

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	Ac-227 (Source: FGR 12)	4.951E-04	4.951E-04	DCFEXT(2)
DCSF	Ac-228 (Source: FGR 12)	5.978E+00	5.978E+00	DCFEXT(3)
DCSF	Al-26 (Source: FGR 12)	1.741E+01	1.741E+01	DCFEXT(4)
DCSF	Am-241 (Source: FGR 12)	4.372E-02	4.372E-02	DCFEXT(5)
DCSF	Am-243 (Source: FGR 12)	1.420E-01	1.420E-01	DCFEXT(6)
DCSF	At-217 (Source: FGR 12)	1.773E-03	1.773E-03	DCFEXT(7)
DCSF	At-218 (Source: FGR 12)	5.847E-03	5.847E-03	DCFEXT(8)
DCSF	Ba-137m (Source: FGR 12)	3.606E+00	3.606E+00	DCFEXT(9)
DCSF	Bi-210 (Source: FGR 12)	3.606E-03	3.606E-03	DCFEXT(10)
DCSF	Bi-211 (Source: FGR 12)	2.559E-01	2.559E-01	DCFEXT(11)
DCSF	Bi-212 (Source: FGR 12)	1.171E+00	1.171E+00	DCFEXT(12)
DCSF	Bi-213 (Source: FGR 12)	7.660E-01	7.660E-01	DCFEXT(13)
DCSF	Bi-214 (Source: FGR 12)	9.808E+00	9.808E+00	DCFEXT(14)
DCSF	Cf-249 (Source: FGR 12)	1.851E+00	1.851E+00	DCFEXT(15)
DCSF	Cf-251 (Source: FGR 12)	5.268E-01	5.268E-01	DCFEXT(16)
DCSF	Cf-252 (Source: FGR 12)	1.758E-04	1.758E-04	DCFEXT(17)
DCSF	Cl-36 (Source: FGR 12)	2.391E-03	2.391E-03	DCFEXT(18)
DCSF	Cm-245 (Source: FGR 12)	3.400E-01	3.400E-01	DCFEXT(19)
DCSF	Cm-247 (Source: FGR 12)	1.780E+00	1.780E+00	DCFEXT(20)
DCSF	Cm-248 (Source: FGR 12)	8.781E-05	8.781E-05	DCFEXT(21)
DCSF	Co-60 (Source: FGR 12)	1.622E+01	1.622E+01	DCFEXT(22)
DCSF	Cs-134 (Source: FGR 12)	9.472E+00	9.472E+00	DCFEXT(23)
DCSF	Cs-137 (Source: FGR 12)	7.510E-04	7.510E-04	DCFEXT(24)
DCSF	Eu-154 (Source: FGR 12)	7.678E+00	7.678E+00	DCFEXT(25)
DCSF	Eu-155 (Source: FGR 12)	1.822E-01	1.822E-01	DCFEXT(26)

DCSF ≥ Fr-221	(Source: FGR 12)	≥ 1.536E-01	≥ 1.536E-01	≥ DCFEXT(27)
DCSF ≥ Fr-223	(Source: FGR 12)	≥ 1.980E-01	≥ 1.980E-01	≥ DCFEXT(28)
DCSF ≥ H-3	(Source: FGR 12)	≥ 0.000E+00	≥ 0.000E+00	≥ DCFEXT(29)
DCSF ≥ Ho-166m	(Source: FGR 12)	≥ 1.029E+01	≥ 1.029E+01	≥ DCFEXT(30)
DCSF ≥ Na-22	(Source: FGR 12)	≥ 1.368E+01	≥ 1.368E+01	≥ DCFEXT(31)
DCSF ≥ Np-237	(Source: FGR 12)	≥ 7.790E-02	≥ 7.790E-02	≥ DCFEXT(32)
DCSF ≥ Np-239	(Source: FGR 12)	≥ 7.529E-01	≥ 7.529E-01	≥ DCFEXT(33)
DCSF ≥ Np-240m	(Source: FGR 12)	≥ 2.018E+00	≥ 2.018E+00	≥ DCFEXT(34)
DCSF ≥ Pa-231	(Source: FGR 12)	≥ 1.906E-01	≥ 1.906E-01	≥ DCFEXT(35)
DCSF ≥ Pa-233	(Source: FGR 12)	≥ 1.020E+00	≥ 1.020E+00	≥ DCFEXT(36)
DCSF ≥ Pa-234	(Source: FGR 12)	≥ 1.155E+01	≥ 1.155E+01	≥ DCFEXT(37)
DCSF ≥ Pa-234m	(Source: FGR 12)	≥ 8.967E-02	≥ 8.967E-02	≥ DCFEXT(38)
DCSF ≥ Pb-209	(Source: FGR 12)	≥ 7.734E-04	≥ 7.734E-04	≥ DCFEXT(39)
DCSF ≥ Pb-210	(Source: FGR 12)	≥ 2.447E-03	≥ 2.447E-03	≥ DCFEXT(40)
DCSF ≥ Pb-211	(Source: FGR 12)	≥ 3.064E-01	≥ 3.064E-01	≥ DCFEXT(41)
DCSF ≥ Pb-212	(Source: FGR 12)	≥ 7.043E-01	≥ 7.043E-01	≥ DCFEXT(42)
DCSF ≥ Pb-214	(Source: FGR 12)	≥ 1.341E+00	≥ 1.341E+00	≥ DCFEXT(43)
DCSF ≥ Pm-147	(Source: FGR 12)	≥ 5.007E-05	≥ 5.007E-05	≥ DCFEXT(44)

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

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

Current Library: FGR 12

Default Library: FGR 12

0	≥		≥	Current	≥		≥	Parameter
Menu	≥	Parameter	≥	Value	≥	Default	≥	Name
fffff	≈	fffff	≈	fffff	≈	fffff	≈	fffff
DCSF ≥ Po-210	(Source: FGR 12)		≥	5.231E-05	≥	5.231E-05	≥	DCFEXT(45)
DCSF ≥ Po-211	(Source: FGR 12)		≥	4.764E-02	≥	4.764E-02	≥	DCFEXT(46)
DCSF ≥ Po-212	(Source: FGR 12)		≥	0.000E+00	≥	0.000E+00	≥	DCFEXT(47)
DCSF ≥ Po-213	(Source: FGR 12)		≥	0.000E+00	≥	0.000E+00	≥	DCFEXT(48)

DCSF ≥ Po-214	(Source: FGR 12)	≥ 5.138E-04	≥ 5.138E-04	≥ DCFEXT(49)
DCSF ≥ Po-215	(Source: FGR 12)	≥ 1.016E-03	≥ 1.016E-03	≥ DCFEXT(50)
DCSF ≥ Po-216	(Source: FGR 12)	≥ 1.042E-04	≥ 1.042E-04	≥ DCFEXT(51)
DCSF ≥ Po-218	(Source: FGR 12)	≥ 5.642E-05	≥ 5.642E-05	≥ DCFEXT(52)
DCSF ≥ Pu-238	(Source: FGR 12)	≥ 1.513E-04	≥ 1.513E-04	≥ DCFEXT(53)
DCSF ≥ Pu-239	(Source: FGR 12)	≥ 2.952E-04	≥ 2.952E-04	≥ DCFEXT(54)
DCSF ≥ Pu-240	(Source: FGR 12)	≥ 1.467E-04	≥ 1.467E-04	≥ DCFEXT(55)
DCSF ≥ Pu-241	(Source: FGR 12)	≥ 5.904E-06	≥ 5.904E-06	≥ DCFEXT(56)
DCSF ≥ Pu-242	(Source: FGR 12)	≥ 1.280E-04	≥ 1.280E-04	≥ DCFEXT(57)
DCSF ≥ Pu-243	(Source: FGR 12)	≥ 7.959E-02	≥ 7.959E-02	≥ DCFEXT(58)
DCSF ≥ Pu-244	(Source: FGR 12)	≥ 7.548E-05	≥ 7.548E-05	≥ DCFEXT(59)
DCSF ≥ Ra-223	(Source: FGR 12)	≥ 6.034E-01	≥ 6.034E-01	≥ DCFEXT(60)
DCSF ≥ Ra-224	(Source: FGR 12)	≥ 5.119E-02	≥ 5.119E-02	≥ DCFEXT(61)
DCSF ≥ Ra-225	(Source: FGR 12)	≥ 1.102E-02	≥ 1.102E-02	≥ DCFEXT(62)
DCSF ≥ Ra-226	(Source: FGR 12)	≥ 3.176E-02	≥ 3.176E-02	≥ DCFEXT(63)
DCSF ≥ Ra-228	(Source: FGR 12)	≥ 0.000E+00	≥ 0.000E+00	≥ DCFEXT(64)
DCSF ≥ Rh-106	(Source: FGR 12)	≥ 1.291E+00	≥ 1.291E+00	≥ DCFEXT(65)
DCSF ≥ Rn-219	(Source: FGR 12)	≥ 3.083E-01	≥ 3.083E-01	≥ DCFEXT(66)
DCSF ≥ Rn-220	(Source: FGR 12)	≥ 2.298E-03	≥ 2.298E-03	≥ DCFEXT(67)
DCSF ≥ Rn-222	(Source: FGR 12)	≥ 2.354E-03	≥ 2.354E-03	≥ DCFEXT(68)
DCSF ≥ Ru-106	(Source: FGR 12)	≥ 0.000E+00	≥ 0.000E+00	≥ DCFEXT(69)
DCSF ≥ Sb-125	(Source: FGR 12)	≥ 2.447E+00	≥ 2.447E+00	≥ DCFEXT(70)
DCSF ≥ Sb-126	(Source: FGR 12)	≥ 1.711E+01	≥ 1.711E+01	≥ DCFEXT(71)
DCSF ≥ Sb-126m	(Source: FGR 12)	≥ 9.304E+00	≥ 9.304E+00	≥ DCFEXT(72)
DCSF ≥ Sm-147	(Source: FGR 12)	≥ 0.000E+00	≥ 0.000E+00	≥ DCFEXT(73)
DCSF ≥ Sm-151	(Source: FGR 12)	≥ 9.845E-07	≥ 9.845E-07	≥ DCFEXT(74)
DCSF ≥ Sn-121	(Source: FGR 12)	≥ 1.962E-04	≥ 1.962E-04	≥ DCFEXT(75)
DCSF ≥ Sn-121m	(Source: FGR 12)	≥ 1.962E-03	≥ 1.962E-03	≥ DCFEXT(76)
DCSF ≥ Sn-126	(Source: FGR 12)	≥ 1.474E-01	≥ 1.474E-01	≥ DCFEXT(77)
DCSF ≥ Sr-90	(Source: FGR 12)	≥ 7.043E-04	≥ 7.043E-04	≥ DCFEXT(78)
DCSF ≥ Te-125m	(Source: FGR 12)	≥ 1.515E-02	≥ 1.515E-02	≥ DCFEXT(79)
DCSF ≥ Th-227	(Source: FGR 12)	≥ 5.212E-01	≥ 5.212E-01	≥ DCFEXT(80)
DCSF ≥ Th-228	(Source: FGR 12)	≥ 7.940E-03	≥ 7.940E-03	≥ DCFEXT(81)

DCSF ≥ Th-229	(Source: FGR 12)	≥ 3.213E-01	≥ 3.213E-01	≥ DCFEXT(82)
DCSF ≥ Th-230	(Source: FGR 12)	≥ 1.209E-03	≥ 1.209E-03	≥ DCFEXT(83)
DCSF ≥ Th-231	(Source: FGR 12)	≥ 3.643E-02	≥ 3.643E-02	≥ DCFEXT(84)
DCSF ≥ Th-232	(Source: FGR 12)	≥ 5.212E-04	≥ 5.212E-04	≥ DCFEXT(85)
DCSF ≥ Th-234	(Source: FGR 12)	≥ 2.410E-02	≥ 2.410E-02	≥ DCFEXT(86)
DCSF ≥ Tl-207	(Source: FGR 12)	≥ 1.980E-02	≥ 1.980E-02	≥ DCFEXT(87)
DCSF ≥ Tl-208	(Source: FGR 12)	≥ 2.298E+01	≥ 2.298E+01	≥ DCFEXT(88)
DCSF ≥ Tl-209	(Source: FGR 12)	≥ 1.293E+01	≥ 1.293E+01	≥ DCFEXT(89)

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

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

Current Library: FGR 12

Default Library: FGR 12

0	≥		≥	Current	≥	≥	Parameter
Menu	≥	Parameter	≥	Value	≥	Default	≥ Name
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DCSF ≥ Tl-210	(Source: no data)	≥ 0.000E+00	≥ -2.000E+00	≥ DCFEXT( 90)			
DCSF ≥ U-233	(Source: FGR 12)	≥ 1.397E-03	≥ 1.397E-03	≥ DCFEXT( 91)			
DCSF ≥ U-234	(Source: FGR 12)	≥ 4.017E-04	≥ 4.017E-04	≥ DCFEXT( 92)			
DCSF ≥ U-235	(Source: FGR 12)	≥ 7.211E-01	≥ 7.211E-01	≥ DCFEXT( 93)			
DCSF ≥ U-236	(Source: FGR 12)	≥ 2.148E-04	≥ 2.148E-04	≥ DCFEXT( 94)			
DCSF ≥ U-237	(Source: FGR 12)	≥ 5.306E-01	≥ 5.306E-01	≥ DCFEXT( 95)			
DCSF ≥ U-238	(Source: FGR 12)	≥ 1.031E-04	≥ 1.031E-04	≥ DCFEXT( 96)			
DCSF ≥ U-240	(Source: FGR 12)	≥ 1.424E-03	≥ 1.424E-03	≥ DCFEXT( 97)			
DCSF ≥ Y-90	(Source: FGR 12)	≥ 2.391E-02	≥ 2.391E-02	≥ DCFEXT( 98)			
≥		≥	≥	≥			

Current Library: ICRP 72 (Adult)

Default Library: ICRP 72 (Adult)

0	≥		≥	Current	≥	≥	Parameter
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Menu ≥	Parameter	≥ Value	≥ Default	≥ Name
fffff~	fffff~	fffff~	fffff~	fffff~
DCSF ≥	Dose conversion factors for inhalation, mrem/pCi:	≥	≥	≥
DCSF ≥	Ac-227+D	≥ 2.104E+00	≥ 2.104E+00	≥ DCF2(1)
DCSF ≥	Al-26	≥ 7.400E-05	≥ 7.400E-05	≥ DCF2(2)
DCSF ≥	Am-241	≥ 3.552E-01	≥ 3.552E-01	≥ DCF2(3)
DCSF ≥	Am-243+D	≥ 3.552E-01	≥ 3.552E-01	≥ DCF2(4)
DCSF ≥	Cf-249	≥ 2.590E-01	≥ 2.590E-01	≥ DCF2(5)
DCSF ≥	Cf-251	≥ 2.627E-01	≥ 2.627E-01	≥ DCF2(8)
DCSF ≥	Cf-252	≥ 7.400E-02	≥ 7.400E-02	≥ DCF2(9)
DCSF ≥	Cl-36	≥ 2.701E-05	≥ 2.701E-05	≥ DCF2(14)
DCSF ≥	Cm-245	≥ 3.663E-01	≥ 3.663E-01	≥ DCF2(15)
DCSF ≥	Cm-247+D	≥ 3.330E-01	≥ 3.330E-01	≥ DCF2(17)
DCSF ≥	Cm-248	≥ 1.332E+00	≥ 1.332E+00	≥ DCF2(18)
DCSF ≥	Co-60	≥ 1.147E-04	≥ 1.147E-04	≥ DCF2(22)
DCSF ≥	Cs-134	≥ 7.400E-05	≥ 7.400E-05	≥ DCF2(23)
DCSF ≥	Cs-137+D	≥ 1.443E-04	≥ 1.443E-04	≥ DCF2(24)
DCSF ≥	Eu-154	≥ 1.961E-04	≥ 1.961E-04	≥ DCF2(25)
DCSF ≥	Eu-155	≥ 2.553E-05	≥ 2.553E-05	≥ DCF2(26)
DCSF ≥	H-3	≥ 9.620E-07	≥ 9.620E-07	≥ DCF2(27)
DCSF ≥	Ho-166m	≥ 4.440E-04	≥ 4.440E-04	≥ DCF2(28)
DCSF ≥	Na-22	≥ 4.810E-06	≥ 4.810E-06	≥ DCF2(29)
DCSF ≥	Np-237+D	≥ 1.850E-01	≥ 1.850E-01	≥ DCF2(30)
DCSF ≥	Pa-231	≥ 5.180E-01	≥ 5.180E-01	≥ DCF2(31)
DCSF ≥	Pb-210+D	≥ 2.106E-02	≥ 2.106E-02	≥ DCF2(32)
DCSF ≥	Pm-147	≥ 1.850E-05	≥ 1.850E-05	≥ DCF2(33)
DCSF ≥	Po-210	≥ 1.591E-02	≥ 1.591E-02	≥ DCF2(34)
DCSF ≥	Pu-238	≥ 4.070E-01	≥ 4.070E-01	≥ DCF2(35)
DCSF ≥	Pu-239	≥ 4.440E-01	≥ 4.440E-01	≥ DCF2(37)
DCSF ≥	Pu-240	≥ 4.440E-01	≥ 4.440E-01	≥ DCF2(38)

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

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

Current Library: ICRP 72 (Adult)

Default Library: ICRP 72 (Adult)

0	≥		≥	Current	≥	≥	Parameter	
Menu	≥		≥	Value	≥	Default	≥	Name
fffff	≈	ffffffffff	ffffffffff	ffffffffff	ffffffffff	ffffffffff	ffffffffff	ffffffffff
DCSF	≥	Pu-241	≥	8.510E-03	≥	8.510E-03	≥	DCF2(40)
DCSF	≥	Pu-241+D	≥	8.517E-03	≥	8.517E-03	≥	DCF2(41)
DCSF	≥	Pu-242	≥	4.070E-01	≥	4.070E-01	≥	DCF2(42)
DCSF	≥	Pu-244	≥	4.070E-01	≥	4.070E-01	≥	DCF2(45)
DCSF	≥	Pu-244+D	≥	4.070E-01	≥	4.070E-01	≥	DCF2(46)
DCSF	≥	Ra-226+D	≥	3.526E-02	≥	3.526E-02	≥	DCF2(48)
DCSF	≥	Ra-228+D	≥	5.929E-02	≥	5.929E-02	≥	DCF2(49)
DCSF	≥	Ru-106+D	≥	2.442E-04	≥	2.442E-04	≥	DCF2(50)
DCSF	≥	Sb-125	≥	4.440E-05	≥	4.440E-05	≥	DCF2(51)
DCSF	≥	Sm-147	≥	3.552E-02	≥	3.552E-02	≥	DCF2(53)
DCSF	≥	Sm-151	≥	1.480E-05	≥	1.480E-05	≥	DCF2(54)
DCSF	≥	Sn-121m+D	≥	1.731E-05	≥	1.731E-05	≥	DCF2(55)
DCSF	≥	Sn-126+D	≥	1.053E-04	≥	1.053E-04	≥	DCF2(56)
DCSF	≥	Sr-90+D	≥	5.976E-04	≥	5.976E-04	≥	DCF2(57)
DCSF	≥	Te-125m	≥	1.554E-05	≥	1.554E-05	≥	DCF2(58)
DCSF	≥	Th-228+D	≥	1.614E-01	≥	1.614E-01	≥	DCF2(59)
DCSF	≥	Th-229+D	≥	9.481E-01	≥	9.481E-01	≥	DCF2(60)
DCSF	≥	Th-230	≥	3.700E-01	≥	3.700E-01	≥	DCF2(61)
DCSF	≥	Th-232	≥	4.070E-01	≥	4.070E-01	≥	DCF2(62)
DCSF	≥	U-233	≥	3.552E-02	≥	3.552E-02	≥	DCF2(63)
DCSF	≥	U-234	≥	3.478E-02	≥	3.478E-02	≥	DCF2(64)
DCSF	≥	U-235+D	≥	3.145E-02	≥	3.145E-02	≥	DCF2(65)
DCSF	≥	U-236	≥	3.219E-02	≥	3.219E-02	≥	DCF2(66)
DCSF	≥	U-238	≥	2.960E-02	≥	2.960E-02	≥	DCF2(67)
DCSF	≥	U-238+D	≥	2.963E-02	≥	2.963E-02	≥	DCF2(68)

DCSF ≥	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Dose conversion factors for ingestion, mrem/pCi:	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Ac-227+D	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Al-26	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Am-241	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Am-243+D	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Cf-249	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Cf-251	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Cf-252	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Cl-36	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Cm-245	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Cm-247+D	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Cm-248	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Co-60	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Cs-134	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Cs-137+D	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Eu-154	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Eu-155	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ H-3	DCSF ≥	DCSF ≥	DCSF ≥
DCSF ≥ Ho-166m	DCSF ≥	DCSF ≥	DCSF ≥

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Parent Dose Report

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File : INDUSTRIAL NO CAP HYDRO.ROF

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

Current Library: ICRP 72 (Adult)

Default Library: ICRP 72 (Adult)

0	≥		≥	Current	≥		≥	Parameter
Menu	≥		≥	Value	≥	Default	≥	Name
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DCSF	≥	Na-22	≥	1.184E-05	≥	1.184E-05	≥	DCF3(29)
DCSF	≥	Np-237+D	≥	4.102E-04	≥	4.102E-04	≥	DCF3(30)

DCSF \geq Pa-231	$\geq 2.627\text{E-}03$	$\geq 2.627\text{E-}03$	$\geq \text{DCF3(31)}$
DCSF \geq Pb-210+D	$\geq 2.558\text{E-}03$	$\geq 2.558\text{E-}03$	$\geq \text{DCF3(32)}$
DCSF \geq Pm-147	$\geq 9.620\text{E-}07$	$\geq 9.620\text{E-}07$	$\geq \text{DCF3(33)}$
DCSF \geq Po-210	$\geq 4.440\text{E-}03$	$\geq 4.440\text{E-}03$	$\geq \text{DCF3(34)}$
DCSF \geq Pu-238	$\geq 8.510\text{E-}04$	$\geq 8.510\text{E-}04$	$\geq \text{DCF3(35)}$
DCSF \geq Pu-239	$\geq 9.250\text{E-}04$	$\geq 9.250\text{E-}04$	$\geq \text{DCF3(37)}$
DCSF \geq Pu-240	$\geq 9.250\text{E-}04$	$\geq 9.250\text{E-}04$	$\geq \text{DCF3(38)}$
DCSF \geq Pu-241	$\geq 1.776\text{E-}05$	$\geq 1.776\text{E-}05$	$\geq \text{DCF3(40)}$
DCSF \geq Pu-241+D	$\geq 2.057\text{E-}05$	$\geq 2.057\text{E-}05$	$\geq \text{DCF3(41)}$
DCSF \geq Pu-242	$\geq 8.880\text{E-}04$	$\geq 8.880\text{E-}04$	$\geq \text{DCF3(42)}$
DCSF \geq Pu-244	$\geq 8.880\text{E-}04$	$\geq 8.880\text{E-}04$	$\geq \text{DCF3(45)}$
DCSF \geq Pu-244+D	$\geq 8.921\text{E-}04$	$\geq 8.921\text{E-}04$	$\geq \text{DCF3(46)}$
DCSF \geq Ra-226+D	$\geq 1.037\text{E-}03$	$\geq 1.037\text{E-}03$	$\geq \text{DCF3(48)}$
DCSF \geq Ra-228+D	$\geq 2.555\text{E-}03$	$\geq 2.555\text{E-}03$	$\geq \text{DCF3(49)}$
DCSF \geq Ru-106+D	$\geq 2.590\text{E-}05$	$\geq 2.590\text{E-}05$	$\geq \text{DCF3(50)}$
DCSF \geq Sb-125	$\geq 4.070\text{E-}06$	$\geq 4.070\text{E-}06$	$\geq \text{DCF3(51)}$
DCSF \geq Sm-147	$\geq 1.813\text{E-}04$	$\geq 1.813\text{E-}04$	$\geq \text{DCF3(53)}$
DCSF \geq Sm-151	$\geq 3.626\text{E-}07$	$\geq 3.626\text{E-}07$	$\geq \text{DCF3(54)}$
DCSF \geq Sn-121m+D	$\geq 2.066\text{E-}06$	$\geq 2.066\text{E-}06$	$\geq \text{DCF3(55)}$
DCSF \geq Sn-126+D	$\geq 1.877\text{E-}05$	$\geq 1.877\text{E-}05$	$\geq \text{DCF3(56)}$
DCSF \geq Sr-90+D	$\geq 1.136\text{E-}04$	$\geq 1.136\text{E-}04$	$\geq \text{DCF3(57)}$
DCSF \geq Te-125m	$\geq 3.219\text{E-}06$	$\geq 3.219\text{E-}06$	$\geq \text{DCF3(58)}$
DCSF \geq Th-228+D	$\geq 5.301\text{E-}04$	$\geq 5.301\text{E-}04$	$\geq \text{DCF3(59)}$
DCSF \geq Th-229+D	$\geq 2.269\text{E-}03$	$\geq 2.269\text{E-}03$	$\geq \text{DCF3(60)}$
DCSF \geq Th-230	$\geq 7.770\text{E-}04$	$\geq 7.770\text{E-}04$	$\geq \text{DCF3(61)}$
DCSF \geq Th-232	$\geq 8.510\text{E-}04$	$\geq 8.510\text{E-}04$	$\geq \text{DCF3(62)}$
DCSF \geq U-233	$\geq 1.887\text{E-}04$	$\geq 1.887\text{E-}04$	$\geq \text{DCF3(63)}$
DCSF \geq U-234	$\geq 1.813\text{E-}04$	$\geq 1.813\text{E-}04$	$\geq \text{DCF3(64)}$
DCSF \geq U-235+D	$\geq 1.752\text{E-}04$	$\geq 1.752\text{E-}04$	$\geq \text{DCF3(65)}$
DCSF \geq U-236	$\geq 1.739\text{E-}04$	$\geq 1.739\text{E-}04$	$\geq \text{DCF3(66)}$
DCSF \geq U-238	$\geq 1.665\text{E-}04$	$\geq 1.665\text{E-}04$	$\geq \text{DCF3(67)}$
DCSF \geq U-238+D	$\geq 1.791\text{E-}04$	$\geq 1.791\text{E-}04$	$\geq \text{DCF3(68)}$
\geq	\geq	\geq	

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

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

Current Library: RESRAD Default Transfer factors

Default Library: RESRAD Default Transfer factors

0	≥		≥	Current	≥	Parameter		
Menu	≥	Parameter	≥	Value	≥	Default	≥	Name
fffff	~	fffff	~	fffff	~	fffff	~	fffff
TF	≥	Soil to plant transfer factors:	≥		≥		≥	
TF	≥	Ac-227+D , plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(1,1)
TF	≥	Ac-227+D , plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(1,2)
TF	≥	Ac-227+D , plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(1,3)
TF	≥	Ac-227+D , plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(1,4)
TF	≥		≥		≥		≥	
TF	≥	Al-26 , plant/soil concentration ratio, dimensionless	≥	4.000E-03	≥	4.000E-03	≥	RTF(2,1)
TF	≥	Al-26 , plant/soil concentration ratio, dimensionless	≥	4.000E-03	≥	4.000E-03	≥	RTF(2,2)
TF	≥	Al-26 , plant/soil concentration ratio, dimensionless	≥	4.000E-03	≥	4.000E-03	≥	RTF(2,3)
TF	≥	Al-26 , plant/soil concentration ratio, dimensionless	≥	4.000E-03	≥	4.000E-03	≥	RTF(2,4)
TF	≥		≥		≥		≥	
TF	≥	Am-241 , plant/soil concentration ratio, dimensionless	≥	1.000E-03	≥	1.000E-03	≥	RTF(3,1)
TF	≥	Am-241 , plant/soil concentration ratio, dimensionless	≥	1.000E-03	≥	1.000E-03	≥	RTF(3,2)
TF	≥	Am-241 , plant/soil concentration ratio, dimensionless	≥	1.000E-03	≥	1.000E-03	≥	RTF(3,3)
TF	≥	Am-241 , plant/soil concentration ratio, dimensionless	≥	1.000E-03	≥	1.000E-03	≥	RTF(3,4)
TF	≥		≥		≥		≥	
TF	≥	Am-243+D , plant/soil concentration ratio, dimensionless	≥	1.000E-03	≥	1.000E-03	≥	RTF(4,1)
TF	≥	Am-243+D , plant/soil concentration ratio, dimensionless	≥	1.000E-03	≥	1.000E-03	≥	RTF(4,2)
TF	≥	Am-243+D , plant/soil concentration ratio, dimensionless	≥	1.000E-03	≥	1.000E-03	≥	RTF(4,3)
TF	≥	Am-243+D , plant/soil concentration ratio, dimensionless	≥	1.000E-03	≥	1.000E-03	≥	RTF(4,4)
TF	≥		≥		≥		≥	
TF	≥	Cf-249 , plant/soil concentration ratio, dimensionless	≥	1.000E-03	≥	1.000E-03	≥	RTF(5,1)

TF	≥ Cf-249	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(5,2)
TF	≥ Cf-249	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(5,3)
TF	≥ Cf-249	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(5,4)
TF	≥		≥	≥	≥
TF	≥ Cf-251	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(8,1)
TF	≥ Cf-251	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(8,2)
TF	≥ Cf-251	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(8,3)
TF	≥ Cf-251	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(8,4)
TF	≥		≥	≥	≥
TF	≥ Cf-252	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(9,1)
TF	≥ Cf-252	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(9,2)
TF	≥ Cf-252	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(9,3)
TF	≥ Cf-252	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(9,4)
TF	≥		≥	≥	≥
TF	≥ Cl-36	, plant/soil concentration ratio, dimensionless	≥ 2.000E+01	≥ 2.000E+01	≥ RTF(14,1)
TF	≥ Cl-36	, plant/soil concentration ratio, dimensionless	≥ 2.000E+01	≥ 2.000E+01	≥ RTF(14,2)
TF	≥ Cl-36	, plant/soil concentration ratio, dimensionless	≥ 2.000E+01	≥ 2.000E+01	≥ RTF(14,3)
TF	≥ Cl-36	, plant/soil concentration ratio, dimensionless	≥ 2.000E+01	≥ 2.000E+01	≥ RTF(14,4)
TF	≥		≥	≥	≥
TF	≥ Cm-245	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(15,1)
TF	≥ Cm-245	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(15,2)
TF	≥ Cm-245	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(15,3)
TF	≥ Cm-245	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(15,4)

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File : INDUSTRIAL NO CAP HYDRO.ROF

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

Current Library: RESRAD Default Transfer factors

Default Library: RESRAD Default Transfer factors

0	≥		≥	Current	≥		≥	Parameter
Menu	≥	Parameter	≥	Value	≥	Default	≥	Name

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fffff~ffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff
TF ≥ Cm-247+D , plant/soil concentration ratio, dimensionless ≥ 1.000E-03 ≥ 1.000E-03 ≥ RTF(17,1)
TF ≥ Cm-247+D , plant/soil concentration ratio, dimensionless ≥ 1.000E-03 ≥ 1.000E-03 ≥ RTF(17,2)
TF ≥ Cm-247+D , plant/soil concentration ratio, dimensionless ≥ 1.000E-03 ≥ 1.000E-03 ≥ RTF(17,3)
TF ≥ Cm-247+D , plant/soil concentration ratio, dimensionless ≥ 1.000E-03 ≥ 1.000E-03 ≥ RTF(17,4)
TF ≥
TF ≥ Cm-248 , plant/soil concentration ratio, dimensionless ≥ 1.000E-03 ≥ 1.000E-03 ≥ RTF(18,1)
TF ≥ Cm-248 , plant/soil concentration ratio, dimensionless ≥ 1.000E-03 ≥ 1.000E-03 ≥ RTF(18,2)
TF ≥ Cm-248 , plant/soil concentration ratio, dimensionless ≥ 1.000E-03 ≥ 1.000E-03 ≥ RTF(18,3)
TF ≥ Cm-248 , plant/soil concentration ratio, dimensionless ≥ 1.000E-03 ≥ 1.000E-03 ≥ RTF(18,4)
TF ≥
TF ≥ Co-60 , plant/soil concentration ratio, dimensionless ≥ 8.000E-02 ≥ 8.000E-02 ≥ RTF(22,1)
TF ≥ Co-60 , plant/soil concentration ratio, dimensionless ≥ 8.000E-02 ≥ 8.000E-02 ≥ RTF(22,2)
TF ≥ Co-60 , plant/soil concentration ratio, dimensionless ≥ 8.000E-02 ≥ 8.000E-02 ≥ RTF(22,3)
TF ≥ Co-60 , plant/soil concentration ratio, dimensionless ≥ 8.000E-02 ≥ 8.000E-02 ≥ RTF(22,4)
TF ≥
TF ≥ Cs-134 , plant/soil concentration ratio, dimensionless ≥ 4.000E-02 ≥ 4.000E-02 ≥ RTF(23,1)
TF ≥ Cs-134 , plant/soil concentration ratio, dimensionless ≥ 4.000E-02 ≥ 4.000E-02 ≥ RTF(23,2)
TF ≥ Cs-134 , plant/soil concentration ratio, dimensionless ≥ 4.000E-02 ≥ 4.000E-02 ≥ RTF(23,3)
TF ≥ Cs-134 , plant/soil concentration ratio, dimensionless ≥ 4.000E-02 ≥ 4.000E-02 ≥ RTF(23,4)
TF ≥
TF ≥ Cs-137+D , plant/soil concentration ratio, dimensionless ≥ 4.000E-02 ≥ 4.000E-02 ≥ RTF(24,1)
TF ≥ Cs-137+D , plant/soil concentration ratio, dimensionless ≥ 4.000E-02 ≥ 4.000E-02 ≥ RTF(24,2)
TF ≥ Cs-137+D , plant/soil concentration ratio, dimensionless ≥ 4.000E-02 ≥ 4.000E-02 ≥ RTF(24,3)
TF ≥ Cs-137+D , plant/soil concentration ratio, dimensionless ≥ 4.000E-02 ≥ 4.000E-02 ≥ RTF(24,4)
TF ≥
TF ≥ Eu-154 , plant/soil concentration ratio, dimensionless ≥ 2.500E-03 ≥ 2.500E-03 ≥ RTF(25,1)
TF ≥ Eu-154 , plant/soil concentration ratio, dimensionless ≥ 2.500E-03 ≥ 2.500E-03 ≥ RTF(25,2)
TF ≥ Eu-154 , plant/soil concentration ratio, dimensionless ≥ 2.500E-03 ≥ 2.500E-03 ≥ RTF(25,3)
TF ≥ Eu-154 , plant/soil concentration ratio, dimensionless ≥ 2.500E-03 ≥ 2.500E-03 ≥ RTF(25,4)
TF ≥
TF ≥ Eu-155 , plant/soil concentration ratio, dimensionless ≥ 2.500E-03 ≥ 2.500E-03 ≥ RTF(26,1)
TF ≥ Eu-155 , plant/soil concentration ratio, dimensionless ≥ 2.500E-03 ≥ 2.500E-03 ≥ RTF(26,2)

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TF	≥	Eu-155	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(26,3)
TF	≥	Eu-155	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(26,4)
TF	≥			≥	≥	≥
TF	≥	H-3	, plant/soil concentration ratio, dimensionless	≥ 3.733E+00	≥ 4.800E+00	≥ RTF(27,1)
TF	≥	H-3	, plant/soil concentration ratio, dimensionless	≥ 3.733E+00	≥ 4.800E+00	≥ RTF(27,2)
TF	≥	H-3	, plant/soil concentration ratio, dimensionless	≥ 3.733E+00	≥ 4.800E+00	≥ RTF(27,3)
TF	≥	H-3	, plant/soil concentration ratio, dimensionless	≥ 3.733E+00	≥ 4.800E+00	≥ RTF(27,4)
TF	≥			≥	≥	≥
TF	≥	Ho-166m	, plant/soil concentration ratio, dimensionless	≥ 2.600E-03	≥ 2.600E-03	≥ RTF(28,1)
TF	≥	Ho-166m	, plant/soil concentration ratio, dimensionless	≥ 2.600E-03	≥ 2.600E-03	≥ RTF(28,2)
TF	≥	Ho-166m	, plant/soil concentration ratio, dimensionless	≥ 2.600E-03	≥ 2.600E-03	≥ RTF(28,3)
TF	≥	Ho-166m	, plant/soil concentration ratio, dimensionless	≥ 2.600E-03	≥ 2.600E-03	≥ RTF(28,4)
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

0	≥			≥	Current	≥		≥	Parameter
Menu	≥		Parameter	≥	Value	≥	Default	≥	Name
fffff~	fffff	fffff	fffff	fffff	fffff	fffff	fffff	fffff	fffff
TF	≥	Na-22	, plant/soil concentration ratio, dimensionless	≥ 5.000E-02	≥ 5.000E-02	≥ RTF(29,1)			
TF	≥	Na-22	, plant/soil concentration ratio, dimensionless	≥ 5.000E-02	≥ 5.000E-02	≥ RTF(29,2)			
TF	≥	Na-22	, plant/soil concentration ratio, dimensionless	≥ 5.000E-02	≥ 5.000E-02	≥ RTF(29,3)			
TF	≥	Na-22	, plant/soil concentration ratio, dimensionless	≥ 5.000E-02	≥ 5.000E-02	≥ RTF(29,4)			
TF	≥			≥	≥	≥			
TF	≥	Np-237+D	, plant/soil concentration ratio, dimensionless	≥ 2.000E-02	≥ 2.000E-02	≥ RTF(30,1)			
TF	≥	Np-237+D	, plant/soil concentration ratio, dimensionless	≥ 2.000E-02	≥ 2.000E-02	≥ RTF(30,2)			
TF	≥	Np-237+D	, plant/soil concentration ratio, dimensionless	≥ 2.000E-02	≥ 2.000E-02	≥ RTF(30,3)			
TF	≥	Np-237+D	, plant/soil concentration ratio, dimensionless	≥ 2.000E-02	≥ 2.000E-02	≥ RTF(30,4)			

TF	≥				≥	≥	≥
TF	≥	Pa-231	, plant/soil concentration ratio, dimensionless		≥ 1.000E-02	≥ 1.000E-02	≥ RTF(31,1)
TF	≥	Pa-231	, plant/soil concentration ratio, dimensionless		≥ 1.000E-02	≥ 1.000E-02	≥ RTF(31,2)
TF	≥	Pa-231	, plant/soil concentration ratio, dimensionless		≥ 1.000E-02	≥ 1.000E-02	≥ RTF(31,3)
TF	≥	Pa-231	, plant/soil concentration ratio, dimensionless		≥ 1.000E-02	≥ 1.000E-02	≥ RTF(31,4)
TF	≥				≥	≥	≥
TF	≥	Pb-210+D	, plant/soil concentration ratio, dimensionless		≥ 1.000E-02	≥ 1.000E-02	≥ RTF(32,1)
TF	≥	Pb-210+D	, plant/soil concentration ratio, dimensionless		≥ 1.000E-02	≥ 1.000E-02	≥ RTF(32,2)
TF	≥	Pb-210+D	, plant/soil concentration ratio, dimensionless		≥ 1.000E-02	≥ 1.000E-02	≥ RTF(32,3)
TF	≥	Pb-210+D	, plant/soil concentration ratio, dimensionless		≥ 1.000E-02	≥ 1.000E-02	≥ RTF(32,4)
TF	≥				≥	≥	≥
TF	≥	Pm-147	, plant/soil concentration ratio, dimensionless		≥ 2.500E-03	≥ 2.500E-03	≥ RTF(33,1)
TF	≥	Pm-147	, plant/soil concentration ratio, dimensionless		≥ 2.500E-03	≥ 2.500E-03	≥ RTF(33,2)
TF	≥	Pm-147	, plant/soil concentration ratio, dimensionless		≥ 2.500E-03	≥ 2.500E-03	≥ RTF(33,3)
TF	≥	Pm-147	, plant/soil concentration ratio, dimensionless		≥ 2.500E-03	≥ 2.500E-03	≥ RTF(33,4)
TF	≥				≥	≥	≥
TF	≥	Po-210	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(34,1)
TF	≥	Po-210	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(34,2)
TF	≥	Po-210	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(34,3)
TF	≥	Po-210	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(34,4)
TF	≥				≥	≥	≥
TF	≥	Pu-238	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(35,1)
TF	≥	Pu-238	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(35,2)
TF	≥	Pu-238	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(35,3)
TF	≥	Pu-238	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(35,4)
TF	≥				≥	≥	≥
TF	≥	Pu-239	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(37,1)
TF	≥	Pu-239	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(37,2)
TF	≥	Pu-239	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(37,3)
TF	≥	Pu-239	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(37,4)
TF	≥				≥	≥	≥
TF	≥	Pu-240	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(38,1)
TF	≥	Pu-240	, plant/soil concentration ratio, dimensionless		≥ 1.000E-03	≥ 1.000E-03	≥ RTF(38,2)

TF ≥ Pu-240 , plant/soil concentration ratio, dimensionless ≥ 1.000E-03 ≥ 1.000E-03 ≥ RTF(38,3)
 TF ≥ Pu-240 , plant/soil concentration ratio, dimensionless ≥ 1.000E-03 ≥ 1.000E-03 ≥ RTF(38,4)
 TF ≥ ≥ ≥
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 Parent Dose Report
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Dose Conversion Factor (and Related) Parameter Summary (continued)

Current Library: RESRAD Default Transfer factors

Default Library: RESRAD Default Transfer factors

0	≥	≥	Current	≥	Parameter
Menu	≥	Parameter	Value	Default	Name
fffff~	fffff~	fffff~	fffff~	fffff~	fffff~
TF	≥ Pu-241	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(40,1)
TF	≥ Pu-241	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(40,2)
TF	≥ Pu-241	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(40,3)
TF	≥ Pu-241	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(40,4)
TF	≥		≥	≥	≥
TF	≥ Pu-241+D	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(41,1)
TF	≥ Pu-241+D	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(41,2)
TF	≥ Pu-241+D	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(41,3)
TF	≥ Pu-241+D	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(41,4)
TF	≥		≥	≥	≥
TF	≥ Pu-242	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(42,1)
TF	≥ Pu-242	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(42,2)
TF	≥ Pu-242	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(42,3)
TF	≥ Pu-242	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(42,4)
TF	≥		≥	≥	≥
TF	≥ Pu-244	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(45,1)
TF	≥ Pu-244	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(45,2)
TF	≥ Pu-244	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(45,3)
TF	≥ Pu-244	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(45,4)

TF	≥				≥	≥	≥
TF	≥ Pu-244+D , plant/soil concentration ratio, dimensionless				≥ 1.000E-03	≥ 1.000E-03	≥ RTF(46,1)
TF	≥ Pu-244+D , plant/soil concentration ratio, dimensionless				≥ 1.000E-03	≥ 1.000E-03	≥ RTF(46,2)
TF	≥ Pu-244+D , plant/soil concentration ratio, dimensionless				≥ 1.000E-03	≥ 1.000E-03	≥ RTF(46,3)
TF	≥ Pu-244+D , plant/soil concentration ratio, dimensionless				≥ 1.000E-03	≥ 1.000E-03	≥ RTF(46,4)
TF	≥				≥	≥	≥
TF	≥ Ra-226+D , plant/soil concentration ratio, dimensionless				≥ 4.000E-02	≥ 4.000E-02	≥ RTF(48,1)
TF	≥ Ra-226+D , plant/soil concentration ratio, dimensionless				≥ 4.000E-02	≥ 4.000E-02	≥ RTF(48,2)
TF	≥ Ra-226+D , plant/soil concentration ratio, dimensionless				≥ 4.000E-02	≥ 4.000E-02	≥ RTF(48,3)
TF	≥ Ra-226+D , plant/soil concentration ratio, dimensionless				≥ 4.000E-02	≥ 4.000E-02	≥ RTF(48,4)
TF	≥				≥	≥	≥
TF	≥ Ra-228+D , plant/soil concentration ratio, dimensionless				≥ 4.000E-02	≥ 4.000E-02	≥ RTF(49,1)
TF	≥ Ra-228+D , plant/soil concentration ratio, dimensionless				≥ 4.000E-02	≥ 4.000E-02	≥ RTF(49,2)
TF	≥ Ra-228+D , plant/soil concentration ratio, dimensionless				≥ 4.000E-02	≥ 4.000E-02	≥ RTF(49,3)
TF	≥ Ra-228+D , plant/soil concentration ratio, dimensionless				≥ 4.000E-02	≥ 4.000E-02	≥ RTF(49,4)
TF	≥				≥	≥	≥
TF	≥ Ru-106+D , plant/soil concentration ratio, dimensionless				≥ 3.000E-02	≥ 3.000E-02	≥ RTF(50,1)
TF	≥ Ru-106+D , plant/soil concentration ratio, dimensionless				≥ 3.000E-02	≥ 3.000E-02	≥ RTF(50,2)
TF	≥ Ru-106+D , plant/soil concentration ratio, dimensionless				≥ 3.000E-02	≥ 3.000E-02	≥ RTF(50,3)
TF	≥ Ru-106+D , plant/soil concentration ratio, dimensionless				≥ 3.000E-02	≥ 3.000E-02	≥ RTF(50,4)
TF	≥				≥	≥	≥
TF	≥ Sb-125 , plant/soil concentration ratio, dimensionless				≥ 1.000E-02	≥ 1.000E-02	≥ RTF(51,1)
TF	≥ Sb-125 , plant/soil concentration ratio, dimensionless				≥ 1.000E-02	≥ 1.000E-02	≥ RTF(51,2)
TF	≥ Sb-125 , plant/soil concentration ratio, dimensionless				≥ 1.000E-02	≥ 1.000E-02	≥ RTF(51,3)
TF	≥ Sb-125 , plant/soil concentration ratio, dimensionless				≥ 1.000E-02	≥ 1.000E-02	≥ RTF(51,4)
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

0	≥		≥	Current	≥	≥	Parameter		
Menu	≥		Parameter	≥	Value	≥	Default	≥	Name
fffff	~	fffff	fffff	fffff	~	fffff	fffff	~	fffff
TF	≥	Sm-147	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(53,1)
TF	≥	Sm-147	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(53,2)
TF	≥	Sm-147	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(53,3)
TF	≥	Sm-147	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(53,4)
TF	≥			≥		≥		≥	
TF	≥	Sm-151	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(54,1)
TF	≥	Sm-151	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(54,2)
TF	≥	Sm-151	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(54,3)
TF	≥	Sm-151	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(54,4)
TF	≥			≥		≥		≥	
TF	≥	Sn-121m+D	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(55,1)
TF	≥	Sn-121m+D	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(55,2)
TF	≥	Sn-121m+D	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(55,3)
TF	≥	Sn-121m+D	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(55,4)
TF	≥			≥		≥		≥	
TF	≥	Sn-126+D	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(56,1)
TF	≥	Sn-126+D	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(56,2)
TF	≥	Sn-126+D	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(56,3)
TF	≥	Sn-126+D	, plant/soil concentration ratio, dimensionless	≥	2.500E-03	≥	2.500E-03	≥	RTF(56,4)
TF	≥			≥		≥		≥	
TF	≥	Sr-90+D	, plant/soil concentration ratio, dimensionless	≥	3.000E-01	≥	3.000E-01	≥	RTF(57,1)
TF	≥	Sr-90+D	, plant/soil concentration ratio, dimensionless	≥	3.000E-01	≥	3.000E-01	≥	RTF(57,2)
TF	≥	Sr-90+D	, plant/soil concentration ratio, dimensionless	≥	3.000E-01	≥	3.000E-01	≥	RTF(57,3)
TF	≥	Sr-90+D	, plant/soil concentration ratio, dimensionless	≥	3.000E-01	≥	3.000E-01	≥	RTF(57,4)
TF	≥			≥		≥		≥	
TF	≥	Te-125m	, plant/soil concentration ratio, dimensionless	≥	6.000E-01	≥	6.000E-01	≥	RTF(58,1)
TF	≥	Te-125m	, plant/soil concentration ratio, dimensionless	≥	6.000E-01	≥	6.000E-01	≥	RTF(58,2)
TF	≥	Te-125m	, plant/soil concentration ratio, dimensionless	≥	6.000E-01	≥	6.000E-01	≥	RTF(58,3)
TF	≥	Te-125m	, plant/soil concentration ratio, dimensionless	≥	6.000E-01	≥	6.000E-01	≥	RTF(58,4)

TF	≥		≥	≥	≥
TF	≥ Th-228+D	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(59,1)
TF	≥ Th-228+D	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(59,2)
TF	≥ Th-228+D	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(59,3)
TF	≥ Th-228+D	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(59,4)
TF	≥		≥	≥	≥
TF	≥ Th-229+D	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(60,1)
TF	≥ Th-229+D	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(60,2)
TF	≥ Th-229+D	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(60,3)
TF	≥ Th-229+D	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(60,4)
TF	≥		≥	≥	≥
TF	≥ Th-230	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(61,1)
TF	≥ Th-230	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(61,2)
TF	≥ Th-230	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(61,3)
TF	≥ Th-230	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥ RTF(61,4)
TF	≥		≥	≥	≥

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TF	≥	Th-232	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥	RTF(62,1)	
TF	≥	Th-232	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥	RTF(62,2)	
TF	≥	Th-232	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥	RTF(62,3)	
TF	≥	Th-232	, plant/soil concentration ratio, dimensionless	≥ 1.000E-03	≥ 1.000E-03	≥	RTF(62,4)	
TF	≥			≥	≥	≥		
TF	≥	U-233	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥	RTF(63,1)	

TF	≥ U-233	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(63,2)
TF	≥ U-233	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(63,3)
TF	≥ U-233	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(63,4)
TF	≥		≥	≥	≥
TF	≥ U-234	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(64,1)
TF	≥ U-234	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(64,2)
TF	≥ U-234	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(64,3)
TF	≥ U-234	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(64,4)
TF	≥		≥	≥	≥
TF	≥ U-235+D	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(65,1)
TF	≥ U-235+D	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(65,2)
TF	≥ U-235+D	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(65,3)
TF	≥ U-235+D	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(65,4)
TF	≥		≥	≥	≥
TF	≥ U-236	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(66,1)
TF	≥ U-236	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(66,2)
TF	≥ U-236	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(66,3)
TF	≥ U-236	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(66,4)
TF	≥		≥	≥	≥
TF	≥ U-238	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(67,1)
TF	≥ U-238	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(67,2)
TF	≥ U-238	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(67,3)
TF	≥ U-238	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(67,4)
TF	≥		≥	≥	≥
TF	≥ U-238+D	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(68,1)
TF	≥ U-238+D	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(68,2)
TF	≥ U-238+D	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(68,3)
TF	≥ U-238+D	, plant/soil concentration ratio, dimensionless	≥ 2.500E-03	≥ 2.500E-03	≥ RTF(68,4)
TF	≥		≥	≥	≥
TF	≥ intake to meat/milk transfer factors:		≥	≥	≥
TF	≥ Ac-227+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 2.000E-05	≥ 2.000E-05	≥ I_M(1,1)
TF	≥ Ac-227+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 2.000E-05	≥ 2.000E-05	≥ I_M(1,2)
TF	≥		≥	≥	≥

TF	≥	Al-26	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	5.000E-04	≥	5.000E-04	≥	I_M(2,1)
TF	≥	Al-26	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	2.000E-04	≥	2.000E-04	≥	I_M(2,2)
TF	≥			≥		≥		≥	
TF	≥	Am-241	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	5.000E-05	≥	5.000E-05	≥	I_M(3,1)
TF	≥	Am-241	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	2.000E-06	≥	2.000E-06	≥	I_M(3,2)
TF	≥			≥		≥		≥	

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TF	≥	Am-243+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	5.000E-05	≥	5.000E-05	≥	I_M(4,1)
TF	≥	Am-243+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	2.000E-06	≥	2.000E-06	≥	I_M(4,2)
TF	≥			≥		≥		≥	
TF	≥	Cf-249	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	6.000E-05	≥	6.000E-05	≥	I_M(5,1)
TF	≥	Cf-249	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	7.500E-07	≥	7.500E-07	≥	I_M(5,2)
TF	≥			≥		≥		≥	
TF	≥	Cf-251	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	6.000E-05	≥	6.000E-05	≥	I_M(8,1)
TF	≥	Cf-251	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	7.500E-07	≥	7.500E-07	≥	I_M(8,2)
TF	≥			≥		≥		≥	
TF	≥	Cf-252	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	6.000E-05	≥	6.000E-05	≥	I_M(9,1)
TF	≥	Cf-252	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	7.500E-07	≥	7.500E-07	≥	I_M(9,2)
TF	≥			≥		≥		≥	
TF	≥	Cl-36	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	6.000E-02	≥	6.000E-02	≥	I_M(14,1)
TF	≥	Cl-36	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	2.000E-02	≥	2.000E-02	≥	I_M(14,2)
TF	≥			≥		≥		≥	
TF	≥	Cm-245	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	2.000E-05	≥	2.000E-05	≥	I_M(15,1)

TF	≥ Cm-245	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 2.000E-06	≥ 2.000E-06	≥ I_M(15,2)
TF	≥		≥	≥	≥
TF	≥ Cm-247+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 2.000E-05	≥ 2.000E-05	≥ I_M(17,1)
TF	≥ Cm-247+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 2.000E-06	≥ 2.000E-06	≥ I_M(17,2)
TF	≥		≥	≥	≥
TF	≥ Cm-248	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 2.000E-05	≥ 2.000E-05	≥ I_M(18,1)
TF	≥ Cm-248	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 2.000E-06	≥ 2.000E-06	≥ I_M(18,2)
TF	≥		≥	≥	≥
TF	≥ Co-60	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 2.000E-02	≥ 2.000E-02	≥ I_M(22,1)
TF	≥ Co-60	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 2.000E-03	≥ 2.000E-03	≥ I_M(22,2)
TF	≥		≥	≥	≥
TF	≥ Cs-134	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 3.000E-02	≥ 3.000E-02	≥ I_M(23,1)
TF	≥ Cs-134	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 8.000E-03	≥ 8.000E-03	≥ I_M(23,2)
TF	≥		≥	≥	≥
TF	≥ Cs-137+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 3.000E-02	≥ 3.000E-02	≥ I_M(24,1)
TF	≥ Cs-137+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 8.000E-03	≥ 8.000E-03	≥ I_M(24,2)
TF	≥		≥	≥	≥
TF	≥ Eu-154	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 2.000E-03	≥ 2.000E-03	≥ I_M(25,1)
TF	≥ Eu-154	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 5.000E-05	≥ 5.000E-05	≥ I_M(25,2)
TF	≥		≥	≥	≥
TF	≥ Eu-155	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 2.000E-03	≥ 2.000E-03	≥ I_M(26,1)
TF	≥ Eu-155	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 5.000E-05	≥ 5.000E-05	≥ I_M(26,2)
TF	≥		≥	≥	≥
TF	≥ H-3	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 5.741E-03	≥ 1.200E-02	≥ I_M(27,1)
TF	≥ H-3	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 4.311E-03	≥ 1.000E-02	≥ I_M(27,2)
TF	≥		≥	≥	≥
TF	≥ Ho-166m	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 2.000E-03	≥ 2.000E-03	≥ I_M(28,1)
TF	≥ Ho-166m	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 2.000E-05	≥ 2.000E-05	≥ I_M(28,2)
TF	≥		≥	≥	≥

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Menu	≥	Parameter	≥	Value	≥	Default	≥	Name
fffff	~	ffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffff	~	fffffffffffff	~	fffffffffffff	~	fffffffffffff
TF	≥	Na-22 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	8.000E-02	≥	8.000E-02	≥	I_M(29,1)
TF	≥	Na-22 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	4.000E-02	≥	4.000E-02	≥	I_M(29,2)
TF	≥		≥		≥		≥	
TF	≥	Np-237+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	1.000E-03	≥	1.000E-03	≥	I_M(30,1)
TF	≥	Np-237+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	5.000E-06	≥	5.000E-06	≥	I_M(30,2)
TF	≥		≥		≥		≥	
TF	≥	Pa-231 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	5.000E-03	≥	5.000E-03	≥	I_M(31,1)
TF	≥	Pa-231 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	5.000E-06	≥	5.000E-06	≥	I_M(31,2)
TF	≥		≥		≥		≥	
TF	≥	Pb-210+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	8.000E-04	≥	8.000E-04	≥	I_M(32,1)
TF	≥	Pb-210+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	3.000E-04	≥	3.000E-04	≥	I_M(32,2)
TF	≥		≥		≥		≥	
TF	≥	Pm-147 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	2.000E-03	≥	2.000E-03	≥	I_M(33,1)
TF	≥	Pm-147 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	2.000E-05	≥	2.000E-05	≥	I_M(33,2)
TF	≥		≥		≥		≥	
TF	≥	Po-210 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	5.000E-03	≥	5.000E-03	≥	I_M(34,1)
TF	≥	Po-210 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	3.400E-04	≥	3.400E-04	≥	I_M(34,2)
TF	≥		≥		≥		≥	
TF	≥	Pu-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	1.000E-04	≥	1.000E-04	≥	I_M(35,1)
TF	≥	Pu-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	1.000E-06	≥	1.000E-06	≥	I_M(35,2)
TF	≥		≥		≥		≥	
TF	≥	Pu-239 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	1.000E-04	≥	1.000E-04	≥	I_M(37,1)
TF	≥	Pu-239 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	1.000E-06	≥	1.000E-06	≥	I_M(37,2)
TF	≥		≥		≥		≥	
TF	≥	Pu-240 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	1.000E-04	≥	1.000E-04	≥	I_M(38,1)
TF	≥	Pu-240 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	1.000E-06	≥	1.000E-06	≥	I_M(38,2)

TF	≥			≥	≥	≥
TF	≥	Pu-241	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-04	≥ 1.000E-04	≥ I_M(40,1)
TF	≥	Pu-241	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 1.000E-06	≥ 1.000E-06	≥ I_M(40,2)
TF	≥			≥	≥	≥
TF	≥	Pu-241+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-04	≥ 1.000E-04	≥ I_M(41,1)
TF	≥	Pu-241+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 1.000E-06	≥ 1.000E-06	≥ I_M(41,2)
TF	≥			≥	≥	≥
TF	≥	Pu-242	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-04	≥ 1.000E-04	≥ I_M(42,1)
TF	≥	Pu-242	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 1.000E-06	≥ 1.000E-06	≥ I_M(42,2)
TF	≥			≥	≥	≥
TF	≥	Pu-244	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-04	≥ 1.000E-04	≥ I_M(45,1)
TF	≥	Pu-244	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 1.000E-06	≥ 1.000E-06	≥ I_M(45,2)
TF	≥			≥	≥	≥
TF	≥	Pu-244+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-04	≥ 1.000E-04	≥ I_M(46,1)
TF	≥	Pu-244+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 1.000E-06	≥ 1.000E-06	≥ I_M(46,2)
TF	≥			≥	≥	≥
TF	≥	Ra-226+D	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-03	≥ 1.000E-03	≥ I_M(48,1)
TF	≥	Ra-226+D	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 1.000E-03	≥ 1.000E-03	≥ I_M(48,2)
TF	≥			≥	≥	≥

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TF	≥	Ra-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-03	≥ 1.000E-03	≥	≥	I_M(49,1)
TF	≥	Ra-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 1.000E-03	≥ 1.000E-03	≥	≥	I_M(49,2)
TF	≥		≥	≥	≥	≥	

TF	≥ Ru-106+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 2.000E-03	≥ 2.000E-03	≥ I_M(50,1)
TF	≥ Ru-106+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 3.300E-06	≥ 3.300E-06	≥ I_M(50,2)
TF	≥	≥	≥	
TF	≥ Sb-125 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-03	≥ 1.000E-03	≥ I_M(51,1)
TF	≥ Sb-125 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 1.000E-04	≥ 1.000E-04	≥ I_M(51,2)
TF	≥	≥	≥	
TF	≥ Sm-147 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 2.000E-03	≥ 2.000E-03	≥ I_M(53,1)
TF	≥ Sm-147 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 2.000E-05	≥ 2.000E-05	≥ I_M(53,2)
TF	≥	≥	≥	
TF	≥ Sm-151 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 2.000E-03	≥ 2.000E-03	≥ I_M(54,1)
TF	≥ Sm-151 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 2.000E-05	≥ 2.000E-05	≥ I_M(54,2)
TF	≥	≥	≥	
TF	≥ Sn-121m+D, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-02	≥ 1.000E-02	≥ I_M(55,1)
TF	≥ Sn-121m+D, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 1.000E-03	≥ 1.000E-03	≥ I_M(55,2)
TF	≥	≥	≥	
TF	≥ Sn-126+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-02	≥ 1.000E-02	≥ I_M(56,1)
TF	≥ Sn-126+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 1.000E-03	≥ 1.000E-03	≥ I_M(56,2)
TF	≥	≥	≥	
TF	≥ Sr-90+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 8.000E-03	≥ 8.000E-03	≥ I_M(57,1)
TF	≥ Sr-90+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 2.000E-03	≥ 2.000E-03	≥ I_M(57,2)
TF	≥	≥	≥	
TF	≥ Te-125m , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 7.000E-03	≥ 7.000E-03	≥ I_M(58,1)
TF	≥ Te-125m , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 5.000E-04	≥ 5.000E-04	≥ I_M(58,2)
TF	≥	≥	≥	
TF	≥ Th-228+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-04	≥ 1.000E-04	≥ I_M(59,1)
TF	≥ Th-228+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 5.000E-06	≥ 5.000E-06	≥ I_M(59,2)
TF	≥	≥	≥	
TF	≥ Th-229+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-04	≥ 1.000E-04	≥ I_M(60,1)
TF	≥ Th-229+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 5.000E-06	≥ 5.000E-06	≥ I_M(60,2)
TF	≥	≥	≥	
TF	≥ Th-230 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-04	≥ 1.000E-04	≥ I_M(61,1)
TF	≥ Th-230 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 5.000E-06	≥ 5.000E-06	≥ I_M(61,2)
TF	≥	≥	≥	

TF	≥ Th-232	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 1.000E-04	≥ 1.000E-04	≥ I_M(62,1)
TF	≥ Th-232	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 5.000E-06	≥ 5.000E-06	≥ I_M(62,2)
TF	≥		≥	≥	≥
TF	≥ U-233	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 3.400E-04	≥ 3.400E-04	≥ I_M(63,1)
TF	≥ U-233	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 6.000E-04	≥ 6.000E-04	≥ I_M(63,2)
TF	≥		≥	≥	≥
TF	≥ U-234	, beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥ 3.400E-04	≥ 3.400E-04	≥ I_M(64,1)
TF	≥ U-234	, milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥ 6.000E-04	≥ 6.000E-04	≥ I_M(64,2)
TF	≥		≥	≥	≥

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

Current Library: RESRAD Default Transfer factors

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0	≥		≥	Current	≥	Parameter		
Menu	≥	Parameter	≥	Value	≥	Default	≥	Name
fffff	~	fffff	~	fffff	~	fffff	~	fffff
TF	≥	U-235+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	3.400E-04	≥	3.400E-04	≥	I_M(65,1)
TF	≥	U-235+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	6.000E-04	≥	6.000E-04	≥	I_M(65,2)
TF	≥		≥		≥		≥	
TF	≥	U-236 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	3.400E-04	≥	3.400E-04	≥	I_M(66,1)
TF	≥	U-236 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	6.000E-04	≥	6.000E-04	≥	I_M(66,2)
TF	≥		≥		≥		≥	
TF	≥	U-238 , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	3.400E-04	≥	3.400E-04	≥	I_M(67,1)
TF	≥	U-238 , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	6.000E-04	≥	6.000E-04	≥	I_M(67,2)
TF	≥		≥		≥		≥	
TF	≥	U-238+D , beef/livestock-intake ratio, (pCi/kg)/(pCi/d)	≥	3.400E-04	≥	3.400E-04	≥	I_M(68,1)
TF	≥	U-238+D , milk/livestock-intake ratio, (pCi/L)/(pCi/d)	≥	6.000E-04	≥	6.000E-04	≥	I_M(68,2)
	≥		≥		≥		≥	
TF	≥	Bioaccumulation factors, fresh water, L/kg:	≥		≥		≥	

TF	≥ Ac-227+D , fish	≥ 1.500E+01	≥ 1.500E+01	≥ BIOFA(1,1)
TF	≥ Ac-227+D , crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(1,2)
TF	≥	≥	≥	
TF	≥ Al-26 , fish	≥ 5.000E+02	≥ 5.000E+02	≥ BIOFA(2,1)
TF	≥ Al-26 , crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(2,2)
TF	≥	≥	≥	
TF	≥ Am-241 , fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(3,1)
TF	≥ Am-241 , crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(3,2)
TF	≥	≥	≥	
TF	≥ Am-243+D , fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(4,1)
TF	≥ Am-243+D , crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(4,2)
TF	≥	≥	≥	
TF	≥ Cf-249 , fish	≥ 2.500E+01	≥ 2.500E+01	≥ BIOFA(5,1)
TF	≥ Cf-249 , crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(5,2)
TF	≥	≥	≥	
TF	≥ Cf-251 , fish	≥ 2.500E+01	≥ 2.500E+01	≥ BIOFA(8,1)
TF	≥ Cf-251 , crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(8,2)
TF	≥	≥	≥	
TF	≥ Cf-252 , fish	≥ 2.500E+01	≥ 2.500E+01	≥ BIOFA(9,1)
TF	≥ Cf-252 , crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(9,2)
TF	≥	≥	≥	
TF	≥ Cl-36 , fish	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(14,1)
TF	≥ Cl-36 , crustacea and mollusks	≥ 1.900E+02	≥ 1.900E+02	≥ BIOFA(14,2)
TF	≥	≥	≥	
TF	≥ Cm-245 , fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(15,1)
TF	≥ Cm-245 , crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(15,2)
TF	≥	≥	≥	
TF	≥ Cm-247+D , fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(17,1)
TF	≥ Cm-247+D , crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(17,2)
TF	≥	≥	≥	
TF	≥ Cm-248 , fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(18,1)
TF	≥ Cm-248 , crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(18,2)

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

Current Library: RESRAD Default Transfer factors

Default Library: RESRAD Default Transfer factors

0	≥		≥	Current	≥	Parameter		
Menu	≥	Parameter	≥	Value	≥	Default	≥	Name
fffff~	fffff	fffff	fffff	fffff	fffff	fffff	fffff	fffff
TF	≥	Co-60 , fish	≥	3.000E+02	≥	3.000E+02	≥	BIOFA(22,1)
TF	≥	Co-60 , crustacea and mollusks	≥	2.000E+02	≥	2.000E+02	≥	BIOFA(22,2)
TF	≥		≥		≥		≥	
TF	≥	Cs-134 , fish	≥	2.000E+03	≥	2.000E+03	≥	BIOFA(23,1)
TF	≥	Cs-134 , crustacea and mollusks	≥	1.000E+02	≥	1.000E+02	≥	BIOFA(23,2)
TF	≥		≥		≥		≥	
TF	≥	Cs-137+D , fish	≥	2.000E+03	≥	2.000E+03	≥	BIOFA(24,1)
TF	≥	Cs-137+D , crustacea and mollusks	≥	1.000E+02	≥	1.000E+02	≥	BIOFA(24,2)
TF	≥		≥		≥		≥	
TF	≥	Eu-154 , fish	≥	5.000E+01	≥	5.000E+01	≥	BIOFA(25,1)
TF	≥	Eu-154 , crustacea and mollusks	≥	1.000E+03	≥	1.000E+03	≥	BIOFA(25,2)
TF	≥		≥		≥		≥	
TF	≥	Eu-155 , fish	≥	5.000E+01	≥	5.000E+01	≥	BIOFA(26,1)
TF	≥	Eu-155 , crustacea and mollusks	≥	1.000E+03	≥	1.000E+03	≥	BIOFA(26,2)
TF	≥		≥		≥		≥	
TF	≥	H-3 , fish	≥	1.000E+00	≥	1.000E+00	≥	BIOFA(27,1)
TF	≥	H-3 , crustacea and mollusks	≥	1.000E+00	≥	1.000E+00	≥	BIOFA(27,2)
TF	≥		≥		≥		≥	
TF	≥	Ho-166m , fish	≥	2.500E+01	≥	2.500E+01	≥	BIOFA(28,1)
TF	≥	Ho-166m , crustacea and mollusks	≥	1.000E+03	≥	1.000E+03	≥	BIOFA(28,2)
TF	≥		≥		≥		≥	
TF	≥	Na-22 , fish	≥	2.000E+01	≥	2.000E+01	≥	BIOFA(29,1)
TF	≥	Na-22 , crustacea and mollusks	≥	2.000E+02	≥	2.000E+02	≥	BIOFA(29,2)

TF	≥		≥	≥	≥
TF	≥	Np-237+D , fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(30,1)
TF	≥	Np-237+D , crustacea and mollusks	≥ 4.000E+02	≥ 4.000E+02	≥ BIOFA(30,2)
TF	≥		≥	≥	≥
TF	≥	Pa-231 , fish	≥ 1.000E+01	≥ 1.000E+01	≥ BIOFA(31,1)
TF	≥	Pa-231 , crustacea and mollusks	≥ 1.100E+02	≥ 1.100E+02	≥ BIOFA(31,2)
TF	≥		≥	≥	≥
TF	≥	Pb-210+D , fish	≥ 3.000E+02	≥ 3.000E+02	≥ BIOFA(32,1)
TF	≥	Pb-210+D , crustacea and mollusks	≥ 1.000E+02	≥ 1.000E+02	≥ BIOFA(32,2)
TF	≥		≥	≥	≥
TF	≥	Pm-147 , fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(33,1)
TF	≥	Pm-147 , crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(33,2)
TF	≥		≥	≥	≥
TF	≥	Po-210 , fish	≥ 1.000E+02	≥ 1.000E+02	≥ BIOFA(34,1)
TF	≥	Po-210 , crustacea and mollusks	≥ 2.000E+04	≥ 2.000E+04	≥ BIOFA(34,2)
TF	≥		≥	≥	≥
TF	≥	Pu-238 , fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(35,1)
TF	≥	Pu-238 , crustacea and mollusks	≥ 1.000E+02	≥ 1.000E+02	≥ BIOFA(35,2)
TF	≥		≥	≥	≥
TF	≥	Pu-239 , fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(37,1)
TF	≥	Pu-239 , crustacea and mollusks	≥ 1.000E+02	≥ 1.000E+02	≥ BIOFA(37,2)
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

0	≥		≥	Current	≥		≥	Parameter
Menu	≥	Parameter	≥	Value	≥	Default	≥	Name
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TF	≥ Pu-240	, fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(38,1)
TF	≥ Pu-240	, crustacea and mollusks	≥ 1.000E+02	≥ 1.000E+02	≥ BIOFA(38,2)
TF	≥		≥	≥	≥
TF	≥ Pu-241	, fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(40,1)
TF	≥ Pu-241	, crustacea and mollusks	≥ 1.000E+02	≥ 1.000E+02	≥ BIOFA(40,2)
TF	≥		≥	≥	≥
TF	≥ Pu-241+D	, fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(41,1)
TF	≥ Pu-241+D	, crustacea and mollusks	≥ 1.000E+02	≥ 1.000E+02	≥ BIOFA(41,2)
TF	≥		≥	≥	≥
TF	≥ Pu-242	, fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(42,1)
TF	≥ Pu-242	, crustacea and mollusks	≥ 1.000E+02	≥ 1.000E+02	≥ BIOFA(42,2)
TF	≥		≥	≥	≥
TF	≥ Pu-244	, fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(45,1)
TF	≥ Pu-244	, crustacea and mollusks	≥ 1.000E+02	≥ 1.000E+02	≥ BIOFA(45,2)
TF	≥		≥	≥	≥
TF	≥ Pu-244+D	, fish	≥ 3.000E+01	≥ 3.000E+01	≥ BIOFA(46,1)
TF	≥ Pu-244+D	, crustacea and mollusks	≥ 1.000E+02	≥ 1.000E+02	≥ BIOFA(46,2)
TF	≥		≥	≥	≥
TF	≥ Ra-226+D	, fish	≥ 5.000E+01	≥ 5.000E+01	≥ BIOFA(48,1)
TF	≥ Ra-226+D	, crustacea and mollusks	≥ 2.500E+02	≥ 2.500E+02	≥ BIOFA(48,2)
TF	≥		≥	≥	≥
TF	≥ Ra-228+D	, fish	≥ 5.000E+01	≥ 5.000E+01	≥ BIOFA(49,1)
TF	≥ Ra-228+D	, crustacea and mollusks	≥ 2.500E+02	≥ 2.500E+02	≥ BIOFA(49,2)
TF	≥		≥	≥	≥
TF	≥ Ru-106+D	, fish	≥ 1.000E+01	≥ 1.000E+01	≥ BIOFA(50,1)
TF	≥ Ru-106+D	, crustacea and mollusks	≥ 3.000E+02	≥ 3.000E+02	≥ BIOFA(50,2)
TF	≥		≥	≥	≥
TF	≥ Sb-125	, fish	≥ 1.000E+02	≥ 1.000E+02	≥ BIOFA(51,1)
TF	≥ Sb-125	, crustacea and mollusks	≥ 1.000E+01	≥ 1.000E+01	≥ BIOFA(51,2)
TF	≥		≥	≥	≥
TF	≥ Sm-147	, fish	≥ 2.500E+01	≥ 2.500E+01	≥ BIOFA(53,1)
TF	≥ Sm-147	, crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(53,2)
TF	≥		≥	≥	≥

TF	≥ Sm-151	, fish	≥ 2.500E+01	≥ 2.500E+01	≥ BIOFA(54,1)
TF	≥ Sm-151	, crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(54,2)
TF	≥		≥	≥	≥
TF	≥ Sn-121m+D	, fish	≥ 3.000E+03	≥ 3.000E+03	≥ BIOFA(55,1)
TF	≥ Sn-121m+D	, crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(55,2)
TF	≥		≥	≥	≥
TF	≥ Sn-126+D	, fish	≥ 3.000E+03	≥ 3.000E+03	≥ BIOFA(56,1)
TF	≥ Sn-126+D	, crustacea and mollusks	≥ 1.000E+03	≥ 1.000E+03	≥ BIOFA(56,2)
TF	≥		≥	≥	≥
TF	≥ Sr-90+D	, fish	≥ 6.000E+01	≥ 6.000E+01	≥ BIOFA(57,1)
TF	≥ Sr-90+D	, crustacea and mollusks	≥ 1.000E+02	≥ 1.000E+02	≥ BIOFA(57,2)
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

0	≥		≥	Current	≥	≥	Parameter
Menu	≥	Parameter	≥	Value	≥	Default	≥ Name
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TF	≥ Te-125m	, fish	≥ 4.000E+02	≥ 4.000E+02	≥	≥	BIOFA(58,1)
TF	≥ Te-125m	, crustacea and mollusks	≥ 7.500E+01	≥ 7.500E+01	≥	≥	BIOFA(58,2)
TF	≥		≥	≥	≥	≥	
TF	≥ Th-228+D	, fish	≥ 1.000E+02	≥ 1.000E+02	≥	≥	BIOFA(59,1)
TF	≥ Th-228+D	, crustacea and mollusks	≥ 5.000E+02	≥ 5.000E+02	≥	≥	BIOFA(59,2)
TF	≥		≥	≥	≥	≥	
TF	≥ Th-229+D	, fish	≥ 1.000E+02	≥ 1.000E+02	≥	≥	BIOFA(60,1)
TF	≥ Th-229+D	, crustacea and mollusks	≥ 5.000E+02	≥ 5.000E+02	≥	≥	BIOFA(60,2)
TF	≥		≥	≥	≥	≥	
TF	≥ Th-230	, fish	≥ 1.000E+02	≥ 1.000E+02	≥	≥	BIOFA(61,1)

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Menu	Parameter	Input	Default	computed	Name
0	≥	≥	User	≥	RESRAD

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 fffff

FSTI ≥ Exposure duration	≥ 3.000E+01	≥ 3.000E+01	≥	---	≥ ED
FSTI ≥ Basic radiation dose limit (mrem/yr)	≥ 1.500E+01	≥ 2.500E+01	≥	---	≥ BRDL
≥	≥	≥	≥		≥
CONC ≥ Initial principal radionuclide (pCi/g): Ac-227	≥ 2.340E+00	≥ 0.000E+00	≥	---	≥ S1(1)
CONC ≥ Initial principal radionuclide (pCi/g): Al-26	≥ 7.640E+02	≥ 0.000E+00	≥	---	≥ S1(2)
CONC ≥ Initial principal radionuclide (pCi/g): Am-241	≥ 1.410E+03	≥ 0.000E+00	≥	---	≥ S1(3)
CONC ≥ Initial principal radionuclide (pCi/g): Cf-249	≥ 3.240E-03	≥ 0.000E+00	≥	---	≥ S1(5)
CONC ≥ Initial principal radionuclide (pCi/g): Cf-251	≥ 1.340E-02	≥ 0.000E+00	≥	---	≥ S1(8)
CONC ≥ Initial principal radionuclide (pCi/g): Cf-252	≥ 1.510E-07	≥ 0.000E+00	≥	---	≥ S1(9)
CONC ≥ Initial principal radionuclide (pCi/g): Cl-36	≥ 2.790E-01	≥ 0.000E+00	≥	---	≥ S1(14)
CONC ≥ Initial principal radionuclide (pCi/g): Co-60	≥ 4.860E+00	≥ 0.000E+00	≥	---	≥ S1(22)
CONC ≥ Initial principal radionuclide (pCi/g): Cs-134	≥ 2.620E-06	≥ 0.000E+00	≥	---	≥ S1(23)
CONC ≥ Initial principal radionuclide (pCi/g): Cs-137	≥ 3.050E+03	≥ 0.000E+00	≥	---	≥ S1(24)
CONC ≥ Initial principal radionuclide (pCi/g): Eu-154	≥ 9.920E-03	≥ 0.000E+00	≥	---	≥ S1(25)
CONC ≥ Initial principal radionuclide (pCi/g): Eu-155	≥ 8.720E-03	≥ 0.000E+00	≥	---	≥ S1(26)
CONC ≥ Initial principal radionuclide (pCi/g): H-3	≥ 3.780E+04	≥ 0.000E+00	≥	---	≥ S1(27)
CONC ≥ Initial principal radionuclide (pCi/g): Ho-166m	≥ 5.020E-01	≥ 0.000E+00	≥	---	≥ S1(28)
CONC ≥ Initial principal radionuclide (pCi/g): Na-22	≥ 1.120E-03	≥ 0.000E+00	≥	---	≥ S1(29)
CONC ≥ Initial principal radionuclide (pCi/g): Np-237	≥ 1.620E-03	≥ 0.000E+00	≥	---	≥ S1(30)
CONC ≥ Initial principal radionuclide (pCi/g): Pb-210	≥ 2.850E+00	≥ 0.000E+00	≥	---	≥ S1(32)
CONC ≥ Initial principal radionuclide (pCi/g): Pm-147	≥ 1.370E-08	≥ 0.000E+00	≥	---	≥ S1(33)
CONC ≥ Initial principal radionuclide (pCi/g): Pu-238	≥ 1.470E+04	≥ 0.000E+00	≥	---	≥ S1(35)
CONC ≥ Initial principal radionuclide (pCi/g): Pu-239	≥ 9.250E+03	≥ 0.000E+00	≥	---	≥ S1(37)
CONC ≥ Initial principal radionuclide (pCi/g): Pu-240	≥ 2.380E+03	≥ 0.000E+00	≥	---	≥ S1(38)
CONC ≥ Initial principal radionuclide (pCi/g): Pu-241	≥ 3.820E+03	≥ 0.000E+00	≥	---	≥ S1(40)
CONC ≥ Initial principal radionuclide (pCi/g): Pu-242	≥ 2.520E-01	≥ 0.000E+00	≥	---	≥ S1(42)
CONC ≥ Initial principal radionuclide (pCi/g): Ra-226	≥ 3.850E+00	≥ 0.000E+00	≥	---	≥ S1(48)
CONC ≥ Initial principal radionuclide (pCi/g): Ra-228	≥ 4.190E+00	≥ 0.000E+00	≥	---	≥ S1(49)
CONC ≥ Initial principal radionuclide (pCi/g): Ru-106	≥ 7.770E-09	≥ 0.000E+00	≥	---	≥ S1(50)
CONC ≥ Initial principal radionuclide (pCi/g): Sb-125	≥ 5.400E-04	≥ 0.000E+00	≥	---	≥ S1(51)
CONC ≥ Initial principal radionuclide (pCi/g): Sm-151	≥ 2.110E-02	≥ 0.000E+00	≥	---	≥ S1(54)



CONC ≥ Initial principal radionuclide (pCi/g):	Sn-121m	≥ 5.020E-01	≥ 0.000E+00	≥ ---	≥ S1(55)
CONC ≥ Initial principal radionuclide (pCi/g):	Sn-126	≥ 1.220E-01	≥ 0.000E+00	≥ ---	≥ S1(56)
CONC ≥ Initial principal radionuclide (pCi/g):	Sr-90	≥ 4.300E+02	≥ 0.000E+00	≥ ---	≥ S1(57)
CONC ≥ Initial principal radionuclide (pCi/g):	Th-228	≥ 8.930E-03	≥ 0.000E+00	≥ ---	≥ S1(59)
CONC ≥ Initial principal radionuclide (pCi/g):	Th-230	≥ 8.370E+01	≥ 0.000E+00	≥ ---	≥ S1(61)
CONC ≥ Initial principal radionuclide (pCi/g):	Th-232	≥ 9.880E-03	≥ 0.000E+00	≥ ---	≥ S1(62)
CONC ≥ Initial principal radionuclide (pCi/g):	U-233	≥ 2.790E+00	≥ 0.000E+00	≥ ---	≥ S1(63)
CONC ≥ Initial principal radionuclide (pCi/g):	U-234	≥ 4.260E+01	≥ 0.000E+00	≥ ---	≥ S1(64)
CONC ≥ Initial principal radionuclide (pCi/g):	U-235	≥ 2.180E+02	≥ 0.000E+00	≥ ---	≥ S1(65)
CONC ≥ Initial principal radionuclide (pCi/g):	U-236	≥ 4.070E-01	≥ 0.000E+00	≥ ---	≥ S1(66)
CONC ≥ Initial principal radionuclide (pCi/g):	U-238	≥ 5.350E+01	≥ 0.000E+00	≥ ---	≥ S1(67)
≥		≥	≥	≥	≥
VDEP ≥ Deposition velocity for	Ac-227	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(1)
VDEP ≥ Deposition velocity for	Al-26	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(2)
VDEP ≥ Deposition velocity for	Am-241	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(3)
VDEP ≥ Deposition velocity for	Am-243	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(4)

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## Site-Specific Parameter Summary (continued)

0	≥	≥	User	≥	RESRAD	≥			
Parameter									
Menu ≥	Parameter	≥	Input	≥	Default	≥	computed	≥	Name
fffff~	fffff	fffff	fffff	fffff	fffff	fffff	fffff	fffff	fffff
fffff									
VDEP ≥ Deposition velocity for	Cf-249	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(5)				
VDEP ≥ Deposition velocity for	Cf-251	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(8)				
VDEP ≥ Deposition velocity for	Cf-252	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(9)				
VDEP ≥ Deposition velocity for	Cl-36	≥ 1.000E-02	≥ 1.000E-02	≥ ---	≥ DEPVEL(14)				
VDEP ≥ Deposition velocity for	Cm-245	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(15)				

VDEP ≥ Deposition velocity for Cm-247	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(17)
VDEP ≥ Deposition velocity for Cm-248	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(18)
VDEP ≥ Deposition velocity for Co-60	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(22)
VDEP ≥ Deposition velocity for Cs-134	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(23)
VDEP ≥ Deposition velocity for Cs-137	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(24)
VDEP ≥ Deposition velocity for Eu-154	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(25)
VDEP ≥ Deposition velocity for Eu-155	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(26)
VDEP ≥ Deposition velocity for H-3	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(27)
VDEP ≥ Deposition velocity for Ho-166m	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(28)
VDEP ≥ Deposition velocity for Na-22	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(29)
VDEP ≥ Deposition velocity for Np-237	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(30)
VDEP ≥ Deposition velocity for Pa-231	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(31)
VDEP ≥ Deposition velocity for Pb-210	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(32)
VDEP ≥ Deposition velocity for Pm-147	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(33)
VDEP ≥ Deposition velocity for Po-210	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(34)
VDEP ≥ Deposition velocity for Pu-238	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(35)
VDEP ≥ Deposition velocity for Pu-239	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(37)
VDEP ≥ Deposition velocity for Pu-240	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(38)
VDEP ≥ Deposition velocity for Pu-241	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(40)
VDEP ≥ Deposition velocity for Pu-242	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(42)
VDEP ≥ Deposition velocity for Pu-244	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(45)
VDEP ≥ Deposition velocity for Ra-226	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(48)
VDEP ≥ Deposition velocity for Ra-228	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(49)
VDEP ≥ Deposition velocity for Ru-106	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(50)
VDEP ≥ Deposition velocity for Sb-125	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(51)
VDEP ≥ Deposition velocity for Sm-147	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(53)
VDEP ≥ Deposition velocity for Sm-151	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(54)
VDEP ≥ Deposition velocity for Sn-121m	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(55)
VDEP ≥ Deposition velocity for Sn-126	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(56)
VDEP ≥ Deposition velocity for Sr-90	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(57)
VDEP ≥ Deposition velocity for Te-125m	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(58)
VDEP ≥ Deposition velocity for Th-228	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(59)
VDEP ≥ Deposition velocity for Th-229	≥ 1.000E-03	≥ 1.000E-03	≥	---	≥ DEPVEL(60)

VDEP ≥ Deposition velocity for Th-230	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(61)
VDEP ≥ Deposition velocity for Th-232	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(62)
VDEP ≥ Deposition velocity for U-233	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(63)
VDEP ≥ Deposition velocity for U-234	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(64)
VDEP ≥ Deposition velocity for U-235	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(65)
VDEP ≥ Deposition velocity for U-236	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(66)
VDEP ≥ Deposition velocity for U-238	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥ DEPVEL(67)

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0	≥	≥ User	≥	≥ RESRAD	≥
Parameter					
Menu ≥	Parameter	≥ Input	≥ Default	≥ computed	≥ Name
fffff~	fffff~	fffff~	fffff~	fffff~	fffff~
fffff	fffff	fffff	fffff	fffff	fffff
DCLR ≥ Distribution coefficients for Ac-227		≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)		≥ 1.300E+02	≥ 2.000E+01	≥ ---	≥ DCNUCC(1)
DCLR ≥ Unsaturated zone 1 (cm**3/g)		≥ 1.300E+02	≥ 2.000E+01	≥ ---	≥
DCNUCU(1,1)					
DCLR ≥ Unsaturated zone 2 (cm**3/g)		≥ 1.300E+02	≥ 2.000E+01	≥ ---	≥
DCNUCU(1,2)					
DCLR ≥ Unsaturated zone 3 (cm**3/g)		≥ 1.300E+02	≥ 2.000E+01	≥ ---	≥
DCNUCU(1,3)					
DCLR ≥ Unsaturated zone 4 (cm**3/g)		≥ 0.000E+00	≥ 2.000E+01	≥ ---	≥
DCNUCU(1,4)					
DCLR ≥ Saturated zone (cm**3/g)		≥ 0.000E+00	≥ 2.000E+01	≥ ---	≥ DCNUCS(1)
DCLR ≥ Sediment in surface water body (cm**3/g)		≥ 1.300E+02	≥ 2.000E+01	≥ ---	≥
DCNUCSWB(1)					
DCLR ≥ Agricultural area 1 (cm**3/g)		≥ 1.300E+02	≥ 2.000E+01	≥ ---	≥

DCNUCOF(1,1)					
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 1.300E+02	≥ 2.000E+01	≥ ---	≥	
DCNUCOF(1,2)					
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 1.300E+02	≥ 2.000E+01	≥ ---	≥	
DCNUCOF(1,3)					
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 1.300E+02	≥ 2.000E+01	≥ ---	≥	
DCNUCOF(1,4)					
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 1.300E+02	≥ 2.000E+01	≥ ---	≥	
DCNUCDWE(1)					
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 2.947E-06	≥ ALEACH(1)	
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(1)	
≥	≥	≥	≥	≥	
DCLR ≥ Distribution coefficients for Al-26	≥	≥	≥	≥	
DCLR ≥ Contaminated zone (cm**3/g)	≥ 1.300E+02	≥ 0.000E+00	≥ ---	≥ DCNUCC(2)	
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 1.300E+02	≥ 0.000E+00	≥ ---	≥	
DCNUCU(2,1)					
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 1.300E+02	≥ 0.000E+00	≥ ---	≥	
DCNUCU(2,2)					
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 1.300E+02	≥ 0.000E+00	≥ ---	≥	
DCNUCU(2,3)					
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥	
DCNUCU(2,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥ DCNUCS(2)	
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 1.300E+02	≥ 0.000E+00	≥ ---	≥	
DCNUCSWB(2)					
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 1.300E+02	≥ 0.000E+00	≥ ---	≥	
DCNUCOF(2,1)					
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 1.300E+02	≥ 0.000E+00	≥ ---	≥	
DCNUCOF(2,2)					
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 1.300E+02	≥ 0.000E+00	≥ ---	≥	
DCNUCOF(2,3)					
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 1.300E+02	≥ 0.000E+00	≥ ---	≥	
DCNUCOF(2,4)					

DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 1.300E+02	≥ 0.000E+00	≥ ---	≥
DCNUCDWE(2)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 2.947E-06	≥ ALEACH(2)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(2)
≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for Am-241	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 2.100E+03	≥ 2.000E+01	≥ ---	≥ DCNUCC(3)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 2.400E+03	≥ 2.000E+01	≥ ---	≥
DCNUCU(3,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 2.400E+03	≥ 2.000E+01	≥ ---	≥
DCNUCU(3,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 2.400E+03	≥ 2.000E+01	≥ ---	≥
DCNUCU(3,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 2.000E+01	≥ ---	≥
DCNUCU(3,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 2.000E+01	≥ ---	≥ DCNUCS(3)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 2.100E+03	≥ 2.000E+01	≥ ---	≥
DCNUCSWB(3)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 2.100E+03	≥ 2.000E+01	≥ ---	≥
DCNUCOF(3,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 2.100E+03	≥ 2.000E+01	≥ ---	≥
DCNUCOF(3,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 2.100E+03	≥ 2.000E+01	≥ ---	≥
DCNUCOF(3,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 2.100E+03	≥ 2.000E+01	≥ ---	≥
DCNUCOF(3,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 2.100E+03	≥ 2.000E+01	≥ ---	≥
DCNUCDWE(3)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 1.825E-07	≥ ALEACH(3)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(3)

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## Site-Specific Parameter Summary (continued)

0	≥	≥	User	≥	RESRAD	≥				
Parameter										
Menu	≥	Parameter	≥	Input	≥	Default	≥	computed	≥	Name
fffff~	fffff	fffff	fffff	fffff	fffff	fffff	fffff	fffff	fffff	fffff
fffff										
DCLR	≥	Distribution coefficients for Cf-249	≥		≥		≥		≥	
DCLR	≥	Contaminated zone (cm**3/g)	≥	1.300E+02	≥	1.380E+03	≥	---	≥	DCNUCC(5)
DCLR	≥	Unsaturated zone 1 (cm**3/g)	≥	1.300E+02	≥	1.380E+03	≥	---	≥	
DCNUCU(5,1)										
DCLR	≥	Unsaturated zone 2 (cm**3/g)	≥	1.300E+02	≥	1.380E+03	≥	---	≥	
DCNUCU(5,2)										
DCLR	≥	Unsaturated zone 3 (cm**3/g)	≥	1.300E+02	≥	1.380E+03	≥	---	≥	
DCNUCU(5,3)										
DCLR	≥	Unsaturated zone 4 (cm**3/g)	≥	0.000E+00	≥	1.380E+03	≥	---	≥	
DCNUCU(5,4)										
DCLR	≥	Saturated zone (cm**3/g)	≥	0.000E+00	≥	1.380E+03	≥	---	≥	DCNUCS(5)
DCLR	≥	Sediment in surface water body (cm**3/g)	≥	1.300E+02	≥	1.380E+03	≥	---	≥	
DCNUCSWB(5)										
DCLR	≥	Agricultural area 1 (cm**3/g)	≥	1.300E+02	≥	1.380E+03	≥	---	≥	
DCNUCOF(5,1)										
DCLR	≥	Agricultural area 2 (cm**3/g)	≥	1.300E+02	≥	1.380E+03	≥	---	≥	
DCNUCOF(5,2)										
DCLR	≥	Agricultural area 3 (cm**3/g)	≥	1.300E+02	≥	1.380E+03	≥	---	≥	
DCNUCOF(5,3)										
DCLR	≥	Agricultural area 4 (cm**3/g)	≥	1.300E+02	≥	1.380E+03	≥	---	≥	
DCNUCOF(5,4)										
DCLR	≥	Offsite Dwelling (cm**3/g)	≥	1.300E+02	≥	1.380E+03	≥	---	≥	
DCNUCDWE(5)										
DCLR	≥	Leach rate (/yr)	≥	0.000E+00	≥	0.000E+00	≥	2.947E-06	≥	ALEACH(5)

DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(5)
≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for Cf-251	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥ DCNUCC(8)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCU(8,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCU(8,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCU(8,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥
DCNUCU(8,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥ DCNUCS(8)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCSWB(8)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCOF(8,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCOF(8,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCOF(8,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCOF(8,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCDWE(8)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 2.947E-06	≥ ALEACH(8)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(8)
≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for Cf-252	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥ DCNUCC(9)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCU(9,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥

DCNUCU(9,2)					
DCLR ≥	Unsaturated zone 3 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCU(9,3)					
DCLR ≥	Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥
DCNUCU(9,4)					
DCLR ≥	Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥ DCNUCS(9)
DCLR ≥	Sediment in surface water body (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCSWB(9)					
DCLR ≥	Agricultural area 1 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCOF(9,1)					
DCLR ≥	Agricultural area 2 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCOF(9,2)					
DCLR ≥	Agricultural area 3 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCOF(9,3)					
DCLR ≥	Agricultural area 4 (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCOF(9,4)					
DCLR ≥	Offsite Dwelling (cm**3/g)	≥ 1.300E+02	≥ 1.380E+03	≥ ---	≥
DCNUCDWE(9)					
DCLR ≥	Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 2.947E-06	≥ ALEACH(9)
DCLR ≥	Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(9)

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Site-Specific Parameter Summary (continued)

0	≥		≥	User	≥		≥	RESRAD	≥
Parameter									
Menu ≥		Parameter	≥	Input	≥	Default	≥	computed	≥
Name									
~~~~~									
DCLR ≥		Distribution coefficients for Cl-36	≥		≥		≥		≥

DCLR ≥ Contaminated zone (cm**3/g)	≥ 0.000E+00 ≥ 1.000E-01 ≥ --- ≥ DCNUCC(14)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 0.000E+00 ≥ 1.000E-01 ≥ --- ≥
DCNUCU(14,1)	
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 0.000E+00 ≥ 1.000E-01 ≥ --- ≥
DCNUCU(14,2)	
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 0.000E+00 ≥ 1.000E-01 ≥ --- ≥
DCNUCU(14,3)	
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00 ≥ 1.000E-01 ≥ --- ≥
DCNUCU(14,4)	
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00 ≥ 1.000E-01 ≥ --- ≥ DCNUCS(14)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 0.000E+00 ≥ 1.000E-01 ≥ --- ≥
DCNUCSWB(14)	
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 0.000E+00 ≥ 1.000E-01 ≥ --- ≥
DCNUCOF(14,1)	
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 0.000E+00 ≥ 1.000E-01 ≥ --- ≥
DCNUCOF(14,2)	
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 0.000E+00 ≥ 1.000E-01 ≥ --- ≥
DCNUCOF(14,3)	
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 0.000E+00 ≥ 1.000E-01 ≥ --- ≥
DCNUCOF(14,4)	
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 0.000E+00 ≥ 1.000E-01 ≥ --- ≥
DCNUCDWE(14)	
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00 ≥ 0.000E+00 ≥ 7.266E-03 ≥ ALEACH(14)
DCLR ≥ Solubility constant	≥ 0.000E+00 ≥ 0.000E+00 ≥ not used ≥ SOLUB0(14)
≥	≥ ≥ ≥ ≥
DCLR ≥ Distribution coefficients for Co-60	≥ ≥ ≥ ≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 4.500E-01 ≥ 1.000E+03 ≥ --- ≥ DCNUCC(22)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 4.500E-01 ≥ 1.000E+03 ≥ --- ≥
DCNUCU(22,1)	
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 4.500E-01 ≥ 1.000E+03 ≥ --- ≥
DCNUCU(22,2)	
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 4.500E-01 ≥ 1.000E+03 ≥ --- ≥
DCNUCU(22,3)	

DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 1.000E+03	≥ ---	≥
DCNUCU(22,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 1.000E+03	≥ ---	≥ DCNUCS(22)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 4.500E-01	≥ 1.000E+03	≥ ---	≥
DCNUCSWB(22)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 4.500E-01	≥ 1.000E+03	≥ ---	≥
DCNUCOF(22,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 4.500E-01	≥ 1.000E+03	≥ ---	≥
DCNUCOF(22,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 4.500E-01	≥ 1.000E+03	≥ ---	≥
DCNUCOF(22,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 4.500E-01	≥ 1.000E+03	≥ ---	≥
DCNUCOF(22,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 4.500E-01	≥ 1.000E+03	≥ ---	≥
DCNUCDWE(22)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.623E-04	≥ ALEACH(22)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(22)
≥	≥	≥		≥
DCLR ≥ Distribution coefficients for Cs-134	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 1.500E+01	≥ 4.600E+03	≥ ---	≥ DCNUCC(23)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 1.500E+01	≥ 4.600E+03	≥ ---	≥
DCNUCU(23,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 1.500E+01	≥ 4.600E+03	≥ ---	≥
DCNUCU(23,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 1.500E+01	≥ 4.600E+03	≥ ---	≥
DCNUCU(23,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 4.600E+03	≥ ---	≥
DCNUCU(23,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 4.600E+03	≥ ---	≥ DCNUCS(23)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 1.500E+01	≥ 4.600E+03	≥ ---	≥
DCNUCSWB(23)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 1.500E+01	≥ 4.600E+03	≥ ---	≥
DCNUCOF(23,1)				

DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 1.500E+01 ≥ 4.600E+03 ≥ --- ≥
DCNUCOF(23,2)	
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 1.500E+01 ≥ 4.600E+03 ≥ --- ≥
DCNUCOF(23,3)	
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 1.500E+01 ≥ 4.600E+03 ≥ --- ≥
DCNUCOF(23,4)	
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 1.500E+01 ≥ 4.600E+03 ≥ --- ≥
DCNUCDWE(23)	
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00 ≥ 0.000E+00 ≥ 2.546E-05 ≥ ALEACH(23)
DCLR ≥ Solubility constant	≥ 0.000E+00 ≥ 0.000E+00 ≥ not used ≥ SOLUB0(23)
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Site-Specific Parameter Summary (continued)

0 ≥	≥ User	≥	≥ RESRAD	≥	
Parameter					
Menu ≥	Parameter	≥ Input	≥ Default	≥ computed	≥ Name
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fffff	fffff	fffff	fffff	fffff	fffff
DCLR ≥ Distribution coefficients for Cs-137	≥	≥	≥	≥	
DCLR ≥ Contaminated zone (cm**3/g)	≥ 1.500E+01	≥ 4.600E+03	≥ ---	≥	DCNUCC(24)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 1.500E+01	≥ 4.600E+03	≥ ---	≥	
DCNUCU(24,1)					
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 1.500E+01	≥ 4.600E+03	≥ ---	≥	
DCNUCU(24,2)					
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 1.500E+01	≥ 4.600E+03	≥ ---	≥	
DCNUCU(24,3)					
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 4.600E+03	≥ ---	≥	
DCNUCU(24,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 4.600E+03	≥ ---	≥	DCNUCS(24)

DCLR ≥ Sediment in surface water body (cm**3/g) DCNUCSWB(24)	≥ 1.500E+01 ≥ 4.600E+03 ≥	---	≥
DCLR ≥ Agricultural area 1 (cm**3/g) DCNUCOF(24,1)	≥ 1.500E+01 ≥ 4.600E+03 ≥	---	≥
DCLR ≥ Agricultural area 2 (cm**3/g) DCNUCOF(24,2)	≥ 1.500E+01 ≥ 4.600E+03 ≥	---	≥
DCLR ≥ Agricultural area 3 (cm**3/g) DCNUCOF(24,3)	≥ 1.500E+01 ≥ 4.600E+03 ≥	---	≥
DCLR ≥ Agricultural area 4 (cm**3/g) DCNUCOF(24,4)	≥ 1.500E+01 ≥ 4.600E+03 ≥	---	≥
DCLR ≥ Offsite Dwelling (cm**3/g) DCNUCDWE(24)	≥ 1.500E+01 ≥ 4.600E+03 ≥	---	≥
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00 ≥ 0.000E+00 ≥ 2.546E-05	≥ ALEACH(24)	
DCLR ≥ Solubility constant ≥	≥ 0.000E+00 ≥ 0.000E+00 ≥ not used	≥ SOLUB0(24)	
DCLR ≥ Distribution coefficients for Eu-154	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 5.000E+01 ≥ 8.250E+02 ≥	---	≥ DCNUCC(25)
DCLR ≥ Unsaturated zone 1 (cm**3/g) DCNUCU(25,1)	≥ 5.000E+01 ≥ 8.250E+02 ≥	---	≥
DCLR ≥ Unsaturated zone 2 (cm**3/g) DCNUCU(25,2)	≥ 5.000E+01 ≥ 8.250E+02 ≥	---	≥
DCLR ≥ Unsaturated zone 3 (cm**3/g) DCNUCU(25,3)	≥ 5.000E+01 ≥ 8.250E+02 ≥	---	≥
DCLR ≥ Unsaturated zone 4 (cm**3/g) DCNUCU(25,4)	≥ 0.000E+00 ≥ 8.250E+02 ≥	---	≥
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00 ≥ 8.250E+02 ≥	---	≥ DCNUCS(25)
DCLR ≥ Sediment in surface water body (cm**3/g) DCNUCSWB(25)	≥ 5.000E+01 ≥ 8.250E+02 ≥	---	≥
DCLR ≥ Agricultural area 1 (cm**3/g) DCNUCOF(25,1)	≥ 5.000E+01 ≥ 8.250E+02 ≥	---	≥
DCLR ≥ Agricultural area 2 (cm**3/g) DCNUCOF(25,2)	≥ 5.000E+01 ≥ 8.250E+02 ≥	---	≥
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 5.000E+01 ≥ 8.250E+02 ≥	---	≥

DCNUCOF(25,3)					
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCOF(25,4)					
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCDWE(25)					
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.657E-06	≥ ALEACH(25)	
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(25)	
≥	≥	≥	≥	≥	
DCLR ≥ Distribution coefficients for Eu-155	≥	≥	≥	≥	
DCLR ≥ Contaminated zone (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥ DCNUCC(26)	
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCU(26,1)					
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCU(26,2)					
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCU(26,3)					
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 8.250E+02	≥ ---	≥	
DCNUCU(26,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 8.250E+02	≥ ---	≥ DCNUCS(26)	
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCSWB(26)					
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCOF(26,1)					
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCOF(26,2)					
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCOF(26,3)					
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCOF(26,4)					
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCDWE(26)					
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.657E-06	≥ ALEACH(26)	
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(26)	

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0	≥		≥	User	≥		≥	RESRAD	≥	
Parameter										
Menu	≥	Parameter	≥	Input	≥	Default	≥	computed	≥	Name
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DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCDWE(27)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.266E-03	≥ ALEACH(27)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(27)
≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for Ho-166m	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 2.500E+02	≥ 8.000E+02	≥ ---	≥ DCNUCC(28)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 2.500E+02	≥ 8.000E+02	≥ ---	≥
DCNUCU(28,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 2.500E+02	≥ 8.000E+02	≥ ---	≥
DCNUCU(28,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 2.500E+02	≥ 8.000E+02	≥ ---	≥
DCNUCU(28,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 8.000E+02	≥ ---	≥
DCNUCU(28,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 8.000E+02	≥ ---	≥ DCNUCS(28)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 2.500E+02	≥ 8.000E+02	≥ ---	≥
DCNUCSWB(28)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 2.500E+02	≥ 8.000E+02	≥ ---	≥
DCNUCOF(28,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 2.500E+02	≥ 8.000E+02	≥ ---	≥
DCNUCOF(28,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 2.500E+02	≥ 8.000E+02	≥ ---	≥
DCNUCOF(28,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 2.500E+02	≥ 8.000E+02	≥ ---	≥
DCNUCOF(28,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 2.500E+02	≥ 8.000E+02	≥ ---	≥
DCNUCDWE(28)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 1.533E-06	≥ ALEACH(28)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(28)
≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for Na-22	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥ DCNUCC(29)

DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥
DCNUCU(29,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥
DCNUCU(29,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥
DCNUCU(29,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 1.000E+01	≥ ---	≥
DCNUCU(29,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 1.000E+01	≥ ---	≥ DCNUCS(29)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥
DCNUCSWB(29)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥
DCNUCOF(29,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥
DCNUCOF(29,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥
DCNUCOF(29,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥
DCNUCOF(29,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥
DCNUCDWE(29)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 3.812E-05	≥ ALEACH(29)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(29)

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0	≥	≥ User	≥	≥ RESRAD	≥
Parameter					
Menu ≥	Parameter	≥ Input	≥ Default	≥ computed	≥ Name

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DCLR ≥ Distribution coefficients for Np-237	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 7.500E+00	≥ 2.570E+02	≥ ---	≥ DCNUCC(30)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 2.200E+00	≥ 2.570E+02	≥ ---	≥
DCNUCU(30,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 2.200E+00	≥ 2.570E+02	≥ ---	≥
DCNUCU(30,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 2.200E+00	≥ 2.570E+02	≥ ---	≥
DCNUCU(30,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 2.570E+02	≥ ---	≥
DCNUCU(30,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 2.570E+02	≥ ---	≥ DCNUCS(30)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 7.500E+00	≥ 2.570E+02	≥ ---	≥
DCNUCSWB(30)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 7.500E+00	≥ 2.570E+02	≥ ---	≥
DCNUCOF(30,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 7.500E+00	≥ 2.570E+02	≥ ---	≥
DCNUCOF(30,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 7.500E+00	≥ 2.570E+02	≥ ---	≥
DCNUCOF(30,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 7.500E+00	≥ 2.570E+02	≥ ---	≥
DCNUCOF(30,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 7.500E+00	≥ 2.570E+02	≥ ---	≥
DCNUCDWE(30)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 5.074E-05	≥ ALEACH(30)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(30)
≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for Pb-210	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 2.500E+01	≥ 1.000E+02	≥ ---	≥ DCNUCC(32)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 2.500E+01	≥ 1.000E+02	≥ ---	≥
DCNUCU(32,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 2.500E+01	≥ 1.000E+02	≥ ---	≥

DCNUCU(32,2)					
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 2.500E+01	≥ 1.000E+02	≥ ---	≥	
DCNUCU(32,3)					
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 1.000E+02	≥ ---	≥	
DCNUCU(32,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 1.000E+02	≥ ---	≥	DCNUCS(32)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 2.500E+01	≥ 1.000E+02	≥ ---	≥	
DCNUCSWB(32)					
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 2.500E+01	≥ 1.000E+02	≥ ---	≥	
DCNUCOF(32,1)					
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 2.500E+01	≥ 1.000E+02	≥ ---	≥	
DCNUCOF(32,2)					
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 2.500E+01	≥ 1.000E+02	≥ ---	≥	
DCNUCOF(32,3)					
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 2.500E+01	≥ 1.000E+02	≥ ---	≥	
DCNUCOF(32,4)					
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 2.500E+01	≥ 1.000E+02	≥ ---	≥	
DCNUCDWE(32)					
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 1.530E-05	≥	ALEACH(32)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥	SOLUB0(32)
≥	≥	≥		≥	
DCLR ≥ Distribution coefficients for Pm-147	≥	≥	≥	≥	
DCLR ≥ Contaminated zone (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	DCNUCC(33)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCU(33,1)					
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCU(33,2)					
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCU(33,3)					
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 8.250E+02	≥ ---	≥	
DCNUCU(33,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 8.250E+02	≥ ---	≥	DCNUCS(33)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	

DCNUCSWB(33)
 DCLR ≥ Agricultural area 1 (cm**3/g) ≥ 5.000E+01 ≥ 8.250E+02 ≥ --- ≥
 DCNUCOF(33,1)
 DCLR ≥ Agricultural area 2 (cm**3/g) ≥ 5.000E+01 ≥ 8.250E+02 ≥ --- ≥
 DCNUCOF(33,2)
 DCLR ≥ Agricultural area 3 (cm**3/g) ≥ 5.000E+01 ≥ 8.250E+02 ≥ --- ≥
 DCNUCOF(33,3)
 DCLR ≥ Agricultural area 4 (cm**3/g) ≥ 5.000E+01 ≥ 8.250E+02 ≥ --- ≥
 DCNUCOF(33,4)
 DCLR ≥ Offsite Dwelling (cm**3/g) ≥ 5.000E+01 ≥ 8.250E+02 ≥ --- ≥
 DCNUCDWE(33)
 DCLR ≥ Leach rate (/yr) ≥ 0.000E+00 ≥ 0.000E+00 ≥ 7.657E-06 ≥ ALEACH(33)
 DCLR ≥ Solubility constant ≥ 0.000E+00 ≥ 0.000E+00 ≥ not used ≥ SOLUB0(33)
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Site-Specific Parameter Summary (continued)

0	≥	≥	User	≥	≥	RESRAD	≥
Parameter							
Menu	≥	Parameter	≥	Input	≥	Default	≥ computed ≥ Name
fffff~	fffff	fffff	fffff	fffff	fffff	fffff	fffff
fffff							
DCLR	≥	Distribution coefficients for Pu-238	≥		≥		≥
DCLR	≥	Contaminated zone (cm**3/g)	≥	7.100E+02	≥	2.000E+03	≥ --- ≥ DCNUCC(35)
DCLR	≥	Unsaturated zone 1 (cm**3/g)	≥	4.100E+00	≥	2.000E+03	≥ --- ≥
DCNUCU(35,1)							
DCLR	≥	Unsaturated zone 2 (cm**3/g)	≥	4.100E+00	≥	2.000E+03	≥ --- ≥
DCNUCU(35,2)							
DCLR	≥	Unsaturated zone 3 (cm**3/g)	≥	4.100E+00	≥	2.000E+03	≥ --- ≥
DCNUCU(35,3)							

DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---	≥
DCNUCU(35,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---	≥ DCNUCS(35)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCSWB(35)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCOF(35,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCOF(35,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCOF(35,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCOF(35,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCDWE(35)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 5.397E-07	≥ ALEACH(35)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(35)
≥	≥	≥		≥
DCLR ≥ Distribution coefficients for Pu-239	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥ DCNUCC(37)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥
DCNUCU(37,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥
DCNUCU(37,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥
DCNUCU(37,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---	≥
DCNUCU(37,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---	≥ DCNUCS(37)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCSWB(37)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCOF(37,1)				

DCLR ≥ Agricultural area 2 (cm**3/g) DCNUCOF(37,2)	≥ 7.100E+02 ≥ 2.000E+03 ≥	---	≥
DCLR ≥ Agricultural area 3 (cm**3/g) DCNUCOF(37,3)	≥ 7.100E+02 ≥ 2.000E+03 ≥	---	≥
DCLR ≥ Agricultural area 4 (cm**3/g) DCNUCOF(37,4)	≥ 7.100E+02 ≥ 2.000E+03 ≥	---	≥
DCLR ≥ Offsite Dwelling (cm**3/g) DCNUCDWE(37)	≥ 7.100E+02 ≥ 2.000E+03 ≥	---	≥
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00 ≥ 0.000E+00 ≥ 5.397E-07	≥	ALEACH(37)
DCLR ≥ Solubility constant ≥	≥ 0.000E+00 ≥ 0.000E+00 ≥ not used	≥	SOLUB0(37)
DCLR ≥ Distribution coefficients for Pu-240	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 7.100E+02 ≥ 2.000E+03 ≥	---	≥ DCNUCC(38)
DCLR ≥ Unsaturated zone 1 (cm**3/g) DCNUCU(38,1)	≥ 4.100E+00 ≥ 2.000E+03 ≥	---	≥
DCLR ≥ Unsaturated zone 2 (cm**3/g) DCNUCU(38,2)	≥ 4.100E+00 ≥ 2.000E+03 ≥	---	≥
DCLR ≥ Unsaturated zone 3 (cm**3/g) DCNUCU(38,3)	≥ 4.100E+00 ≥ 2.000E+03 ≥	---	≥
DCLR ≥ Unsaturated zone 4 (cm**3/g) DCNUCU(38,4)	≥ 0.000E+00 ≥ 2.000E+03 ≥	---	≥
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00 ≥ 2.000E+03 ≥	---	≥ DCNUCS(38)
DCLR ≥ Sediment in surface water body (cm**3/g) DCNUCSWB(38)	≥ 7.100E+02 ≥ 2.000E+03 ≥	---	≥
DCLR ≥ Agricultural area 1 (cm**3/g) DCNUCOF(38,1)	≥ 7.100E+02 ≥ 2.000E+03 ≥	---	≥
DCLR ≥ Agricultural area 2 (cm**3/g) DCNUCOF(38,2)	≥ 7.100E+02 ≥ 2.000E+03 ≥	---	≥
DCLR ≥ Agricultural area 3 (cm**3/g) DCNUCOF(38,3)	≥ 7.100E+02 ≥ 2.000E+03 ≥	---	≥
DCLR ≥ Agricultural area 4 (cm**3/g) DCNUCOF(38,4)	≥ 7.100E+02 ≥ 2.000E+03 ≥	---	≥
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 7.100E+02 ≥ 2.000E+03 ≥	---	≥

DCNUCDWE(38)

DCLR ≥ Leach rate (/yr) ≥ 0.000E+00 ≥ 0.000E+00 ≥ 5.397E-07 ≥ ALEACH(38)
 DCLR ≥ Solubility constant ≥ 0.000E+00 ≥ 0.000E+00 ≥ not used ≥ SOLUB0(38)
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0 ≥	≥ User	≥ RESRAD	≥
Parameter	Input	Default	computed
Menu ≥	Parameter	≥	Name
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DCLR ≥ Distribution coefficients for Pu-241	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---
DCNUCU(40,1)			
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---
DCNUCU(40,2)			
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---
DCNUCU(40,3)			
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---
DCNUCU(40,4)			
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---
DCNUCSWB(40)			
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---
DCNUCOF(40,1)			
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---
DCNUCOF(40,2)			
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---

DCNUCOF(40,3)					
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCOF(40,4)					
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCDWE(40)					
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 5.397E-07	≥ ALEACH(40)	
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(40)	
≥	≥	≥	≥	≥	
DCLR ≥ Distribution coefficients for Pu-242	≥	≥	≥	≥	
DCLR ≥ Contaminated zone (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥ DCNUCC(42)	
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥	
DCNUCU(42,1)					
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥	
DCNUCU(42,2)					
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥	
DCNUCU(42,3)					
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---	≥	
DCNUCU(42,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---	≥ DCNUCS(42)	
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCSWB(42)					
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCOF(42,1)					
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCOF(42,2)					
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCOF(42,3)					
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCOF(42,4)					
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCDWE(42)					
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 5.397E-07	≥ ALEACH(42)	
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(42)	

≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for Ra-226	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 1.000E+03	≥ 7.000E+01	≥ ---	≥ DCNUCC(48)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 1.000E+03	≥ 7.000E+01	≥ ---	≥
DCNUCU(48,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 1.000E+03	≥ 7.000E+01	≥ ---	≥
DCNUCU(48,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 1.000E+03	≥ 7.000E+01	≥ ---	≥
DCNUCU(48,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 7.000E+01	≥ ---	≥
DCNUCU(48,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 7.000E+01	≥ ---	≥ DCNUCS(48)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 1.000E+03	≥ 7.000E+01	≥ ---	≥
DCNUCSWB(48)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 1.000E+03	≥ 7.000E+01	≥ ---	≥
DCNUCOF(48,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 1.000E+03	≥ 7.000E+01	≥ ---	≥
DCNUCOF(48,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 1.000E+03	≥ 7.000E+01	≥ ---	≥
DCNUCOF(48,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 1.000E+03	≥ 7.000E+01	≥ ---	≥
DCNUCOF(48,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 1.000E+03	≥ 7.000E+01	≥ ---	≥
DCNUCDWE(48)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 3.832E-07	≥ ALEACH(48)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(48)
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Parameter Menu ≥	Parameter	≥	Input	≥	Default	≥	computed	≥	Name
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fffff									
DCLR ≥ Distribution coefficients for Ra-228		≥		≥		≥		≥	
DCLR ≥ Contaminated zone (cm**3/g)		≥	1.000E+03	≥	7.000E+01	≥	---	≥	DCNUCC(49)
DCLR ≥ Unsaturated zone 1 (cm**3/g)		≥	1.000E+03	≥	7.000E+01	≥	---	≥	
DCNUCU(49,1)									
DCLR ≥ Unsaturated zone 2 (cm**3/g)		≥	1.000E+03	≥	7.000E+01	≥	---	≥	
DCNUCU(49,2)									
DCLR ≥ Unsaturated zone 3 (cm**3/g)		≥	1.000E+03	≥	7.000E+01	≥	---	≥	
DCNUCU(49,3)									
DCLR ≥ Unsaturated zone 4 (cm**3/g)		≥	0.000E+00	≥	7.000E+01	≥	---	≥	
DCNUCU(49,4)									
DCLR ≥ Saturated zone (cm**3/g)		≥	0.000E+00	≥	7.000E+01	≥	---	≥	DCNUCS(49)
DCLR ≥ Sediment in surface water body (cm**3/g)		≥	1.000E+03	≥	7.000E+01	≥	---	≥	
DCNUCSWB(49)									
DCLR ≥ Agricultural area 1 (cm**3/g)		≥	1.000E+03	≥	7.000E+01	≥	---	≥	
DCNUCOF(49,1)									
DCLR ≥ Agricultural area 2 (cm**3/g)		≥	1.000E+03	≥	7.000E+01	≥	---	≥	
DCNUCOF(49,2)									
DCLR ≥ Agricultural area 3 (cm**3/g)		≥	1.000E+03	≥	7.000E+01	≥	---	≥	
DCNUCOF(49,3)									
DCLR ≥ Agricultural area 4 (cm**3/g)		≥	1.000E+03	≥	7.000E+01	≥	---	≥	
DCNUCOF(49,4)									
DCLR ≥ Offsite Dwelling (cm**3/g)		≥	1.000E+03	≥	7.000E+01	≥	---	≥	
DCNUCDWE(49)									
DCLR ≥ Leach rate (/yr)		≥	0.000E+00	≥	0.000E+00	≥	3.832E-07	≥	ALEACH(49)
DCLR ≥ Solubility constant		≥	0.000E+00	≥	0.000E+00	≥	not used	≥	SOLUB0(49)
≥		≥		≥		≥		≥	
DCLR ≥ Distribution coefficients for Ru-106		≥		≥		≥		≥	
DCLR ≥ Contaminated zone (cm**3/g)		≥	0.000E+00	≥	0.000E+00	≥	---	≥	DCNUCC(50)

DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCU(50,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCU(50,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCU(50,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCU(50,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥ DCNUCS(50)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCSWB(50)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCOF(50,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCOF(50,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCOF(50,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCOF(50,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCDWE(50)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.266E-03	≥ ALEACH(50)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(50)
≥	≥	≥		≥
DCLR ≥ Distribution coefficients for Sb-125	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥ DCNUCC(51)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCU(51,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCU(51,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCU(51,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥

DCNUCU(51,4)						
DCLR ≥	Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥ DCNUCS(51)	
DCLR ≥	Sediment in surface water body (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥	
DCNUCSWB(51)						
DCLR ≥	Agricultural area 1 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥	
DCNUCOF(51,1)						
DCLR ≥	Agricultural area 2 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥	
DCNUCOF(51,2)						
DCLR ≥	Agricultural area 3 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥	
DCNUCOF(51,3)						
DCLR ≥	Agricultural area 4 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥	
DCNUCOF(51,4)						
DCLR ≥	Offsite Dwelling (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥	
DCNUCDWE(51)						
DCLR ≥	Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.266E-03	≥ ALEACH(51)	
DCLR ≥	Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(51)	

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Parameter									
Menu ≥	Parameter	≥	Input	≥	Default	≥	computed	≥	Name
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DCLR ≥	Distribution coefficients for Sm-151	≥		≥		≥		≥	
DCLR ≥	Contaminated zone (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥ DCNUCC(54)				
DCLR ≥	Unsaturated zone 1 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥				
DCNUCU(54,1)									
DCLR ≥	Unsaturated zone 2 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥				

DCNUCU(54,2)					
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCU(54,3)					
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 8.250E+02	≥ ---	≥	
DCNUCU(54,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 8.250E+02	≥ ---	≥	DCNUCS(54)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCSWB(54)					
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCOF(54,1)					
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCOF(54,2)					
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCOF(54,3)					
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCOF(54,4)					
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥	
DCNUCDWE(54)					
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.657E-06	≥	ALEACH(54)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥	SOLUB0(54)
≥	≥	≥	≥	≥	
DCLR ≥ Distribution coefficients for Sn-121m	≥	≥	≥	≥	
DCLR ≥ Contaminated zone (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥	DCNUCC(55)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥	
DCNUCU(55,1)					
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥	
DCNUCU(55,2)					
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥	
DCNUCU(55,3)					
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥	
DCNUCU(55,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥	DCNUCS(55)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥	

DCNUCSWB(55)					
DCLR ≥	Agricultural area 1 (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥
DCNUCOF(55,1)					
DCLR ≥	Agricultural area 2 (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥
DCNUCOF(55,2)					
DCLR ≥	Agricultural area 3 (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥
DCNUCOF(55,3)					
DCLR ≥	Agricultural area 4 (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥
DCNUCOF(55,4)					
DCLR ≥	Offsite Dwelling (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥
DCNUCDWE(55)					
DCLR ≥	Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.657E-06	≥ ALEACH(55)
DCLR ≥	Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(55)
≥		≥	≥	≥	≥
DCLR ≥	Distribution coefficients for Sn-126	≥	≥	≥	≥
DCLR ≥	Contaminated zone (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥ DCNUCC(56)
DCLR ≥	Unsaturated zone 1 (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥
DCNUCU(56,1)					
DCLR ≥	Unsaturated zone 2 (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥
DCNUCU(56,2)					
DCLR ≥	Unsaturated zone 3 (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥
DCNUCU(56,3)					
DCLR ≥	Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCU(56,4)					
DCLR ≥	Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥ DCNUCS(56)
DCLR ≥	Sediment in surface water body (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥
DCNUCSWB(56)					
DCLR ≥	Agricultural area 1 (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥
DCNUCOF(56,1)					
DCLR ≥	Agricultural area 2 (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥
DCNUCOF(56,2)					
DCLR ≥	Agricultural area 3 (cm**3/g)	≥ 5.000E+01	≥ 0.000E+00	≥ ---	≥
DCNUCOF(56,3)					

DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 5.000E+01 ≥ 0.000E+00 ≥ --- ≥
DCNUCOF(56,4)	
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 5.000E+01 ≥ 0.000E+00 ≥ --- ≥
DCNUCDWE(56)	
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00 ≥ 0.000E+00 ≥ 7.657E-06 ≥ ALEACH(56)
DCLR ≥ Solubility constant	≥ 0.000E+00 ≥ 0.000E+00 ≥ not used ≥ SOLUB0(56)
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Site-Specific Parameter Summary (continued)

0 ≥	≥ User ≥	≥ RESRAD ≥
Parameter		
Menu ≥	≥ Input ≥ Default ≥ computed ≥	≥ Name
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DCLR ≥ Distribution coefficients for Sr-90	≥ ≥ ≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 7.000E+01 ≥ 3.000E+01 ≥ ---	≥ DCNUCC(57)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 7.000E+01 ≥ 3.000E+01 ≥ ---	≥
DCNUCU(57,1)		
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 7.000E+01 ≥ 3.000E+01 ≥ ---	≥
DCNUCU(57,2)		
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 7.000E+01 ≥ 3.000E+01 ≥ ---	≥
DCNUCU(57,3)		
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00 ≥ 3.000E+01 ≥ ---	≥
DCNUCU(57,4)		
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00 ≥ 3.000E+01 ≥ ---	≥ DCNUCS(57)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 7.000E+01 ≥ 3.000E+01 ≥ ---	≥
DCNUCSWB(57)		
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 7.000E+01 ≥ 3.000E+01 ≥ ---	≥
DCNUCOF(57,1)		

DCLR ≥ Agricultural area 2 (cm**3/g) DCNUCOF(57,2)	≥ 7.000E+01 ≥ 3.000E+01 ≥	---	≥
DCLR ≥ Agricultural area 3 (cm**3/g) DCNUCOF(57,3)	≥ 7.000E+01 ≥ 3.000E+01 ≥	---	≥
DCLR ≥ Agricultural area 4 (cm**3/g) DCNUCOF(57,4)	≥ 7.000E+01 ≥ 3.000E+01 ≥	---	≥
DCLR ≥ Offsite Dwelling (cm**3/g) DCNUCDWE(57)	≥ 7.000E+01 ≥ 3.000E+01 ≥	---	≥
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00 ≥ 0.000E+00 ≥ 5.471E-06	≥ ALEACH(57)	
DCLR ≥ Solubility constant ≥	≥ 0.000E+00 ≥ 0.000E+00 ≥ not used	≥ SOLUB0(57)	
DCLR ≥ Distribution coefficients for Th-228	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 1.000E+04 ≥ 6.000E+04 ≥	---	≥ DCNUCC(59)
DCLR ≥ Unsaturated zone 1 (cm**3/g) DCNUCU(59,1)	≥ 1.000E+04 ≥ 6.000E+04 ≥	---	≥
DCLR ≥ Unsaturated zone 2 (cm**3/g) DCNUCU(59,2)	≥ 1.000E+04 ≥ 6.000E+04 ≥	---	≥
DCLR ≥ Unsaturated zone 3 (cm**3/g) DCNUCU(59,3)	≥ 1.000E+04 ≥ 6.000E+04 ≥	---	≥
DCLR ≥ Unsaturated zone 4 (cm**3/g) DCNUCU(59,4)	≥ 0.000E+00 ≥ 6.000E+04 ≥	---	≥
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00 ≥ 6.000E+04 ≥	---	≥ DCNUCS(59)
DCLR ≥ Sediment in surface water body (cm**3/g) DCNUCSWB(59)	≥ 1.000E+04 ≥ 6.000E+04 ≥	---	≥
DCLR ≥ Agricultural area 1 (cm**3/g) DCNUCOF(59,1)	≥ 1.000E+04 ≥ 6.000E+04 ≥	---	≥
DCLR ≥ Agricultural area 2 (cm**3/g) DCNUCOF(59,2)	≥ 1.000E+04 ≥ 6.000E+04 ≥	---	≥
DCLR ≥ Agricultural area 3 (cm**3/g) DCNUCOF(59,3)	≥ 1.000E+04 ≥ 6.000E+04 ≥	---	≥
DCLR ≥ Agricultural area 4 (cm**3/g) DCNUCOF(59,4)	≥ 1.000E+04 ≥ 6.000E+04 ≥	---	≥
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 1.000E+04 ≥ 6.000E+04 ≥	---	≥

## DCNUCDWE(59)

DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 3.832E-08	≥ ALEACH(59)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(59)
≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for Th-230	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥ DCNUCC(61)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥
DCNUCU(61,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥
DCNUCU(61,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥
DCNUCU(61,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 6.000E+04	≥ ---	≥
DCNUCU(61,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 6.000E+04	≥ ---	≥ DCNUCS(61)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥
DCNUCSWB(61)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥
DCNUCOF(61,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥
DCNUCOF(61,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥
DCNUCOF(61,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥
DCNUCOF(61,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥
DCNUCDWE(61)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 3.832E-08	≥ ALEACH(61)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(61)

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0	≥	≥	User	≥	RESRAD	≥
Parameter						
Menu	Parameter	Input	Default	computed		Name
fffff~	fffff~	fffff~	fffff~	fffff~	fffff~	fffff~
fffff	fffff	fffff	fffff	fffff	fffff	fffff
	DCLR ≥ Distribution coefficients for Th-232	≥	≥	≥	≥	
	DCLR ≥ Contaminated zone (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥	DCNUCC(62)
	DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥	
	DCNUCU(62,1)					
	DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥	
	DCNUCU(62,2)					
	DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥	
	DCNUCU(62,3)					
	DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 6.000E+04	≥ ---	≥	
	DCNUCU(62,4)					
	DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 6.000E+04	≥ ---	≥	DCNUCS(62)
	DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥	
	DCNUCSWB(62)					
	DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥	
	DCNUCOF(62,1)					
	DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥	
	DCNUCOF(62,2)					
	DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥	
	DCNUCOF(62,3)					
	DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥	
	DCNUCOF(62,4)					
	DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 1.000E+04	≥ 6.000E+04	≥ ---	≥	
	DCNUCDWE(62)					
	DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 3.832E-08	≥	ALEACH(62)
	DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥	SOLUB0(62)

≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for U-233	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥ DCNUCC(63)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(63,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(63,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(63,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(63,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 5.000E+01	≥ ---	≥ DCNUCS(63)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCSWB(63)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCOF(63,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCOF(63,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCOF(63,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCOF(63,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCDWE(63)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 1.445E-04	≥ ALEACH(63)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(63)
≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for U-234	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥ DCNUCC(64)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(64,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(64,2)				

DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(64,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(64,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 5.000E+01	≥ ---	≥ DCNUCS(64)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCSWB(64)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCOF(64,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCOF(64,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCOF(64,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCOF(64,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCDWE(64)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 1.445E-04	≥ ALEACH(64)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(64)
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Site-Specific Parameter Summary (continued)

0 ≥	≥ User	≥	≥ RESRAD	≥
Parameter				
Menu ≥	Parameter	≥ Input	≥ Default	≥ computed ≥ Name
~~~~~				
DCLR ≥ Distribution coefficients for U-235	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥ DCNUCC(65)

DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(65,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(65,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(65,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(65,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 5.000E+01	≥ ---	≥ DCNUCS(65)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCSWB(65)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCOF(65,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCOF(65,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCOF(65,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCOF(65,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥
DCNUCDWE(65)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 1.445E-04	≥ ALEACH(65)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(65)
≥	≥	≥		≥
DCLR ≥ Distribution coefficients for U-236	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥ DCNUCC(66)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(66,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(66,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(66,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 5.000E+01	≥ ---	≥

DCNUCU(66,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 5.000E+01	≥ ---	≥ DCNUCS(66)	
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥	
DCNUCSWB(66)					
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥	
DCNUCOF(66,1)					
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥	
DCNUCOF(66,2)					
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥	
DCNUCOF(66,3)					
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥	
DCNUCOF(66,4)					
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥	
DCNUCDWE(66)					
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 1.445E-04	≥ ALEACH(66)	
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(66)	
≥	≥	≥	≥	≥	
DCLR ≥ Distribution coefficients for U-238	≥	≥	≥	≥	
DCLR ≥ Contaminated zone (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥ DCNUCC(67)	
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥	
DCNUCU(67,1)					
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥	
DCNUCU(67,2)					
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 2.400E+00	≥ 5.000E+01	≥ ---	≥	
DCNUCU(67,3)					
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 5.000E+01	≥ ---	≥	
DCNUCU(67,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 5.000E+01	≥ ---	≥ DCNUCS(67)	
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥	
DCNUCSWB(67)					
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥	
DCNUCOF(67,1)					
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 2.600E+00	≥ 5.000E+01	≥ ---	≥	

DCNUCOF(67,2)
 DCLR ≥ Agricultural area 3 (cm**3/g) ≥ 2.600E+00 ≥ 5.000E+01 ≥ --- ≥
 DCNUCOF(67,3)
 DCLR ≥ Agricultural area 4 (cm**3/g) ≥ 2.600E+00 ≥ 5.000E+01 ≥ --- ≥
 DCNUCOF(67,4)
 DCLR ≥ Offsite Dwelling (cm**3/g) ≥ 2.600E+00 ≥ 5.000E+01 ≥ --- ≥
 DCNUCDWE(67)
 DCLR ≥ Leach rate (/yr) ≥ 0.000E+00 ≥ 0.000E+00 ≥ 1.445E-04 ≥ ALEACH(67)
 DCLR ≥ Solubility constant ≥ 0.000E+00 ≥ 0.000E+00 ≥ not used ≥ SOLUB0(67)
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0	≥	≥	User	≥	≥	RESRAD	≥
Parameter							
Menu	≥	Parameter	≥	Input	≥	Default	≥ computed ≥ Name
fffff~	fffff	fffff	fffff	fffff	fffff	fffff	fffff
fffff							
DCLR ≥	Distribution coefficients for progeny Am-243	≥		≥		≥	
DCLR ≥	Contaminated zone (cm**3/g)	≥	2.100E+03	≥	2.000E+01	≥	--- ≥ DCNUCC(4)
DCLR ≥	Unsaturated zone 1 (cm**3/g)	≥	2.400E+03	≥	2.000E+01	≥	--- ≥
DCNUCU(4,1)							
DCLR ≥	Unsaturated zone 2 (cm**3/g)	≥	2.400E+03	≥	2.000E+01	≥	--- ≥
DCNUCU(4,2)							
DCLR ≥	Unsaturated zone 3 (cm**3/g)	≥	2.400E+03	≥	2.000E+01	≥	--- ≥
DCNUCU(4,3)							
DCLR ≥	Unsaturated zone 4 (cm**3/g)	≥	0.000E+00	≥	2.000E+01	≥	--- ≥
DCNUCU(4,4)							
DCLR ≥	Saturated zone (cm**3/g)	≥	0.000E+00	≥	2.000E+01	≥	--- ≥ DCNUCS(4)
DCLR ≥	Sediment in surface water body (cm**3/g)	≥	2.100E+03	≥	2.000E+01	≥	--- ≥

DCNUCSWB(4)					
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 2.100E+03	≥ 2.000E+01	≥ ---	≥	
DCNUCOF(4,1)					
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 2.100E+03	≥ 2.000E+01	≥ ---	≥	
DCNUCOF(4,2)					
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 2.100E+03	≥ 2.000E+01	≥ ---	≥	
DCNUCOF(4,3)					
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 2.100E+03	≥ 2.000E+01	≥ ---	≥	
DCNUCOF(4,4)					
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 2.100E+03	≥ 2.000E+01	≥ ---	≥	
DCNUCDWE(4)					
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 1.825E-07	≥ ALEACH(4)	
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(4)	
≥	≥	≥	≥	≥	
DCLR ≥ Distribution coefficients for progeny Cm-245	≥	≥	≥	≥	
DCLR ≥ Contaminated zone (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥ DCNUCC(15)	
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥	
DCNUCU(15,1)					
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥	
DCNUCU(15,2)					
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥	
DCNUCU(15,3)					
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥	
DCNUCU(15,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥ DCNUCS(15)	
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥	
DCNUCSWB(15)					
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥	
DCNUCOF(15,1)					
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥	
DCNUCOF(15,2)					
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥	
DCNUCOF(15,3)					

DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(15,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCDWE(15)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.657E-06	≥ ALEACH(15)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(15)
≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for progeny Cm-245	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥ DCNUCC(16)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(16,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(16,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(16,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥
DCNUCU(16,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥ DCNUCS(16)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCSWB(16)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(16,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(16,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(16,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(16,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCDWE(16)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.657E-06	≥ ALEACH(16)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(16)
1RESRAD-OFFSITE, Version 2.6				
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Site-Specific Parameter Summary (continued)

0	≥	≥	User	≥	≥	RESRAD	≥
Parameter							
Menu	≥	Parameter	≥	Input	≥	Default	≥
						computed	≥
							Name
fffff~	fffff	fffff	fffff	fffff	fffff	fffff	fffff
fffff							
DCLR	≥	Distribution coefficients for progeny Cm-247	≥		≥		≥
DCLR	≥	Contaminated zone (cm**3/g)	≥	5.000E+01	≥	1.380E+03	≥ --- ≥ DCNUCC(17)
DCLR	≥	Unsaturated zone 1 (cm**3/g)	≥	5.000E+01	≥	1.380E+03	≥ --- ≥
DCNUCU(17,1)							
DCLR	≥	Unsaturated zone 2 (cm**3/g)	≥	5.000E+01	≥	1.380E+03	≥ --- ≥
DCNUCU(17,2)							
DCLR	≥	Unsaturated zone 3 (cm**3/g)	≥	5.000E+01	≥	1.380E+03	≥ --- ≥
DCNUCU(17,3)							
DCLR	≥	Unsaturated zone 4 (cm**3/g)	≥	0.000E+00	≥	1.380E+03	≥ --- ≥
DCNUCU(17,4)							
DCLR	≥	Saturated zone (cm**3/g)	≥	0.000E+00	≥	1.380E+03	≥ --- ≥ DCNUCS(17)
DCLR	≥	Sediment in surface water body (cm**3/g)	≥	5.000E+01	≥	1.380E+03	≥ --- ≥
DCNUCSWB(17)							
DCLR	≥	Agricultural area 1 (cm**3/g)	≥	5.000E+01	≥	1.380E+03	≥ --- ≥
DCNUCOF(17,1)							
DCLR	≥	Agricultural area 2 (cm**3/g)	≥	5.000E+01	≥	1.380E+03	≥ --- ≥
DCNUCOF(17,2)							
DCLR	≥	Agricultural area 3 (cm**3/g)	≥	5.000E+01	≥	1.380E+03	≥ --- ≥
DCNUCOF(17,3)							
DCLR	≥	Agricultural area 4 (cm**3/g)	≥	5.000E+01	≥	1.380E+03	≥ --- ≥
DCNUCOF(17,4)							
DCLR	≥	Offsite Dwelling (cm**3/g)	≥	5.000E+01	≥	1.380E+03	≥ --- ≥

DCNUCDWE(17)

DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.657E-06	≥ ALEACH(17)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(17)
≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for progeny Cm-248	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥ DCNUCC(18)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(18,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(18,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(18,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥
DCNUCU(18,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥ DCNUCS(18)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCSWB(18)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(18,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(18,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(18,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(18,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCDWE(18)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.657E-06	≥ ALEACH(18)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(18)
≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for progeny Cm-248	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥ DCNUCC(19)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥

DCNUCU(19,1)					
DCLR ≥	Unsaturated zone 2 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(19,2)					
DCLR ≥	Unsaturated zone 3 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(19,3)					
DCLR ≥	Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥
DCNUCU(19,4)					
DCLR ≥	Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥ DCNUCS(19)
DCLR ≥	Sediment in surface water body (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCSWB(19)					
DCLR ≥	Agricultural area 1 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(19,1)					
DCLR ≥	Agricultural area 2 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(19,2)					
DCLR ≥	Agricultural area 3 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(19,3)					
DCLR ≥	Agricultural area 4 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(19,4)					
DCLR ≥	Offsite Dwelling (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCDWE(19)					
DCLR ≥	Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.657E-06	≥ ALEACH(19)
DCLR ≥	Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(19)

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0	≥		≥ User	≥	≥ RESRAD	≥
Parameter						
Menu ≥		Parameter	≥ Input	≥ Default	≥ computed	≥ Name

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DCLR ≥ Distribution coefficients for progeny Cm-248	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥ DCNUCC(20)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(20,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(20,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(20,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥
DCNUCU(20,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥ DCNUCS(20)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCSWB(20)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(20,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(20,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(20,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(20,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCDWE(20)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.657E-06	≥ ALEACH(20)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(20)
≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for progeny Cm-248	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥ DCNUCC(21)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(21,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(21,2)				

DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCU(21,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥
DCNUCU(21,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 1.380E+03	≥ ---	≥ DCNUCS(21)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCSWB(21)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(21,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(21,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(21,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCOF(21,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 5.000E+01	≥ 1.380E+03	≥ ---	≥
DCNUCDWE(21)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.657E-06	≥ ALEACH(21)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(21)
≥	≥	≥		≥
DCLR ≥ Distribution coefficients for progeny Pa-231	≥	≥		≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 5.500E+03	≥ 5.000E+01	≥ ---	≥ DCNUCC(31)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 5.500E+03	≥ 5.000E+01	≥ ---	≥
DCNUCU(31,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 5.500E+03	≥ 5.000E+01	≥ ---	≥
DCNUCU(31,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 5.500E+03	≥ 5.000E+01	≥ ---	≥
DCNUCU(31,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 5.000E+01	≥ ---	≥
DCNUCU(31,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 5.000E+01	≥ ---	≥ DCNUCS(31)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 5.500E+03	≥ 5.000E+01	≥ ---	≥
DCNUCSWB(31)				

Site-Specific Parameter Summary (continued)						
Parameter		User		RESRAD		
Menu	Parameter	Input	Default	computed		Name
<i>~~~~~</i>						
DCLR	Distribution coefficients for progeny Po-210					
DCLR	Contaminated zone (cm**3/g)	$\geq 1.000E+01$	$\geq 1.000E+01$	$\geq ---$		DCNUCC(34)
DCLR	Unsaturated zone 1 (cm**3/g)	$\geq 1.000E+01$	$\geq 1.000E+01$	$\geq ---$		
DCNUCU(34,1)						
DCLR	Unsaturated zone 2 (cm**3/g)	$\geq 1.000E+01$	$\geq 1.000E+01$	$\geq ---$		
DCNUCU(34,2)						
DCLR	Unsaturated zone 3 (cm**3/g)	$\geq 1.000E+01$	$\geq 1.000E+01$	$\geq ---$		
DCNUCU(34,3)						
DCLR	Unsaturated zone 4 (cm**3/g)	$\geq 1.000E+01$	$\geq 1.000E+01$	$\geq ---$		

DCNUCU(34,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥ DCNUCS(34)	
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥	
DCNUCSWB(34)					
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥	
DCNUCOF(34,1)					
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥	
DCNUCOF(34,2)					
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥	
DCNUCOF(34,3)					
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥	
DCNUCOF(34,4)					
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 1.000E+01	≥ 1.000E+01	≥ ---	≥	
DCNUCDWE(34)					
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 3.812E-05	≥ ALEACH(34)	
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(34)	
≥	≥	≥		≥	
DCLR ≥ Distribution coefficients for progeny Pu-244	≥	≥	≥	≥	
DCLR ≥ Contaminated zone (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥ DCNUCC(45)	
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥	
DCNUCU(45,1)					
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥	
DCNUCU(45,2)					
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥	
DCNUCU(45,3)					
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---	≥	
DCNUCU(45,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---	≥ DCNUCS(45)	
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCSWB(45)					
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCOF(45,1)					
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	

DCNUCOF(45,2)					
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCOF(45,3)					
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCOF(45,4)					
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCDWE(45)					
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 5.397E-07	≥	ALEACH(45)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥	SOLUB0(45)
≥	≥	≥	≥	≥	
DCLR ≥ Distribution coefficients for progeny Pu-244	≥	≥	≥	≥	
DCLR ≥ Contaminated zone (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	DCNUCC(46)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥	
DCNUCU(46,1)					
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥	
DCNUCU(46,2)					
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥	
DCNUCU(46,3)					
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---	≥	
DCNUCU(46,4)					
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---	≥	DCNUCS(46)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCSWB(46)					
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCOF(46,1)					
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCOF(46,2)					
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCOF(46,3)					
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCOF(46,4)					
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥	
DCNUCDWE(46)					

DCLR ≥ Leach rate (/yr) ≥ 0.000E+00 ≥ 0.000E+00 ≥ 5.397E-07 ≥ ALEACH(46)
 DCLR ≥ Solubility constant ≥ 0.000E+00 ≥ 0.000E+00 ≥ not used ≥ SOLUB0(46)
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Site-Specific Parameter Summary (continued)

0 ≥	≥ User	≥	≥ RESRAD	≥
Parameter	Input	Default	computed	Name
fffff~ff~ffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff fffff				
DCLR ≥ Distribution coefficients for progeny Pu-244	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥ DCNUCC(47)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥
DCNUCU(47,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥
DCNUCU(47,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 4.100E+00	≥ 2.000E+03	≥ ---	≥
DCNUCU(47,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---	≥
DCNUCU(47,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 2.000E+03	≥ ---	≥ DCNUCS(47)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCSWB(47)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCOF(47,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCOF(47,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCOF(47,3)				

DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCOF(47,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 7.100E+02	≥ 2.000E+03	≥ ---	≥
DCNUCDWE(47)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 5.397E-07	≥ ALEACH(47)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(47)
≥	≥	≥	≥	≥
DCLR ≥ Distribution coefficients for progeny Sm-147	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥ DCNUCC(53)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥
DCNUCU(53,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥
DCNUCU(53,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥
DCNUCU(53,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 8.250E+02	≥ ---	≥
DCNUCU(53,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 8.250E+02	≥ ---	≥ DCNUCS(53)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥
DCNUCSWB(53)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥
DCNUCOF(53,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥
DCNUCOF(53,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 4.000E+01	≥ 8.250E+02	≥ ---	≥
DCNUCOF(53,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥
DCNUCOF(53,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 5.000E+01	≥ 8.250E+02	≥ ---	≥
DCNUCDWE(53)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.657E-06	≥ ALEACH(53)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(53)
≥	≥	≥	≥	≥

DCLR ≥ Distribution coefficients for progeny Te-125m	≥	≥	≥	≥
DCLR ≥ Contaminated zone (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥ DCNUCC(58)
DCLR ≥ Unsaturated zone 1 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCU(58,1)				
DCLR ≥ Unsaturated zone 2 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCU(58,2)				
DCLR ≥ Unsaturated zone 3 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCU(58,3)				
DCLR ≥ Unsaturated zone 4 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCU(58,4)				
DCLR ≥ Saturated zone (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥ DCNUCS(58)
DCLR ≥ Sediment in surface water body (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCSWB(58)				
DCLR ≥ Agricultural area 1 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCOF(58,1)				
DCLR ≥ Agricultural area 2 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCOF(58,2)				
DCLR ≥ Agricultural area 3 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCOF(58,3)				
DCLR ≥ Agricultural area 4 (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCOF(58,4)				
DCLR ≥ Offsite Dwelling (cm**3/g)	≥ 0.000E+00	≥ 0.000E+00	≥ ---	≥
DCNUCDWE(58)				
DCLR ≥ Leach rate (/yr)	≥ 0.000E+00	≥ 0.000E+00	≥ 7.266E-03	≥ ALEACH(58)
DCLR ≥ Solubility constant	≥ 0.000E+00	≥ 0.000E+00	≥ not used	≥ SOLUB0(58)

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Parameter					

Menu ≥	Parameter	≥	Input	≥	Default	≥	computed	≥	Name
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DCLR ≥	Distribution coefficients for progeny Th-229	≥		≥		≥		≥	
DCLR ≥	Contaminated zone (cm**3/g)	≥	1.000E+04	≥	6.000E+04	≥	---	≥	DCNUCC(60)
DCLR ≥	Unsaturated zone 1 (cm**3/g)	≥	1.000E+04	≥	6.000E+04	≥	---	≥	
DCNUCU(60,1)									
DCLR ≥	Unsaturated zone 2 (cm**3/g)	≥	1.000E+04	≥	6.000E+04	≥	---	≥	
DCNUCU(60,2)									
DCLR ≥	Unsaturated zone 3 (cm**3/g)	≥	1.000E+04	≥	6.000E+04	≥	---	≥	
DCNUCU(60,3)									
DCLR ≥	Unsaturated zone 4 (cm**3/g)	≥	0.000E+00	≥	6.000E+04	≥	---	≥	
DCNUCU(60,4)									
DCLR ≥	Saturated zone (cm**3/g)	≥	0.000E+00	≥	6.000E+04	≥	---	≥	DCNUCS(60)
DCLR ≥	Sediment in surface water body (cm**3/g)	≥	1.000E+04	≥	6.000E+04	≥	---	≥	
DCNUCSWB(60)									
DCLR ≥	Agricultural area 1 (cm**3/g)	≥	1.000E+04	≥	6.000E+04	≥	---	≥	
DCNUCOF(60,1)									
DCLR ≥	Agricultural area 2 (cm**3/g)	≥	1.000E+04	≥	6.000E+04	≥	---	≥	
DCNUCOF(60,2)									
DCLR ≥	Agricultural area 3 (cm**3/g)	≥	1.000E+04	≥	6.000E+04	≥	---	≥	
DCNUCOF(60,3)									
DCLR ≥	Agricultural area 4 (cm**3/g)	≥	1.000E+04	≥	6.000E+04	≥	---	≥	
DCNUCOF(60,4)									
DCLR ≥	Offsite Dwelling (cm**3/g)	≥	1.000E+04	≥	6.000E+04	≥	---	≥	
DCNUCDWE(60)									
DCLR ≥	Leach rate (/yr)	≥	0.000E+00	≥	0.000E+00	≥	3.832E-08	≥	ALEACH(60)
DCLR ≥	Solubility constant	≥	0.000E+00	≥	0.000E+00	≥	not used	≥	SOLUB0(60)
≥		≥		≥		≥		≥	
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	≥	1.750E+02	≥	1.000E+02	≥	---	≥	
SOURCEXY(1)									

LYOT ≥ Length of Primary contamination in Y Direction SOURCEXY(2)	≥ 1.200E+02 ≥ 1.000E+02 ≥	---	≥
LYOT ≥ Smaller X coordinate of Agricultural Area 1 AGRIX(1,1)	≥ 0.000E+00 ≥ 3.438E+01 ≥	---	≥
LYOT ≥ Larger X coordinate of Agricultural Area 1 AGRIX(2,1)	≥ 1.750E+02 ≥ 6.563E+01 ≥	---	≥
LYOT ≥ Smaller Y coordinate of Agricultural Area 1 AGRIX(3,1)	≥ 0.000E+00 ≥ 2.340E+02 ≥	---	≥
LYOT ≥ Larger Y coordinate of Agricultural Area 1 AGRIX(4,1)	≥ 1.200E+02 ≥ 2.660E+02 ≥	---	≥
LYOT ≥ Smaller X coordinate of Agricultural Area 2 AGRIX(1,2)	≥ 0.000E+00 ≥ 3.438E+01 ≥	---	≥
LYOT ≥ Larger X coordinate of Agricultural Area 2 AGRIX(2,2)	≥ 1.750E+02 ≥ 6.563E+01 ≥	---	≥
LYOT ≥ Smaller Y coordinate of Agricultural Area 2 AGRIX(3,2)	≥ 0.000E+00 ≥ 2.680E+02 ≥	---	≥
LYOT ≥ Larger Y coordinate of Agricultural Area 2 AGRIX(4,2)	≥ 1.200E+02 ≥ 3.000E+02 ≥	---	≥
LYOT ≥ Smaller X coordinate of Agricultural Area 3 AGRIX(1,3)	≥ 0.000E+00 ≥ 0.000E+00 ≥	---	≥
LYOT ≥ Larger X coordinate of Agricultural Area 3 AGRIX(2,3)	≥ 1.750E+02 ≥ 1.000E+02 ≥	---	≥
LYOT ≥ Smaller Y coordinate of Agricultural Area 3 AGRIX(3,3)	≥ 0.000E+00 ≥ 4.500E+02 ≥	---	≥
LYOT ≥ Larger Y coordinate of Agricultural Area 3 AGRIX(4,3)	≥ 1.200E+02 ≥ 5.500E+02 ≥	---	≥
LYOT ≥ Smaller X coordinate of Agricultural Area 4 AGRIX(1,4)	≥ 0.000E+00 ≥ 0.000E+00 ≥	---	≥
LYOT ≥ Larger X coordinate of Agricultural Area 4 AGRIX(2,4)	≥ 1.750E+02 ≥ 1.000E+02 ≥	---	≥
LYOT ≥ Smaller Y coordinate of Agricultural Area 4 AGRIX(3,4)	≥ 0.000E+00 ≥ 3.000E+02 ≥	---	≥
LYOT ≥ Larger Y coordinate of Agricultural Area 4	≥ 1.200E+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	≥ 1.750E+02	≥ 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	≥ 1.200E+02	≥ 1.660E+02	≥ ---	≥ DWELLXY(4)
LYOT ≥ Smaller X coordinate of Surface water body	≥ 1.806E+03	≥ -1.000E+02	≥ ---	≥ SWXY(1)
LYOT ≥ Larger X coordinate of Surface water body	≥ 1.858E+03	≥ 2.000E+02	≥ ---	≥ SWXY(2)
LYOT ≥ Smaller Y coordinate of Surface water body	≥ 1.620E+03	≥ 5.500E+02	≥ ---	≥ SWXY(3)
LYOT ≥ Larger Y coordinate of Surface water body	≥ 1.681E+03	≥ 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)

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Parameter					
Menu ≥	Parameter	≥ Input	≥ Default	≥ computed	≥ Name
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fffff	fffff	fffff	fffff	fffff	fffff
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)	≥ 6.000E+00	≥ 3.000E+00	≥ ---	≥ T(3)
TIME ≥ Times at which dose/risk are to be reported (yr)	≥ 1.200E+01	≥ 6.000E+00	≥ ---	≥ T(4)
TIME ≥ Times at which dose/risk are to be reported (yr)	≥ 3.000E+01	≥ 1.200E+01	≥ ---	≥ T(5)
TIME ≥ Times at which dose/risk are to be reported (yr)	≥ 1.000E+02	≥ 3.000E+01	≥ ---	≥ T(6)
TIME ≥ Times at which dose/risk are to be reported (yr)	≥ 3.000E+02	≥ 7.500E+01	≥ ---	≥ T(7)
TIME ≥ Times at which dose/risk are to be reported (yr)	≥ 1.000E+03	≥ 1.750E+02	≥ ---	≥ T(8)
TIME ≥ Times at which dose/risk are to be reported (yr)	≥ not used	≥ 4.200E+02	≥ ---	≥ T(9)
TIME ≥ Times at which dose/risk are to be reported (yr)	≥ not used	≥ 9.700E+02	≥ ---	≥ T(10)
SITE ≥ Precipitation (m/yr)	≥ 4.600E-01	≥ 1.000E+00	≥ ---	≥ PRECIP
SITE ≥ Average annual wind speed (m/sec)	≥ 3.179E+00	≥ 2.000E+00	≥ ---	≥ WIND
PRCZ ≥ Area of primary contamination (m**2)	≥ 2.100E+04	≥ 1.000E+04	≥ ---	≥ AREA
PRCZ ≥ Length parallel to aquifer flow (m)	≥ 1.750E+02	≥ 1.000E+02	≥ ---	≥ LCZPAQ
PRCZ ≥ Depth of soil mixing layer (m)	≥ 1.500E-01	≥ 1.500E-01	≥ ---	≥ DM
PRCZ ≥ Deposition velocity of dust (m)	≥ 1.000E-03	≥ 1.000E-03	≥ ---	≥
DEPVEL_DUST				
PRCZ ≥ Irrigation (m/yr)	≥ 0.000E+00	≥ 2.000E-01	≥ ---	≥ RI
PRCZ ≥ Evapotranspiration coefficient	≥ 9.900E-01	≥ 5.000E-01	≥ ---	≥ EVAPTR
PRCZ ≥ Runoff coefficient	≥ 2.500E-01	≥ 2.000E-01	≥ ---	≥ RUNOFF
PRCZ ≥ Rainfall Erosion Index	≥ 2.000E+01	≥ 1.600E+02	≥ ---	≥ RAINEROS
PRCZ ≥ Slope-length-steepness factor of prim. contamination	≥ 3.250E+00	≥ 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)	≥ 7.260E+00	≥ 2.000E+00	≥ ---	≥ THICK0
PRCZ ≥ Contaminated zone total porosity	≥ 4.100E-01	≥ 4.000E-01	≥ ---	≥ TPCZ
PRCZ ≥ Computed erosion rate of contaminated zone (m/yr)	≥ 1.409E-05	≥ 1.147E-05	≥ ---	≥ VCZ
PRCZ ≥ Density of contaminated zone (g/cm**3)	≥ 1.240E+00	≥ 1.500E+00	≥ ---	≥ DENSCH
PRCZ ≥ Soil erodibility factor of contaminated zone	≥ 4.000E-01	≥ 4.000E-01	≥ ---	≥
ERODIBILITYCZ				

PRCZ ≥ Contaminated zone field capacity	≥ 8.800E-03	≥ 3.000E-01	≥ ---	≥ FCCZ
PRCZ ≥ Contaminated zone b parameter	≥ 1.000E+00	≥ 5.300E+00	≥ ---	≥ BCZ
PRCZ ≥ Contaminated zone hydraulic conductivity (m/yr)	≥ 3.340E+01	≥ 1.000E+01	≥ ---	≥ HCCZ
PRCZ ≥ Cover depth (m)	≥ 1.000E+00	≥ 0.000E+00	≥ ---	≥ COVER0
PRCZ ≥ Total porosity of the cover material	≥ not used	≥ 4.000E-01	≥ ---	≥ TPCV
PRCZ ≥ Computed erosion rate of cover material (m/yr)	≥ 1.248E-05	≥ 1.147E-05	≥ ---	≥ VCV
PRCZ ≥ Density of cover material (g/cm**3)	≥ 1.400E+00	≥ 1.500E+00	≥ ---	≥ DENS CV
PRCZ ≥ Soil erodibility factor of cover	≥ 4.000E-01	≥ 4.000E-01	≥ ---	≥

ERODIBILITY CV

PRCZ ≥ Volumetric water content of the cover material	≥ not used	≥ 5.000E-02	≥ ---	≥ PH20CV
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Parameter					
Menu ≥	Parameter	≥ Input	≥ Default	≥ computed	≥ Name

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|                                                        |             |             |       |              |
|--------------------------------------------------------|-------------|-------------|-------|--------------|
| AGRI ≥ Areal extent of Agricultural Area 1 (m**2)      | ≥ 2.100E+04 | ≥ 1.000E+03 | ≥ --- | ≥ AREA0(1)   |
| AGRI ≥ Fraction of Agri. Area 1 directly over the c.z. | ≥ not used  | ≥ 0.000E+00 | ≥ --- | ≥            |
| FAREA_PLANT(1)                                         |             |             |       |              |
| AGRI ≥ Evapotranspiration coefficient in Agri. Area 1  | ≥ 9.900E-01 | ≥ 5.000E-01 | ≥ --- | ≥ EVAPTRN(1) |
| AGRI ≥ Runoff coefficient in Agricultural Area 1       | ≥ 2.500E-01 | ≥ 2.000E-01 | ≥ --- | ≥ RUNOF(1)   |
| AGRI ≥ Mixing depth/plow layer of Agricultural Area 1  | ≥ 1.500E-01 | ≥ 1.500E-01 | ≥ --- | ≥            |
| DPTHMIXG(1)                                            |             |             |       |              |
| AGRI ≥ Water filled porosity of soil in Agri. Area 1   | ≥ 3.000E-01 | ≥ 3.000E-01 | ≥ --- | ≥ TMOF(1)    |
| AGRI ≥ Computed erosion rate of soil in Agri. Area 1   | ≥ 1.248E-05 | ≥ 1.147E-05 | ≥ --- | ≥ EROSN(1)   |
| AGRI ≥ Dry Bulk Density of soil in Agricultural Area 1 | ≥ 1.400E+00 | ≥ 1.500E+00 | ≥ --- | ≥ RHOB(1)    |
| AGRI ≥ Soil erodibility factor of Agricultural Area 1  | ≥ 4.000E-01 | ≥ 4.000E-01 | ≥ --- | ≥            |



## ERODIBILITY(1)

AGRI ≥ Slope-length-steepness factor, Agricultural Area 1 ≥ 3.250E+00 ≥ 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 ≥ --- ≥

## CONVPRACT(1)

AGRI ≥ Areal extent of Agricultural Area 2 (m\*\*2) ≥ 2.100E+04 ≥ 1.000E+03 ≥ --- ≥ AREA0(2)

AGRI ≥ Fraction of Agri. Area 2 directly over the c.z. ≥ not used ≥ 0.000E+00 ≥ --- ≥

## FAREA\_PLANT(2)

AGRI ≥ Evapotranspiration coefficient in Agri. Area 2 ≥ 9.900E-01 ≥ 5.000E-01 ≥ --- ≥ EVAPTRN(2)

AGRI ≥ Runoff coefficient in Agricultural Area 2 ≥ 2.500E-01 ≥ 2.000E-01 ≥ --- ≥ RUNOF(2)

AGRI ≥ Mixing depth/plow layer of Agricultural Area 2 ≥ 1.500E-01 ≥ 1.500E-01 ≥ --- ≥

## DPTHMIXG(2)

AGRI ≥ Water filled porosity of soil in Agri. Area 2 ≥ 3.000E-01 ≥ 3.000E-01 ≥ --- ≥ TMOF(2)

AGRI ≥ Computed erosion rate of soil in Agri. Area 2 ≥ 1.248E-05 ≥ 1.147E-05 ≥ --- ≥ EROSN(2)

AGRI ≥ Dry Bulk Density of soil in Agricultural Area 2 ≥ 1.400E+00 ≥ 1.500E+00 ≥ --- ≥ RHOB(2)

AGRI ≥ Soil erodibility factor of Agricultural Area 2 ≥ 4.000E-01 ≥ 4.000E-01 ≥ --- ≥

## ERODIBILITY(2)

AGRI ≥ Slope-length-steepness factor, Agricultural Area 2 ≥ 3.250E+00 ≥ 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 ≥ --- ≥

## CONVPRACT(2)

AGRI ≥ Areal extent of Agricultural Area 3 (m\*\*2) ≥ 2.100E+04 ≥ 1.000E+04 ≥ --- ≥ AREA0(3)

AGRI ≥ Fraction of Agri. Area 3 directly over the c.z. ≥ not used ≥ 0.000E+00 ≥ --- ≥

## FAREA\_PLANT(3)

AGRI ≥ Evapotranspiration coefficient in Agri. Area 3 ≥ 9.900E-01 ≥ 5.000E-01 ≥ --- ≥ EVAPTRN(3)

AGRI ≥ Runoff coefficient in Agricultural Area 3 ≥ 2.500E-01 ≥ 2.000E-01 ≥ --- ≥ RUNOF(3)

AGRI ≥ Mixing depth/plow layer of Agricultural Area 3 ≥ 1.500E-01 ≥ 1.500E-01 ≥ --- ≥

## DPTHMIXG(3)

AGRI ≥ Water filled porosity of soil in Agri. Area 3 ≥ 3.000E-01 ≥ 3.000E-01 ≥ --- ≥ TMOF(3)

AGRI ≥ Computed erosion rate of soil in Agri. Area 3 ≥ 1.248E-05 ≥ 1.147E-05 ≥ --- ≥ EROSN(3)

AGRI ≥ Dry Bulk Density of soil in Agricultural Area 3 ≥ 1.400E+00 ≥ 1.500E+00 ≥ --- ≥ RHOB(3)

|                                                            |             |             |       |              |
|------------------------------------------------------------|-------------|-------------|-------|--------------|
| AGRI ≥ Soil erodibility factor of Agricultural Area 3      | ≥ 4.000E-01 | ≥ 4.000E-01 | ≥ --- | ≥            |
| ERODIBILITY(3)                                             |             |             |       |              |
| AGRI ≥ Slope-length-steepness factor, Agricultural Area 3  | ≥ 3.250E+00 | ≥ 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 ≥ Areal extent of Agricultural Area 4 (m**2)          | ≥ 2.100E+04 | ≥ 1.000E+04 | ≥ --- | ≥ AREA0(4)   |
| AGRI ≥ Fraction of Agri. Area 4 directly over the c.z.     | ≥ not used  | ≥ 0.000E+00 | ≥ --- | ≥            |
| FAREA_PLANT(4)                                             |             |             |       |              |
| AGRI ≥ Evapotranspiration coefficient in Agri. Area 4      | ≥ 9.900E-01 | ≥ 5.000E-01 | ≥ --- | ≥ EVAPTRN(4) |
| AGRI ≥ Runoff coefficient in Agricultural Area 4           | ≥ 2.500E-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. Area4        | ≥ 1.248E-05 | ≥ 1.147E-05 | ≥ --- | ≥ EROSN(4)   |
| AGRI ≥ Dry Bulk Density of soil in Agricultural Area 4     | ≥ 1.400E+00 | ≥ 1.500E+00 | ≥ --- | ≥ RHOB(4)    |
| AGRI ≥ Soil erodibility factor of Agricultural Area 4      | ≥ 4.000E-01 | ≥ 4.000E-01 | ≥ --- | ≥            |
| ERODIBILITY(4)                                             |             |             |       |              |
| AGRI ≥ Slope-length-steepness factor, Agricultural Area 4  | ≥ 3.250E+00 | ≥ 4.000E-01 | ≥ --- | ≥            |
| SLPLENSTP(4)                                               |             |             |       |              |
| AGRI ≥ Cropping-management factor of Agricultural Area 4   | ≥ 3.000E-03 | ≥ 3.000E-03 | ≥ --- | ≥ CRPMANG(4) |

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|           |   |           |        |       |   |          |                   |
|-----------|---|-----------|--------|-------|---|----------|-------------------|
| 0         | ≥ |           | ≥ User | ≥     |   | ≥ RESRAD | ≥                 |
| Parameter |   |           |        |       |   |          |                   |
| Menu ≥    |   | Parameter | ≥      | Input | ≥ | Default  | ≥ computed ≥ Name |
| ~~~~~     |   |           |        |       |   |          |                   |

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|                                                             |             |             |   |     |              |
|-------------------------------------------------------------|-------------|-------------|---|-----|--------------|
| AGRI ≥ Conservation practice factor of Agricultural Area 4  | ≥ 1.000E+00 | ≥ 1.000E+00 | ≥ | --- | ≥            |
| CONVPRAC(4)                                                 |             |             |   |     |              |
| DWEL ≥ Areal extent of Offsite dwelling site (m**2)         | ≥ 2.100E+04 | ≥ 1.000E+03 | ≥ | --- | ≥ AREAODWELL |
| DWEL ≥ Evapotranspiration coefficient in dwelling (Off)site | ≥ 9.900E-01 | ≥ 5.000E-01 | ≥ | --- | ≥            |
| EVAPTRNDWELL                                                |             |             |   |     |              |
| DWEL ≥ Runoff coefficient in Offsite dwelling site          | ≥ 2.500E-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    | ≥ 1.400E+00 | ≥ 1.500E+00 | ≥ | --- | ≥ RHOBWDWELL |
| DWEL ≥ Soil erodibility factor of soil in Dwelling site     | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥            |
| ERODIBILITYDWELL                                            |             |             |   |     |              |
| DWEL ≥ Slope-length-steepness factor of Dwelling site       | ≥ 3.250E+00 | ≥ 4.000E-01 | ≥ | --- | ≥            |
| SLPLENSTPDWELL                                              |             |             |   |     |              |
| DWEL ≥ Cropping-management factor of Dwelling site          | ≥ 3.000E-03 | ≥ 3.000E-03 | ≥ | --- | ≥            |
| CRPMANGDWELL                                                |             |             |   |     |              |
| DWEL ≥ Conservation practice factor of Offsite Dwelling sit | ≥ 1.000E+00 | ≥ 1.000E+00 | ≥ | --- | ≥            |
| CONVPRACDWELL                                               |             |             |   |     |              |
| AIRT ≥ Dispersion Coefficients; 1 = Pasquill-Gifford        | ≥ 1         | ≥ 1         | ≥ | --- | ≥ IDISPMOD   |
| AIRT ≥ Population zone; 1 = Rural                           | ≥ 1         | ≥ 1         | ≥ | --- | ≥ IZONE      |
| AIRT ≥ Release height, (m)                                  | ≥ 1.000E-01 | ≥ 1.000E+00 | ≥ | --- | ≥ AIRRELHT   |
| AIRT ≥ Heat flux for buoyant plume (cal/s),                 | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ HEATFLX    |
| AIRT ≥ Anemometer height, (m)                               | ≥ 1.200E+01 | ≥ 1.000E+01 | ≥ | --- | ≥ ANH        |
| AIRT ≥ Absolute temperature (Kelvin)                        | ≥ 2.820E+02 | ≥ 2.850E+02 | ≥ | --- | ≥ TABK       |
| AIRT ≥ AM atmospheric mixing height (m)                     | ≥ 1.600E+03 | ≥ 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) ≥ 8.900E-01 ≥ 8.900E-01 ≥ --- ≥

WINDSPEED(1)

AIRT ≥ Upper limit for windspeed class 2 (m/s) ≥ 2.460E+00 ≥ 2.460E+00 ≥ --- ≥

WINDSPEED(2)

AIRT ≥ Upper limit for windspeed class 3 (m/s) ≥ 4.470E+00 ≥ 4.470E+00 ≥ --- ≥

WINDSPEED(3)

AIRT ≥ Upper limit for windspeed class 4 (m/s) ≥ 6.930E+00 ≥ 6.930E+00 ≥ --- ≥

WINDSPEED(4)

AIRT ≥ Upper limit for windspeed class 5 (m/s) ≥ 9.610E+00 ≥ 9.610E+00 ≥ --- ≥

WINDSPEED(5)

AIRT ≥ Upper limit for windspeed class 6 (m/s) ≥ 1.252E+01 ≥ 1.252E+01 ≥ --- ≥

WINDSPEED(6)

≥ ≥ ≥ ≥

AIRT ≥ Joint Frequency in N Sector ≥ ≥ ≥ ≥

AIRT ≥ for wind speed class 1 and stability class A ≥ 1.320E-03 ≥ 1.000E+00 ≥ --- ≥

DFREQ(1,1,1)

AIRT ≥ for wind speed class 1 and stability class B ≥ 3.100E-04 ≥ 0.000E+00 ≥ --- ≥

DFREQ(1,2,1)

AIRT ≥ for wind speed class 1 and stability class C ≥ 6.900E-04 ≥ 0.000E+00 ≥ --- ≥

DFREQ(1,3,1)

AIRT ≥ for wind speed class 1 and stability class D ≥ 4.320E-03 ≥ 0.000E+00 ≥ --- ≥

DFREQ(1,4,1)

AIRT ≥ for wind speed class 1 and stability class E ≥ 1.530E-03 ≥ 0.000E+00 ≥ --- ≥

DFREQ(1,5,1)

AIRT ≥ for wind speed class 1 and stability class F ≥ 2.400E-03 ≥ 0.000E+00 ≥ --- ≥  
 DFREQ(1,6,1)  
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 File : INDUSTRIAL NO CAP HYDRO.ROF

## Site-Specific Parameter Summary (continued)

| 0 ≥                                                                                                                                | ≥ User      | ≥           | ≥ RESRAD | ≥    |
|------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|----------|------|
| Parameter                                                                                                                          | Input       | Default     | computed | Name |
| Menu ≥                                                                                                                             | Parameter   | ≥           | ≥        | ≥    |
| fffff~ffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff |             |             |          |      |
| fffff                                                                                                                              |             |             |          |      |
| AIRT ≥ Joint Frequency in N Sector                                                                                                 | ≥           | ≥           | ≥        | ≥    |
| AIRT ≥ for wind speed class 2 and stability class A                                                                                | ≥ 1.190E-03 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| DFREQ(2,1,1)                                                                                                                       |             |             |          |      |
| AIRT ≥ for wind speed class 2 and stability class B                                                                                | ≥ 1.290E-03 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| DFREQ(2,2,1)                                                                                                                       |             |             |          |      |
| AIRT ≥ for wind speed class 2 and stability class C                                                                                | ≥ 5.400E-03 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| DFREQ(2,3,1)                                                                                                                       |             |             |          |      |
| AIRT ≥ for wind speed class 2 and stability class D                                                                                | ≥ 2.157E-02 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| DFREQ(2,4,1)                                                                                                                       |             |             |          |      |
| AIRT ≥ for wind speed class 2 and stability class E                                                                                | ≥ 7.290E-03 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| DFREQ(2,5,1)                                                                                                                       |             |             |          |      |
| AIRT ≥ for wind speed class 2 and stability class F                                                                                | ≥ 1.560E-03 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| DFREQ(2,6,1)                                                                                                                       |             |             |          |      |
| ≥                                                                                                                                  | ≥           | ≥           | ≥        | ≥    |
| AIRT ≥ Joint Frequency in N Sector                                                                                                 | ≥           | ≥           | ≥        | ≥    |
| AIRT ≥ for wind speed class 3 and stability class A                                                                                | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| DFREQ(3,1,1)                                                                                                                       |             |             |          |      |
| AIRT ≥ for wind speed class 3 and stability class B                                                                                | ≥ 1.000E-05 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| DFREQ(3,2,1)                                                                                                                       |             |             |          |      |

|                                                                     |                           |     |   |
|---------------------------------------------------------------------|---------------------------|-----|---|
| AIRT ≥ for wind speed class 3 and stability class C<br>DFREQ(3,3,1) | ≥ 1.200E-03 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class D<br>DFREQ(3,4,1) | ≥ 3.140E-02 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class E<br>DFREQ(3,5,1) | ≥ 1.800E-03 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class F<br>DFREQ(3,6,1) | ≥ 3.000E-05 ≥ 0.000E+00 ≥ | --- | ≥ |
| ≥                                                                   | ≥                         | ≥   | ≥ |
| AIRT ≥ Joint Frequency in N Sector                                  | ≥                         | ≥   | ≥ |
| AIRT ≥ for wind speed class 4 and stability class A<br>DFREQ(4,1,1) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class B<br>DFREQ(4,2,1) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class C<br>DFREQ(4,3,1) | ≥ 2.000E-05 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class D<br>DFREQ(4,4,1) | ≥ 8.450E-03 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class E<br>DFREQ(4,5,1) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class F<br>DFREQ(4,6,1) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| ≥                                                                   | ≥                         | ≥   | ≥ |
| AIRT ≥ Joint Frequency in N Sector                                  | ≥                         | ≥   | ≥ |
| AIRT ≥ for wind speed class 5 and stability class A<br>DFREQ(5,1,1) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class B<br>DFREQ(5,2,1) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class C<br>DFREQ(5,3,1) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class D<br>DFREQ(5,4,1) | ≥ 2.300E-04 ≥ 0.000E+00 ≥ | --- | ≥ |
| 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 | ≥ 1.000E-05        | ≥ 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 | ≥ 9.000E-04        | ≥ 0.000E+00      | ≥    | --- | ≥ |
| DFREQ(1,1,2)                                        |                    |                  |      |     |   |
| AIRT ≥ for wind speed class 1 and stability class B | ≥ 2.200E-04        | ≥ 0.000E+00      | ≥    | --- | ≥ |
| DFREQ(1,2,2)                                        |                    |                  |      |     |   |
| AIRT ≥ for wind speed class 1 and stability class C | ≥ 4.400E-04        | ≥ 0.000E+00      | ≥    | --- | ≥ |
| DFREQ(1,3,2)                                        |                    |                  |      |     |   |
| AIRT ≥ for wind speed class 1 and stability class D | ≥ 4.360E-03        | ≥ 0.000E+00      | ≥    | --- | ≥ |
| DFREQ(1,4,2)                                        |                    |                  |      |     |   |
| AIRT ≥ for wind speed class 1 and stability class E | ≥ 1.690E-03        | ≥ 0.000E+00      | ≥    | --- | ≥ |
| DFREQ(1,5,2)                                        |                    |                  |      |     |   |
| AIRT ≥ for wind speed class 1 and stability class F | ≥ 3.860E-03        | ≥ 0.000E+00      | ≥    | --- | ≥ |
| DFREQ(1,6,2)                                        |                    |                  |      |     |   |
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| Parent Dose Report                                  |                    |                  |      |     |   |

Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.ROF

## Site-Specific Parameter Summary (continued)

| 0            | ≥                                                                          | ≥     | User      | ≥     | RESRAD    | ≥     |
|--------------|----------------------------------------------------------------------------|-------|-----------|-------|-----------|-------|
| Parameter    |                                                                            |       |           |       |           |       |
| Menu ≥       | Parameter                                                                  | ≥     | Input     | ≥     | Default   | ≥     |
|              |                                                                            | ≥     |           | ≥     | computed  | ≥     |
|              |                                                                            |       |           |       |           | Name  |
| fffff        | ~ffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffff~ | fffff | fffff     | fffff | fffff     | fffff |
| fffff        |                                                                            |       |           |       |           |       |
| AIRT         | ≥ Joint Frequency in NNE Sector                                            | ≥     |           | ≥     |           | ≥     |
| AIRT         | ≥ for wind speed class 2 and stability class A                             | ≥     | 4.900E-04 | ≥     | 0.000E+00 | ≥     |
| DFREQ(2,1,2) |                                                                            |       |           |       | ---       | ≥     |
| AIRT         | ≥ for wind speed class 2 and stability class B                             | ≥     | 6.200E-04 | ≥     | 0.000E+00 | ≥     |
| DFREQ(2,2,2) |                                                                            |       |           |       | ---       | ≥     |
| AIRT         | ≥ for wind speed class 2 and stability class C                             | ≥     | 2.090E-03 | ≥     | 0.000E+00 | ≥     |
| DFREQ(2,3,2) |                                                                            |       |           |       | ---       | ≥     |
| AIRT         | ≥ for wind speed class 2 and stability class D                             | ≥     | 1.694E-02 | ≥     | 0.000E+00 | ≥     |
| DFREQ(2,4,2) |                                                                            |       |           |       | ---       | ≥     |
| AIRT         | ≥ for wind speed class 2 and stability class E                             | ≥     | 1.294E-02 | ≥     | 0.000E+00 | ≥     |
| DFREQ(2,5,2) |                                                                            |       |           |       | ---       | ≥     |
| AIRT         | ≥ for wind speed class 2 and stability class F                             | ≥     | 4.500E-03 | ≥     | 0.000E+00 | ≥     |
| DFREQ(2,6,2) |                                                                            |       |           |       | ---       | ≥     |
| ≥            |                                                                            | ≥     |           | ≥     |           | ≥     |
| AIRT         | ≥ Joint Frequency in NNE Sector                                            | ≥     |           | ≥     |           | ≥     |
| AIRT         | ≥ for wind speed class 3 and stability class A                             | ≥     | 0.000E+00 | ≥     | 0.000E+00 | ≥     |
| DFREQ(3,1,2) |                                                                            |       |           |       | ---       | ≥     |
| AIRT         | ≥ for wind speed class 3 and stability class B                             | ≥     | 1.000E-05 | ≥     | 0.000E+00 | ≥     |
| DFREQ(3,2,2) |                                                                            |       |           |       | ---       | ≥     |
| AIRT         | ≥ for wind speed class 3 and stability class C                             | ≥     | 1.030E-03 | ≥     | 0.000E+00 | ≥     |
| DFREQ(3,3,2) |                                                                            |       |           |       | ---       | ≥     |
| AIRT         | ≥ for wind speed class 3 and stability class D                             | ≥     | 2.506E-02 | ≥     | 0.000E+00 | ≥     |
| DFREQ(3,4,2) |                                                                            |       |           |       | ---       | ≥     |



|                                                                     |             |             |       |   |
|---------------------------------------------------------------------|-------------|-------------|-------|---|
| AIRT ≥ for wind speed class 3 and stability class E<br>DFREQ(3,5,2) | ≥ 3.590E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class F<br>DFREQ(3,6,2) | ≥ 7.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           |       | ≥ |
| AIRT ≥ Joint Frequency in NNE Sector                                | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 4 and stability class A<br>DFREQ(4,1,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class B<br>DFREQ(4,2,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class C<br>DFREQ(4,3,2) | ≥ 1.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class D<br>DFREQ(4,4,2) | ≥ 1.041E-02 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class E<br>DFREQ(4,5,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class F<br>DFREQ(4,6,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           |       | ≥ |
| AIRT ≥ Joint Frequency in NNE Sector                                | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 5 and stability class A<br>DFREQ(5,1,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class B<br>DFREQ(5,2,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class C<br>DFREQ(5,3,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class D<br>DFREQ(5,4,2) | ≥ 1.480E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class E<br>DFREQ(5,5,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class F<br>DFREQ(5,6,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           |       | ≥ |

|                                                                     |             |             |       |   |
|---------------------------------------------------------------------|-------------|-------------|-------|---|
| AIRT ≥ Joint Frequency in NNE Sector                                | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 6 and stability class A<br>DFREQ(6,1,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class B<br>DFREQ(6,2,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class C<br>DFREQ(6,3,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class D<br>DFREQ(6,4,2) | ≥ 8.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class E<br>DFREQ(6,5,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class F<br>DFREQ(6,6,2) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in NE Sector                                 | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 1 and stability class A<br>DFREQ(1,1,3) | ≥ 5.400E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class B<br>DFREQ(1,2,3) | ≥ 1.000E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class C<br>DFREQ(1,3,3) | ≥ 2.500E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class D<br>DFREQ(1,4,3) | ≥ 3.890E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class E<br>DFREQ(1,5,3) | ≥ 1.730E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class F<br>DFREQ(1,6,3) | ≥ 6.140E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |

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Site-Specific Parameter Summary (continued)

| 0            | ≥ |                                              | ≥          | User       | ≥          |            | ≥          | RESRAD     | ≥          |            |
|--------------|---|----------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Parameter    |   |                                              |            |            |            |            |            |            |            |            |
| Menu         | ≥ | Parameter                                    | ≥          | Input      | ≥          | Default    | ≥          | computed   | ≥          | Name       |
| fffff        | ≈ | ffffffffff                                   | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff |
| fffff        |   |                                              |            |            |            |            |            |            |            |            |
| AIRT         | ≥ | Joint Frequency in NE Sector                 | ≥          |            | ≥          |            | ≥          |            | ≥          |            |
| AIRT         | ≥ | for wind speed class 2 and stability class A | ≥          | 2.900E-04  | ≥          | 0.000E+00  | ≥          | ---        | ≥          |            |
| DFREQ(2,1,3) |   |                                              |            |            |            |            |            |            |            |            |
| AIRT         | ≥ | for wind speed class 2 and stability class B | ≥          | 3.300E-04  | ≥          | 0.000E+00  | ≥          | ---        | ≥          |            |
| DFREQ(2,2,3) |   |                                              |            |            |            |            |            |            |            |            |
| AIRT         | ≥ | for wind speed class 2 and stability class C | ≥          | 1.070E-03  | ≥          | 0.000E+00  | ≥          | ---        | ≥          |            |
| DFREQ(2,3,3) |   |                                              |            |            |            |            |            |            |            |            |
| AIRT         | ≥ | for wind speed class 2 and stability class D | ≥          | 1.046E-02  | ≥          | 0.000E+00  | ≥          | ---        | ≥          |            |
| DFREQ(2,4,3) |   |                                              |            |            |            |            |            |            |            |            |
| AIRT         | ≥ | for wind speed class 2 and stability class E | ≥          | 1.060E-02  | ≥          | 0.000E+00  | ≥          | ---        | ≥          |            |
| DFREQ(2,5,3) |   |                                              |            |            |            |            |            |            |            |            |
| AIRT         | ≥ | for wind speed class 2 and stability class F | ≥          | 1.477E-02  | ≥          | 0.000E+00  | ≥          | ---        | ≥          |            |
| DFREQ(2,6,3) |   |                                              |            |            |            |            |            |            |            |            |
|              | ≥ |                                              | ≥          |            | ≥          |            | ≥          |            | ≥          |            |
| AIRT         | ≥ | Joint Frequency in NE Sector                 | ≥          |            | ≥          |            | ≥          |            | ≥          |            |
| AIRT         | ≥ | for wind speed class 3 and stability class A | ≥          | 1.000E-05  | ≥          | 0.000E+00  | ≥          | ---        | ≥          |            |
| DFREQ(3,1,3) |   |                                              |            |            |            |            |            |            |            |            |
| AIRT         | ≥ | for wind speed class 3 and stability class B | ≥          | 2.000E-05  | ≥          | 0.000E+00  | ≥          | ---        | ≥          |            |
| DFREQ(3,2,3) |   |                                              |            |            |            |            |            |            |            |            |
| AIRT         | ≥ | for wind speed class 3 and stability class C | ≥          | 3.700E-04  | ≥          | 0.000E+00  | ≥          | ---        | ≥          |            |
| DFREQ(3,3,3) |   |                                              |            |            |            |            |            |            |            |            |
| AIRT         | ≥ | for wind speed class 3 and stability class D | ≥          | 1.610E-02  | ≥          | 0.000E+00  | ≥          | ---        | ≥          |            |
| DFREQ(3,4,3) |   |                                              |            |            |            |            |            |            |            |            |
| AIRT         | ≥ | for wind speed class 3 and stability class E | ≥          | 9.520E-03  | ≥          | 0.000E+00  | ≥          | ---        | ≥          |            |
| DFREQ(3,5,3) |   |                                              |            |            |            |            |            |            |            |            |
| AIRT         | ≥ | for wind speed class 3 and stability class F | ≥          | 1.570E-03  | ≥          | 0.000E+00  | ≥          | ---        | ≥          |            |
| DFREQ(3,6,3) |   |                                              |            |            |            |            |            |            |            |            |

|                                                                     |             |             |       |   |
|---------------------------------------------------------------------|-------------|-------------|-------|---|
| ≥                                                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in NE Sector                                 | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 4 and stability class A<br>DFREQ(4,1,3) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class B<br>DFREQ(4,2,3) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class C<br>DFREQ(4,3,3) | ≥ 1.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class D<br>DFREQ(4,4,3) | ≥ 1.176E-02 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class E<br>DFREQ(4,5,3) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class F<br>DFREQ(4,6,3) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in NE Sector                                 | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 5 and stability class A<br>DFREQ(5,1,3) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class B<br>DFREQ(5,2,3) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class C<br>DFREQ(5,3,3) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class D<br>DFREQ(5,4,3) | ≥ 2.460E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class E<br>DFREQ(5,5,3) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class F<br>DFREQ(5,6,3) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in NE Sector                                 | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 6 and stability class A<br>DFREQ(6,1,3) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| 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 | ≥ 3.400E-04 | ≥ 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 | ≥ 4.700E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(1,1,4) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 1 and stability class B | ≥ 1.100E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(1,2,4) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 1 and stability class C | ≥ 1.500E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(1,3,4) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 1 and stability class D | ≥ 3.650E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(1,4,4) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 1 and stability class E | ≥ 1.750E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(1,5,4) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 1 and stability class F | ≥ 7.460E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(1,6,4) |                                              |             |             |       |   |

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File : INDUSTRIAL NO CAP HYDRO.ROF

## Site-Specific Parameter Summary (continued)

|           |   |           |   |      |       |   |         |        |            |
|-----------|---|-----------|---|------|-------|---|---------|--------|------------|
| 0         | ≥ |           | ≥ | User | ≥     |   | ≥       | RESRAD | ≥          |
| Parameter |   |           |   |      |       |   |         |        |            |
| Menu ≥    |   | Parameter |   | ≥    | Input | ≥ | Default | ≥      | computed ≥ |
|           |   |           |   |      |       |   |         |        | Name       |

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 fffff

|                                                                     |             |             |       |   |
|---------------------------------------------------------------------|-------------|-------------|-------|---|
| AIRT ≥ Joint Frequency in ENE Sector                                | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 2 and stability class A<br>DFREQ(2,1,4) | ≥ 1.600E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class B<br>DFREQ(2,2,4) | ≥ 2.300E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class C<br>DFREQ(2,3,4) | ≥ 7.900E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class D<br>DFREQ(2,4,4) | ≥ 8.440E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class E<br>DFREQ(2,5,4) | ≥ 4.530E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class F<br>DFREQ(2,6,4) | ≥ 2.714E-02 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in ENE Sector                                | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 3 and stability class A<br>DFREQ(3,1,4) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class B<br>DFREQ(3,2,4) | ≥ 2.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class C<br>DFREQ(3,3,4) | ≥ 3.100E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class D<br>DFREQ(3,4,4) | ≥ 1.256E-02 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class E<br>DFREQ(3,5,4) | ≥ 4.630E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class F<br>DFREQ(3,6,4) | ≥ 6.070E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in ENE Sector                                | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 4 and stability class A<br>DFREQ(4,1,4) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |

|                                                                     |             |             |       |   |
|---------------------------------------------------------------------|-------------|-------------|-------|---|
| AIRT ≥ for wind speed class 4 and stability class B<br>DFREQ(4,2,4) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class C<br>DFREQ(4,3,4) | ≥ 1.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class D<br>DFREQ(4,4,4) | ≥ 1.388E-02 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class E<br>DFREQ(4,5,4) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class F<br>DFREQ(4,6,4) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in ENE Sector                                | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 5 and stability class A<br>DFREQ(5,1,4) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class B<br>DFREQ(5,2,4) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class C<br>DFREQ(5,3,4) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class D<br>DFREQ(5,4,4) | ≥ 3.630E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class E<br>DFREQ(5,5,4) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class F<br>DFREQ(5,6,4) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in ENE Sector                                | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 6 and stability class A<br>DFREQ(6,1,4) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class B<br>DFREQ(6,2,4) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class C<br>DFREQ(6,3,4) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class D                 | ≥ 6.800E-04 | ≥ 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 | ≥ | 3.100E-04 | ≥ | 0.000E+00 |
| DFREQ(1,1,5) |                                              |   |           |   |           |
| AIRT ≥       | for wind speed class 1 and stability class B | ≥ | 6.000E-05 | ≥ | 0.000E+00 |
| DFREQ(1,2,5) |                                              |   |           |   |           |
| AIRT ≥       | for wind speed class 1 and stability class C | ≥ | 1.400E-04 | ≥ | 0.000E+00 |
| DFREQ(1,3,5) |                                              |   |           |   |           |
| AIRT ≥       | for wind speed class 1 and stability class D | ≥ | 3.460E-03 | ≥ | 0.000E+00 |
| DFREQ(1,4,5) |                                              |   |           |   |           |
| AIRT ≥       | for wind speed class 1 and stability class E | ≥ | 1.400E-03 | ≥ | 0.000E+00 |
| DFREQ(1,5,5) |                                              |   |           |   |           |
| AIRT ≥       | for wind speed class 1 and stability class F | ≥ | 7.640E-03 | ≥ | 0.000E+00 |
| DFREQ(1,6,5) |                                              |   |           |   |           |

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Site-Specific Parameter Summary (continued)

|                                                                                                                     |   |                                              |   |           |   |           |   |          |   |
|---------------------------------------------------------------------------------------------------------------------|---|----------------------------------------------|---|-----------|---|-----------|---|----------|---|
| 0                                                                                                                   | ≥ |                                              | ≥ | User      | ≥ |           | ≥ | RESRAD   | ≥ |
| Parameter                                                                                                           |   |                                              |   |           |   |           |   |          |   |
| Menu                                                                                                                | ≥ | Parameter                                    | ≥ | Input     | ≥ | Default   | ≥ | computed | ≥ |
| fffff~ffffffffffffffffffffffffffffffffffffffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff<br>fffff |   |                                              |   |           |   |           |   |          |   |
| AIRT                                                                                                                | ≥ | Joint Frequency in E Sector                  | ≥ |           | ≥ |           | ≥ |          | ≥ |
| AIRT                                                                                                                | ≥ | for wind speed class 2 and stability class A | ≥ | 2.600E-04 | ≥ | 0.000E+00 | ≥ | ---      | ≥ |



|              |                                              |             |             |       |   |
|--------------|----------------------------------------------|-------------|-------------|-------|---|
| DFREQ(2,1,5) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 2 and stability class B | ≥ 2.200E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(2,2,5) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 2 and stability class C | ≥ 5.200E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(2,3,5) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 2 and stability class D | ≥ 7.640E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(2,4,5) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 2 and stability class E | ≥ 3.330E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(2,5,5) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 2 and stability class F | ≥ 2.584E-02 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(2,6,5) |                                              |             |             |       |   |
| ≥            |                                              | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥       | Joint Frequency in E Sector                  | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥       | for wind speed class 3 and stability class A | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(3,1,5) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class B | ≥ 4.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(3,2,5) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class C | ≥ 3.300E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(3,3,5) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class D | ≥ 1.394E-02 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(3,4,5) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class E | ≥ 2.710E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(3,5,5) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class F | ≥ 4.020E-03 | ≥ 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 | ≥ 1.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(4,3,5) |                                              |             |             |       |   |

|                                                                     |                           |     |   |
|---------------------------------------------------------------------|---------------------------|-----|---|
| AIRT ≥ for wind speed class 4 and stability class D<br>DFREQ(4,4,5) | ≥ 1.553E-02 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class E<br>DFREQ(4,5,5) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class F<br>DFREQ(4,6,5) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| ≥                                                                   | ≥                         | ≥   | ≥ |
| AIRT ≥ Joint Frequency in E Sector                                  | ≥                         | ≥   | ≥ |
| AIRT ≥ for wind speed class 5 and stability class A<br>DFREQ(5,1,5) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class B<br>DFREQ(5,2,5) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class C<br>DFREQ(5,3,5) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class D<br>DFREQ(5,4,5) | ≥ 4.250E-03 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class E<br>DFREQ(5,5,5) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class F<br>DFREQ(5,6,5) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| ≥                                                                   | ≥                         | ≥   | ≥ |
| AIRT ≥ Joint Frequency in E Sector                                  | ≥                         | ≥   | ≥ |
| AIRT ≥ for wind speed class 6 and stability class A<br>DFREQ(6,1,5) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class B<br>DFREQ(6,2,5) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class C<br>DFREQ(6,3,5) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class D<br>DFREQ(6,4,5) | ≥ 7.500E-04 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class E<br>DFREQ(6,5,5) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| 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 | ≥ 3.500E-04 | ≥ 0.000E+00 | ≥ --- | ≥ | ≥ |
| DFREQ(1,1,6)                                        |             |             |       |   |   |
| AIRT ≥ for wind speed class 1 and stability class B | ≥ 7.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ | ≥ |
| DFREQ(1,2,6)                                        |             |             |       |   |   |
| AIRT ≥ for wind speed class 1 and stability class C | ≥ 1.200E-04 | ≥ 0.000E+00 | ≥ --- | ≥ | ≥ |
| DFREQ(1,3,6)                                        |             |             |       |   |   |
| AIRT ≥ for wind speed class 1 and stability class D | ≥ 3.080E-03 | ≥ 0.000E+00 | ≥ --- | ≥ | ≥ |
| DFREQ(1,4,6)                                        |             |             |       |   |   |
| AIRT ≥ for wind speed class 1 and stability class E | ≥ 1.640E-03 | ≥ 0.000E+00 | ≥ --- | ≥ | ≥ |
| DFREQ(1,5,6)                                        |             |             |       |   |   |
| AIRT ≥ for wind speed class 1 and stability class F | ≥ 7.400E-03 | ≥ 0.000E+00 | ≥ --- | ≥ | ≥ |
| DFREQ(1,6,6)                                        |             |             |       |   |   |

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#### Site-Specific Parameter Summary (continued)

|                                                     |             |             |        |        |         |            |        |
|-----------------------------------------------------|-------------|-------------|--------|--------|---------|------------|--------|
| 0                                                   | ≥           | ≥           | User   | ≥      | ≥       | RESRAD     | ≥      |
| Parameter                                           |             |             |        |        |         |            |        |
| Menu ≥                                              | Parameter   | ≥           | Input  | ≥      | Default | ≥ computed | ≥ Name |
| fffff~                                              | fffff~      | fffff~      | fffff~ | fffff~ | fffff~  | fffff~     | fffff~ |
| fffff                                               |             |             |        |        |         |            |        |
| AIRT ≥ Joint Frequency in ESE Sector                | ≥           | ≥           | ≥      | ≥      | ≥       | ≥          | ≥      |
| AIRT ≥ for wind speed class 2 and stability class A | ≥ 2.000E-04 | ≥ 0.000E+00 | ≥ ---  | ≥      | ≥       | ≥          | ≥      |
| DFREQ(2,1,6)                                        |             |             |        |        |         |            |        |
| AIRT ≥ for wind speed class 2 and stability class B | ≥ 1.400E-04 | ≥ 0.000E+00 | ≥ ---  | ≥      | ≥       | ≥          | ≥      |
| DFREQ(2,2,6)                                        |             |             |        |        |         |            |        |
| AIRT ≥ for wind speed class 2 and stability class C | ≥ 6.400E-04 | ≥ 0.000E+00 | ≥ ---  | ≥      | ≥       | ≥          | ≥      |

|              |                                              |             |             |       |   |
|--------------|----------------------------------------------|-------------|-------------|-------|---|
| DFREQ(2,3,6) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 2 and stability class D | ≥ 7.210E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(2,4,6) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 2 and stability class E | ≥ 4.170E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(2,5,6) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 2 and stability class F | ≥ 2.126E-02 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(2,6,6) |                                              |             |             |       |   |
| ≥            |                                              | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥       | Joint Frequency in ESE Sector                | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥       | for wind speed class 3 and stability class A | ≥ 2.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(3,1,6) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class B | ≥ 3.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(3,2,6) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class C | ≥ 3.400E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(3,3,6) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class D | ≥ 1.315E-02 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(3,4,6) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class E | ≥ 4.690E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(3,5,6) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class F | ≥ 3.490E-03 | ≥ 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 | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(4,2,6) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 4 and stability class C | ≥ 2.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(4,3,6) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 4 and stability class D | ≥ 1.237E-02 | ≥ 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<br>DFREQ(4,6,6) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥ |     | ≥ |
| AIRT ≥ Joint Frequency in ESE Sector                                | ≥           | ≥           | ≥ |     | ≥ |
| AIRT ≥ for wind speed class 5 and stability class A<br>DFREQ(5,1,6) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class B<br>DFREQ(5,2,6) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class C<br>DFREQ(5,3,6) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class D<br>DFREQ(5,4,6) | ≥ 4.700E-03 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class E<br>DFREQ(5,5,6) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class F<br>DFREQ(5,6,6) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥ |     | ≥ |
| AIRT ≥ Joint Frequency in ESE Sector                                | ≥           | ≥           | ≥ |     | ≥ |
| AIRT ≥ for wind speed class 6 and stability class A<br>DFREQ(6,1,6) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class B<br>DFREQ(6,2,6) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class C<br>DFREQ(6,3,6) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class D<br>DFREQ(6,4,6) | ≥ 1.510E-03 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class E<br>DFREQ(6,5,6) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class F<br>DFREQ(6,6,6) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥ |     | ≥ |
| AIRT ≥ Joint Frequency in SE Sector                                 | ≥           | ≥           | ≥ |     | ≥ |
| AIRT ≥ for wind speed class 1 and stability class A                 | ≥ 3.900E-04 | ≥ 0.000E+00 | ≥ | --- | ≥ |

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| Parameter | Menu | Input | Default | computed | RESRAD |
|-----------|------|-------|---------|----------|--------|
| 0         | ≥    | ≥     | ≥       | ≥        | ≥      |
| Parameter | ≥    | ≥     | ≥       | ≥        | ≥      |
| Menu      | ≥    | ≥     | ≥       | ≥        | ≥      |
| Parameter | ≥    | ≥     | ≥       | ≥        | ≥      |
| Input     | ≥    | ≥     | ≥       | ≥        | ≥      |
| Default   | ≥    | ≥     | ≥       | ≥        | ≥      |
| computed  | ≥    | ≥     | ≥       | ≥        | ≥      |
| RESRAD    | ≥    | ≥     | ≥       | ≥        | ≥      |

|                                                                          |                         |                         |        |        |
|--------------------------------------------------------------------------|-------------------------|-------------------------|--------|--------|
| AIRT $\geq$ Joint Frequency in SE Sector                                 | $\geq$                  | $\geq$                  | $\geq$ | $\geq$ |
| AIRT $\geq$ for wind speed class 2 and stability class A<br>DFREQ(2,1,7) | $\geq 1.900\text{E-}04$ | $\geq 0.000\text{E+}00$ | $\geq$ | ---    |
| AIRT $\geq$ for wind speed class 2 and stability class B<br>DFREQ(2,2,7) | $\geq 1.800\text{E-}04$ | $\geq 0.000\text{E+}00$ | $\geq$ | ---    |
| AIRT $\geq$ for wind speed class 2 and stability class C<br>DFREQ(2,3,7) | $\geq 5.900\text{E-}04$ | $\geq 0.000\text{E+}00$ | $\geq$ | ---    |
| AIRT $\geq$ for wind speed class 2 and stability class D<br>DFREQ(2,4,7) | $\geq 8.600\text{E-}03$ | $\geq 0.000\text{E+}00$ | $\geq$ | ---    |
| AIRT $\geq$ for wind speed class 2 and stability class E                 | $\geq 7.090\text{E-}03$ | $\geq 0.000\text{E+}00$ | $\geq$ | ---    |

|                                                     |             |             |   |     |   |
|-----------------------------------------------------|-------------|-------------|---|-----|---|
| DFREQ(2,5,7)                                        |             |             |   |     |   |
| AIRT ≥ for wind speed class 2 and stability class F | ≥ 2.564E-02 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| DFREQ(2,6,7)                                        |             |             |   |     |   |
| ≥                                                   | ≥           | ≥           | ≥ |     | ≥ |
| AIRT ≥ Joint Frequency in SE Sector                 | ≥           | ≥           | ≥ |     | ≥ |
| AIRT ≥ for wind speed class 3 and stability class A | ≥ 2.000E-05 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| DFREQ(3,1,7)                                        |             |             |   |     |   |
| AIRT ≥ for wind speed class 3 and stability class B | ≥ 6.000E-05 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| DFREQ(3,2,7)                                        |             |             |   |     |   |
| AIRT ≥ for wind speed class 3 and stability class C | ≥ 4.900E-04 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| DFREQ(3,3,7)                                        |             |             |   |     |   |
| AIRT ≥ for wind speed class 3 and stability class D | ≥ 1.200E-02 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| DFREQ(3,4,7)                                        |             |             |   |     |   |
| AIRT ≥ for wind speed class 3 and stability class E | ≥ 6.180E-03 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| DFREQ(3,5,7)                                        |             |             |   |     |   |
| AIRT ≥ for wind speed class 3 and stability class F | ≥ 1.700E-03 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| DFREQ(3,6,7)                                        |             |             |   |     |   |
| ≥                                                   | ≥           | ≥           | ≥ |     | ≥ |
| AIRT ≥ Joint Frequency in SE Sector                 | ≥           | ≥           | ≥ |     | ≥ |
| AIRT ≥ for wind speed class 4 and stability class A | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| DFREQ(4,1,7)                                        |             |             |   |     |   |
| AIRT ≥ for wind speed class 4 and stability class B | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| DFREQ(4,2,7)                                        |             |             |   |     |   |
| AIRT ≥ for wind speed class 4 and stability class C | ≥ 4.000E-05 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| DFREQ(4,3,7)                                        |             |             |   |     |   |
| AIRT ≥ for wind speed class 4 and stability class D | ≥ 8.430E-03 | ≥ 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<br>DFREQ(5,1,7) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class B<br>DFREQ(5,2,7) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class C<br>DFREQ(5,3,7) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class D<br>DFREQ(5,4,7) | ≥ 2.050E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class E<br>DFREQ(5,5,7) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class F<br>DFREQ(5,6,7) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in SE Sector                                 | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 6 and stability class A<br>DFREQ(6,1,7) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class B<br>DFREQ(6,2,7) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class C<br>DFREQ(6,3,7) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class D<br>DFREQ(6,4,7) | ≥ 6.000E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class E<br>DFREQ(6,5,7) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class F<br>DFREQ(6,6,7) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in SSE Sector                                | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 1 and stability class A<br>DFREQ(1,1,8) | ≥ 5.200E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class B<br>DFREQ(1,2,8) | ≥ 9.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class C                 | ≥ 1.500E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |



DFREQ(1,3,8)  
 AIRT ≥ for wind speed class 1 and stability class D ≥ 4.260E-03 ≥ 0.000E+00 ≥ --- ≥  
 DFREQ(1,4,8)  
 AIRT ≥ for wind speed class 1 and stability class E ≥ 1.870E-03 ≥ 0.000E+00 ≥ --- ≥  
 DFREQ(1,5,8)  
 AIRT ≥ for wind speed class 1 and stability class F ≥ 8.060E-03 ≥ 0.000E+00 ≥ --- ≥  
 DFREQ(1,6,8)  
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 File : INDUSTRIAL NO CAP HYDRO.ROF

## Site-Specific Parameter Summary (continued)

| 0            | ≥     | ≥                                            | User  | ≥         | ≥     | RESRAD    | ≥          |
|--------------|-------|----------------------------------------------|-------|-----------|-------|-----------|------------|
| Parameter    |       |                                              |       |           |       |           |            |
| Menu         | ≥     | Parameter                                    | ≥     | Input     | ≥     | Default   | ≥ computed |
|              |       |                                              |       |           |       |           | Name       |
| fffff~       | fffff | fffff                                        | fffff | fffff     | fffff | fffff     | fffff      |
| fffff        |       |                                              |       |           |       |           |            |
| AIRT         | ≥     | Joint Frequency in SSE Sector                | ≥     |           | ≥     |           | ≥          |
| AIRT         | ≥     | for wind speed class 2 and stability class A | ≥     | 2.600E-04 | ≥     | 0.000E+00 | ≥ --- ≥    |
| DFREQ(2,1,8) |       |                                              |       |           |       |           |            |
| AIRT         | ≥     | for wind speed class 2 and stability class B | ≥     | 1.800E-04 | ≥     | 0.000E+00 | ≥ --- ≥    |
| DFREQ(2,2,8) |       |                                              |       |           |       |           |            |
| AIRT         | ≥     | for wind speed class 2 and stability class C | ≥     | 5.200E-04 | ≥     | 0.000E+00 | ≥ --- ≥    |
| DFREQ(2,3,8) |       |                                              |       |           |       |           |            |
| AIRT         | ≥     | for wind speed class 2 and stability class D | ≥     | 7.070E-03 | ≥     | 0.000E+00 | ≥ --- ≥    |
| DFREQ(2,4,8) |       |                                              |       |           |       |           |            |
| AIRT         | ≥     | for wind speed class 2 and stability class E | ≥     | 4.710E-03 | ≥     | 0.000E+00 | ≥ --- ≥    |
| DFREQ(2,5,8) |       |                                              |       |           |       |           |            |
| AIRT         | ≥     | for wind speed class 2 and stability class F | ≥     | 1.464E-02 | ≥     | 0.000E+00 | ≥ --- ≥    |
| DFREQ(2,6,8) |       |                                              |       |           |       |           |            |
| ≥            |       |                                              | ≥     |           | ≥     |           | ≥          |

|                                                                     |             |             |       |   |
|---------------------------------------------------------------------|-------------|-------------|-------|---|
| AIRT ≥ Joint Frequency in SSE Sector                                | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 3 and stability class A<br>DFREQ(3,1,8) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class B<br>DFREQ(3,2,8) | ≥ 2.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class C<br>DFREQ(3,3,8) | ≥ 2.200E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class D<br>DFREQ(3,4,8) | ≥ 4.810E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class E<br>DFREQ(3,5,8) | ≥ 1.500E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class F<br>DFREQ(3,6,8) | ≥ 5.100E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in SSE Sector                                | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 4 and stability class A<br>DFREQ(4,1,8) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class B<br>DFREQ(4,2,8) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class C<br>DFREQ(4,3,8) | ≥ 1.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class D<br>DFREQ(4,4,8) | ≥ 1.320E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class E<br>DFREQ(4,5,8) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class F<br>DFREQ(4,6,8) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in SSE Sector                                | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 5 and stability class A<br>DFREQ(5,1,8) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class B<br>DFREQ(5,2,8) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |

|                                                                          |                  |                  |        |     |        |
|--------------------------------------------------------------------------|------------------|------------------|--------|-----|--------|
| AIRT $\geq$ for wind speed class 5 and stability class C<br>DFREQ(5,3,8) | $\geq 0.000E+00$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| AIRT $\geq$ for wind speed class 5 and stability class D<br>DFREQ(5,4,8) | $\geq 2.000E-05$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| AIRT $\geq$ for wind speed class 5 and stability class E<br>DFREQ(5,5,8) | $\geq 0.000E+00$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| AIRT $\geq$ for wind speed class 5 and stability class F<br>DFREQ(5,6,8) | $\geq 0.000E+00$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| $\geq$                                                                   | $\geq$           | $\geq$           | $\geq$ |     | $\geq$ |
| AIRT $\geq$ Joint Frequency in SSE Sector                                | $\geq$           | $\geq$           | $\geq$ |     | $\geq$ |
| AIRT $\geq$ for wind speed class 6 and stability class A<br>DFREQ(6,1,8) | $\geq 0.000E+00$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| AIRT $\geq$ for wind speed class 6 and stability class B<br>DFREQ(6,2,8) | $\geq 0.000E+00$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| AIRT $\geq$ for wind speed class 6 and stability class C<br>DFREQ(6,3,8) | $\geq 0.000E+00$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| AIRT $\geq$ for wind speed class 6 and stability class D<br>DFREQ(6,4,8) | $\geq 0.000E+00$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| AIRT $\geq$ for wind speed class 6 and stability class E<br>DFREQ(6,5,8) | $\geq 0.000E+00$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| AIRT $\geq$ for wind speed class 6 and stability class F<br>DFREQ(6,6,8) | $\geq 0.000E+00$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| $\geq$                                                                   | $\geq$           | $\geq$           | $\geq$ |     | $\geq$ |
| AIRT $\geq$ Joint Frequency in S Sector                                  | $\geq$           | $\geq$           | $\geq$ |     | $\geq$ |
| AIRT $\geq$ for wind speed class 1 and stability class A<br>DFREQ(1,1,9) | $\geq 8.400E-04$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| AIRT $\geq$ for wind speed class 1 and stability class B<br>DFREQ(1,2,9) | $\geq 2.800E-04$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| AIRT $\geq$ for wind speed class 1 and stability class C<br>DFREQ(1,3,9) | $\geq 2.100E-04$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| AIRT $\geq$ for wind speed class 1 and stability class D<br>DFREQ(1,4,9) | $\geq 4.110E-03$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |
| AIRT $\geq$ for wind speed class 1 and stability class E                 | $\geq 1.620E-03$ | $\geq 0.000E+00$ | $\geq$ | --- | $\geq$ |

DFREQ(1,5,9)

AIRT ≥ for wind speed class 1 and stability class F ≥ 6.750E-03 ≥ 0.000E+00 ≥ --- ≥

DFREQ(1,6,9)

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## Site-Specific Parameter Summary (continued)

0 ≥ ≥ User ≥ RESRAD ≥

Parameter

Menu ≥

Parameter

≥ Input

≥ Default

≥ computed

≥ Name

fffff~ffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff  
 fffff

AIRT ≥ Joint Frequency in S Sector ≥ ≥ ≥ ≥

AIRT ≥ for wind speed class 2 and stability class A ≥ 2.800E-04 ≥ 0.000E+00 ≥ --- ≥

DFREQ(2,1,9)

AIRT ≥ for wind speed class 2 and stability class B ≥ 2.400E-04 ≥ 0.000E+00 ≥ --- ≥

DFREQ(2,2,9)

AIRT ≥ for wind speed class 2 and stability class C ≥ 5.600E-04 ≥ 0.000E+00 ≥ --- ≥

DFREQ(2,3,9)

AIRT ≥ for wind speed class 2 and stability class D ≥ 7.070E-03 ≥ 0.000E+00 ≥ --- ≥

DFREQ(2,4,9)

AIRT ≥ for wind speed class 2 and stability class E ≥ 4.300E-03 ≥ 0.000E+00 ≥ --- ≥

DFREQ(2,5,9)

AIRT ≥ for wind speed class 2 and stability class F ≥ 8.060E-03 ≥ 0.000E+00 ≥ --- ≥

DFREQ(2,6,9)

≥

≥

≥

≥

≥

AIRT ≥ Joint Frequency in S Sector ≥ ≥ ≥ ≥

AIRT ≥ for wind speed class 3 and stability class A ≥ 1.000E-05 ≥ 0.000E+00 ≥ --- ≥

DFREQ(3,1,9)

AIRT ≥ for wind speed class 3 and stability class B ≥ 1.000E-05 ≥ 0.000E+00 ≥ --- ≥

|              |                                              |             |             |       |   |
|--------------|----------------------------------------------|-------------|-------------|-------|---|
| DFREQ(3,2,9) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class C | ≥ 7.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(3,3,9) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class D | ≥ 3.500E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(3,4,9) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class E | ≥ 2.310E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(3,5,9) |                                              |             |             |       |   |
| AIRT ≥       | for wind speed class 3 and stability class F | ≥ 7.100E-04 | ≥ 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 | ≥ 1.120E-03 | ≥ 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 | ≥ 1.800E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| DFREQ(5,4,9) |                                              |             |             |       |   |

|                                                                      |             |             |       |   |
|----------------------------------------------------------------------|-------------|-------------|-------|---|
| AIRT ≥ for wind speed class 5 and stability class E<br>DFREQ(5,5,9)  | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class F<br>DFREQ(5,6,9)  | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                    | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in S Sector                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 6 and stability class A<br>DFREQ(6,1,9)  | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class B<br>DFREQ(6,2,9)  | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class C<br>DFREQ(6,3,9)  | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class D<br>DFREQ(6,4,9)  | ≥ 1.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class E<br>DFREQ(6,5,9)  | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class F<br>DFREQ(6,6,9)  | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                    | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in SSW Sector                                 | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 1 and stability class A<br>DFREQ(1,1,10) | ≥ 1.280E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class B<br>DFREQ(1,2,10) | ≥ 3.600E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class C<br>DFREQ(1,3,10) | ≥ 6.800E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class D<br>DFREQ(1,4,10) | ≥ 4.340E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class E<br>DFREQ(1,5,10) | ≥ 1.400E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class F<br>DFREQ(1,6,10) | ≥ 4.370E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |

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T' Limit = 30 days

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File : INDUSTRIAL NO CAP HYDRO.ROF

|                                                                                                                                     | ≥         | User        | ≥           | RESRAD   | ≥    |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------|-------------|-------------|----------|------|
| Parameter                                                                                                                           |           |             |             |          |      |
| Menu ≥                                                                                                                              | Parameter | Input       | Default     | computed | Name |
| <i>fffff~ffffffffffffffffffffffffffffffffffffffffffffffffffffff~fffffffffff~fffffffffffff~fffffffffffff~fffffffffffff<br/>fffff</i> |           |             |             |          |      |
| AIRT ≥ Joint Frequency in SSW Sector                                                                                                |           | ≥           | ≥           | ≥        | ≥    |
| AIRT ≥     for wind speed class 2 and stability class A<br>DFREQ(2,1,10)                                                            |           | ≥ 4.400E-04 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| AIRT ≥     for wind speed class 2 and stability class B<br>DFREQ(2,2,10)                                                            |           | ≥ 3.900E-04 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| AIRT ≥     for wind speed class 2 and stability class C<br>DFREQ(2,3,10)                                                            |           | ≥ 1.540E-03 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| AIRT ≥     for wind speed class 2 and stability class D<br>DFREQ(2,4,10)                                                            |           | ≥ 1.041E-02 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| AIRT ≥     for wind speed class 2 and stability class E<br>DFREQ(2,5,10)                                                            |           | ≥ 3.710E-03 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| AIRT ≥     for wind speed class 2 and stability class F<br>DFREQ(2,6,10)                                                            |           | ≥ 2.690E-03 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| ≥                                                                                                                                   |           | ≥           | ≥           |          | ≥    |
| AIRT ≥ Joint Frequency in SSW Sector                                                                                                |           | ≥           | ≥           | ≥        | ≥    |
| AIRT ≥     for wind speed class 3 and stability class A<br>DFREQ(3,1,10)                                                            |           | ≥ 1.000E-05 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| AIRT ≥     for wind speed class 3 and stability class B<br>DFREQ(3,2,10)                                                            |           | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| AIRT ≥     for wind speed class 3 and stability class C<br>DFREQ(3,3,10)                                                            |           | ≥ 7.000E-05 | ≥ 0.000E+00 | ≥ ---    | ≥    |
| AIRT ≥     for wind speed class 3 and stability class D                                                                             |           | ≥ 6.800E-03 | ≥ 0.000E+00 | ≥ ---    | ≥    |

|                                                     |             |             |   |     |   |
|-----------------------------------------------------|-------------|-------------|---|-----|---|
| DFREQ(3,4,10)                                       |             |             |   |     |   |
| AIRT ≥ for wind speed class 3 and stability class E | ≥ 1.780E-03 | ≥ 0.000E+00 | ≥ | --- | ≥ |
| DFREQ(3,5,10)                                       |             |             |   |     |   |
| AIRT ≥ for wind speed class 3 and stability class F | ≥ 1.000E-04 | ≥ 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 | ≥ 2.080E-03 | ≥ 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 | ≥ 1.500E-04 | ≥ 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<br>DFREQ(6,1,10) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class B<br>DFREQ(6,2,10) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class C<br>DFREQ(6,3,10) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class D<br>DFREQ(6,4,10) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class E<br>DFREQ(6,5,10) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class F<br>DFREQ(6,6,10) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                    | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in SW Sector                                  | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 1 and stability class A<br>DFREQ(1,1,11) | ≥ 1.910E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class B<br>DFREQ(1,2,11) | ≥ 5.800E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class C<br>DFREQ(1,3,11) | ≥ 7.500E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class D<br>DFREQ(1,4,11) | ≥ 4.290E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class E<br>DFREQ(1,5,11) | ≥ 9.900E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class F<br>DFREQ(1,6,11) | ≥ 2.530E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

## Site-Specific Parameter Summary (continued)

| 0         | ≥ | ≥                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      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| Parameter |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |      |       |   |         |            |   |      |
| Menu      | ≥ | Parameter                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | ≥    | Input | ≥ | Default | ≥ computed | ≥ | Name |
| fffff     | ~ | ffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffff |      |       |   |         |            |   |      |

|                                                     |             |             |   |     |   |
|-----------------------------------------------------|-------------|-------------|---|-----|---|
| 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 | ≥ 4.700E-04 | ≥ 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 | ≥ 1.000E-05 | ≥ 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<br>DFREQ(6,2,11) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 6 and stability class C<br>DFREQ(6,3,11) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 6 and stability class D<br>DFREQ(6,4,11) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 6 and stability class E<br>DFREQ(6,5,11) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 6 and stability class F<br>DFREQ(6,6,11) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ --- ≥ |
| ≥                                                                    | ≥ ≥ ≥ ≥                         |
| AIRT ≥ Joint Frequency in WSW Sector                                 | ≥ ≥ ≥ ≥                         |
| AIRT ≥ for wind speed class 1 and stability class A<br>DFREQ(1,1,12) | ≥ 3.250E-03 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 1 and stability class B<br>DFREQ(1,2,12) | ≥ 1.040E-03 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 1 and stability class C<br>DFREQ(1,3,12) | ≥ 1.620E-03 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 1 and stability class D<br>DFREQ(1,4,12) | ≥ 4.740E-03 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 1 and stability class E<br>DFREQ(1,5,12) | ≥ 8.200E-04 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 1 and stability class F<br>DFREQ(1,6,12) | ≥ 1.630E-03 ≥ 0.000E+00 ≥ --- ≥ |

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

## Site-Specific Parameter Summary (continued)

| 0 ≥       | ≥ User    | ≥ RESRAD  | ≥          |
|-----------|-----------|-----------|------------|
| Parameter | ≥ Input   | ≥ Default | ≥ computed |
| Menu ≥    | Parameter | ≥         | Name       |

fffff~ffffffffffffffffffffffffffffffffffffffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff~  
fffff

|                                                                      |             |             |       |   |
|----------------------------------------------------------------------|-------------|-------------|-------|---|
| AIRT ≥ Joint Frequency in WSW Sector                                 | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 2 and stability class A<br>DFREQ(2,1,12) | ≥ 1.130E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class B<br>DFREQ(2,2,12) | ≥ 1.430E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class C<br>DFREQ(2,3,12) | ≥ 3.870E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class D<br>DFREQ(2,4,12) | ≥ 7.670E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class E<br>DFREQ(2,5,12) | ≥ 8.200E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class F<br>DFREQ(2,6,12) | ≥ 3.100E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                    | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in WSW Sector                                 | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 3 and stability class A<br>DFREQ(3,1,12) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class B<br>DFREQ(3,2,12) | ≥ 1.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class C<br>DFREQ(3,3,12) | ≥ 4.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class D<br>DFREQ(3,4,12) | ≥ 1.320E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class E<br>DFREQ(3,5,12) | ≥ 7.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class F<br>DFREQ(3,6,12) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                    | ≥           | ≥           | ≥     | ≥ |
| 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 | ≥ 4.000E-05 | ≥ 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<br>DFREQ(6,4,12) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class E<br>DFREQ(6,5,12) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class F<br>DFREQ(6,6,12) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                    | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in W Sector                                   | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 1 and stability class A<br>DFREQ(1,1,13) | ≥ 3.520E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class B<br>DFREQ(1,2,13) | ≥ 1.240E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class C<br>DFREQ(1,3,13) | ≥ 1.970E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class D<br>DFREQ(1,4,13) | ≥ 6.080E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class E<br>DFREQ(1,5,13) | ≥ 9.000E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class F<br>DFREQ(1,6,13) | ≥ 1.430E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |

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Site-Specific Parameter Summary (continued)

|                                                                                                                                                          |   |                             |      |       |   |         |                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|---|-----------------------------|------|-------|---|---------|-------------------|
| 0                                                                                                                                                        | ≥ | ≥                           | User | ≥     | ≥ | RESRAD  | ≥                 |
| Parameter                                                                                                                                                |   |                             |      |       |   |         |                   |
| Menu                                                                                                                                                     | ≥ | Parameter                   | ≥    | Input | ≥ | Default | ≥ computed ≥ Name |
| fffff~ffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff<br>fffff |   |                             |      |       |   |         |                   |
| AIRT                                                                                                                                                     | ≥ | Joint Frequency in W Sector | ≥    | ≥     | ≥ | ≥       | ≥                 |

|                                                                      |                           |     |   |
|----------------------------------------------------------------------|---------------------------|-----|---|
| AIRT ≥ for wind speed class 2 and stability class A<br>DFREQ(2,1,13) | ≥ 1.450E-03 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class B<br>DFREQ(2,2,13) | ≥ 1.680E-03 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class C<br>DFREQ(2,3,13) | ≥ 4.500E-03 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class D<br>DFREQ(2,4,13) | ≥ 7.840E-03 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class E<br>DFREQ(2,5,13) | ≥ 6.000E-04 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class F<br>DFREQ(2,6,13) | ≥ 1.800E-04 ≥ 0.000E+00 ≥ | --- | ≥ |
| ≥                                                                    | ≥                         | ≥   | ≥ |
| AIRT ≥ Joint Frequency in W Sector                                   | ≥                         | ≥   | ≥ |
| AIRT ≥ for wind speed class 3 and stability class A<br>DFREQ(3,1,13) | ≥ 1.000E-05 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class B<br>DFREQ(3,2,13) | ≥ 1.000E-05 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class C<br>DFREQ(3,3,13) | ≥ 3.000E-05 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class D<br>DFREQ(3,4,13) | ≥ 6.300E-04 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class E<br>DFREQ(3,5,13) | ≥ 1.000E-05 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class F<br>DFREQ(3,6,13) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| ≥                                                                    | ≥                         | ≥   | ≥ |
| AIRT ≥ Joint Frequency in W Sector                                   | ≥                         | ≥   | ≥ |
| AIRT ≥ for wind speed class 4 and stability class A<br>DFREQ(4,1,13) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class B<br>DFREQ(4,2,13) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class C                  | ≥ 0.000E+00 ≥ 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<br>DFREQ(6,6,13) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ --- ≥ |
| ≥                                                                    | ≥ ≥ ≥ ≥                         |
| AIRT ≥ Joint Frequency in WNW Sector                                 | ≥ ≥ ≥ ≥                         |
| AIRT ≥ for wind speed class 1 and stability class A<br>DFREQ(1,1,14) | ≥ 2.690E-03 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 1 and stability class B<br>DFREQ(1,2,14) | ≥ 9.500E-04 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 1 and stability class C<br>DFREQ(1,3,14) | ≥ 1.290E-03 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 1 and stability class D<br>DFREQ(1,4,14) | ≥ 4.270E-03 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 1 and stability class E<br>DFREQ(1,5,14) | ≥ 6.600E-04 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 1 and stability class F<br>DFREQ(1,6,14) | ≥ 1.330E-03 ≥ 0.000E+00 ≥ --- ≥ |

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## Site-Specific Parameter Summary (continued)

|                                                                                                                     |                                     |
|---------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| 0 ≥                                                                                                                 | ≥ User ≥ RESRAD ≥                   |
| Parameter                                                                                                           |                                     |
| Menu ≥                                                                                                              | ≥ Input ≥ Default ≥ computed ≥ Name |
| fffff~ffffffffffffffffffffffffffffffffffffffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff<br>fffff |                                     |
| AIRT ≥ Joint Frequency in WNW Sector                                                                                | ≥ ≥ ≥ ≥                             |
| AIRT ≥ for wind speed class 2 and stability class A<br>DFREQ(2,1,14)                                                | ≥ 1.620E-03 ≥ 0.000E+00 ≥ --- ≥     |
| AIRT ≥ for wind speed class 2 and stability class B<br>DFREQ(2,2,14)                                                | ≥ 1.970E-03 ≥ 0.000E+00 ≥ --- ≥     |

|                                                                      |                           |     |   |
|----------------------------------------------------------------------|---------------------------|-----|---|
| AIRT ≥ for wind speed class 2 and stability class C<br>DFREQ(2,3,14) | ≥ 5.130E-03 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class D<br>DFREQ(2,4,14) | ≥ 8.220E-03 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class E<br>DFREQ(2,5,14) | ≥ 8.100E-04 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class F<br>DFREQ(2,6,14) | ≥ 2.600E-04 ≥ 0.000E+00 ≥ | --- | ≥ |
| ≥                                                                    | ≥                         | ≥   | ≥ |
| AIRT ≥ Joint Frequency in WNW Sector                                 | ≥                         | ≥   | ≥ |
| AIRT ≥ for wind speed class 3 and stability class A<br>DFREQ(3,1,14) | ≥ 1.000E-05 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class B<br>DFREQ(3,2,14) | ≥ 1.000E-05 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class C<br>DFREQ(3,3,14) | ≥ 9.000E-05 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class D<br>DFREQ(3,4,14) | ≥ 9.000E-04 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class E<br>DFREQ(3,5,14) | ≥ 6.000E-05 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class F<br>DFREQ(3,6,14) | ≥ 1.000E-05 ≥ 0.000E+00 ≥ | --- | ≥ |
| ≥                                                                    | ≥                         | ≥   | ≥ |
| AIRT ≥ Joint Frequency in WNW Sector                                 | ≥                         | ≥   | ≥ |
| AIRT ≥ for wind speed class 4 and stability class A<br>DFREQ(4,1,14) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class B<br>DFREQ(4,2,14) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class C<br>DFREQ(4,3,14) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class D<br>DFREQ(4,4,14) | ≥ 6.000E-05 ≥ 0.000E+00 ≥ | --- | ≥ |
| 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                 | ≥           | ≥           | ≥ |     | ≥ |

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| Parameter | Menu | Parameter | Input | Default | computed | RESRAD |
|-----------|------|-----------|-------|---------|----------|--------|
| 0         | ≥    | ≥         | User  | ≥       | ≥        | RESRAD |
| Parameter | Menu | Parameter | Input | Default | computed | RESRAD |

|                                                                           |                         |                         |        |        |
|---------------------------------------------------------------------------|-------------------------|-------------------------|--------|--------|
| AIRT $\geq$ Joint Frequency in NW Sector                                  | $\geq$                  | $\geq$                  | $\geq$ | $\geq$ |
| AIRT $\geq$ for wind speed class 2 and stability class A<br>DFREQ(2,1,15) | $\geq 1.630\text{E-}03$ | $\geq 0.000\text{E+}00$ | $\geq$ | ---    |
| AIRT $\geq$ for wind speed class 2 and stability class B<br>DFREQ(2,2,15) | $\geq 2.360\text{E-}03$ | $\geq 0.000\text{E+}00$ | $\geq$ | ---    |
| AIRT $\geq$ for wind speed class 2 and stability class C<br>DFREQ(2,3,15) | $\geq 6.430\text{E-}03$ | $\geq 0.000\text{E+}00$ | $\geq$ | ---    |
| AIRT $\geq$ for wind speed class 2 and stability class D<br>DFREQ(2,4,15) | $\geq 1.140\text{E-}02$ | $\geq 0.000\text{E+}00$ | $\geq$ | ---    |

|                                                                      |                           |     |   |
|----------------------------------------------------------------------|---------------------------|-----|---|
| AIRT ≥ for wind speed class 2 and stability class E<br>DFREQ(2,5,15) | ≥ 1.150E-03 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 2 and stability class F<br>DFREQ(2,6,15) | ≥ 4.700E-04 ≥ 0.000E+00 ≥ | --- | ≥ |
| ≥                                                                    | ≥                         | ≥   | ≥ |
| AIRT ≥ Joint Frequency in NW Sector                                  | ≥                         | ≥   | ≥ |
| AIRT ≥ for wind speed class 3 and stability class A<br>DFREQ(3,1,15) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class B<br>DFREQ(3,2,15) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class C<br>DFREQ(3,3,15) | ≥ 2.500E-04 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class D<br>DFREQ(3,4,15) | ≥ 3.490E-03 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class E<br>DFREQ(3,5,15) | ≥ 1.400E-04 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class F<br>DFREQ(3,6,15) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| ≥                                                                    | ≥                         | ≥   | ≥ |
| AIRT ≥ Joint Frequency in NW Sector                                  | ≥                         | ≥   | ≥ |
| AIRT ≥ for wind speed class 4 and stability class A<br>DFREQ(4,1,15) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class B<br>DFREQ(4,2,15) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class C<br>DFREQ(4,3,15) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class D<br>DFREQ(4,4,15) | ≥ 1.200E-04 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class E<br>DFREQ(4,5,15) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class F<br>DFREQ(4,6,15) | ≥ 0.000E+00 ≥ 0.000E+00 ≥ | --- | ≥ |
| ≥                                                                    | ≥                         | ≥   | ≥ |

|                                                                      |             |             |       |   |
|----------------------------------------------------------------------|-------------|-------------|-------|---|
| AIRT ≥ Joint Frequency in NW Sector                                  | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 5 and stability class A<br>DFREQ(5,1,15) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class B<br>DFREQ(5,2,15) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class C<br>DFREQ(5,3,15) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class D<br>DFREQ(5,4,15) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class E<br>DFREQ(5,5,15) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 5 and stability class F<br>DFREQ(5,6,15) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                    | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in NW Sector                                  | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 6 and stability class A<br>DFREQ(6,1,15) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class B<br>DFREQ(6,2,15) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class C<br>DFREQ(6,3,15) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class D<br>DFREQ(6,4,15) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class E<br>DFREQ(6,5,15) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 6 and stability class F<br>DFREQ(6,6,15) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                    | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in NNW Sector                                 | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 1 and stability class A<br>DFREQ(1,1,16) | ≥ 2.100E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 1 and stability class B<br>DFREQ(1,2,16) | ≥ 6.100E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |

|                                                                      |                                 |
|----------------------------------------------------------------------|---------------------------------|
| AIRT ≥ for wind speed class 1 and stability class C<br>DFREQ(1,3,16) | ≥ 8.800E-04 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 1 and stability class D<br>DFREQ(1,4,16) | ≥ 4.200E-03 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 1 and stability class E<br>DFREQ(1,5,16) | ≥ 1.240E-03 ≥ 0.000E+00 ≥ --- ≥ |
| AIRT ≥ for wind speed class 1 and stability class F<br>DFREQ(1,6,16) | ≥ 1.880E-03 ≥ 0.000E+00 ≥ --- ≥ |

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#### Site-Specific Parameter Summary (continued)

| 0 ≥                                                                                                                 | ≥ User ≥                        | ≥ RESRAD ≥   |
|---------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------|
| Parameter                                                                                                           | Input                           | Default      |
| Menu ≥                                                                                                              | Parameter                       | ≥ computed ≥ |
| Name                                                                                                                |                                 |              |
| fffff~ffffffffffffffffffffffffffffffffffffffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff<br>fffff |                                 |              |
| AIRT ≥ Joint Frequency in NNW Sector                                                                                | ≥                               | ≥            |
| AIRT ≥ for wind speed class 2 and stability class A<br>DFREQ(2,1,16)                                                | ≥ 1.640E-03 ≥ 0.000E+00 ≥ --- ≥ |              |
| AIRT ≥ for wind speed class 2 and stability class B<br>DFREQ(2,2,16)                                                | ≥ 2.250E-03 ≥ 0.000E+00 ≥ --- ≥ |              |
| AIRT ≥ for wind speed class 2 and stability class C<br>DFREQ(2,3,16)                                                | ≥ 8.170E-03 ≥ 0.000E+00 ≥ --- ≥ |              |
| AIRT ≥ for wind speed class 2 and stability class D<br>DFREQ(2,4,16)                                                | ≥ 1.822E-02 ≥ 0.000E+00 ≥ --- ≥ |              |
| AIRT ≥ for wind speed class 2 and stability class E<br>DFREQ(2,5,16)                                                | ≥ 2.150E-03 ≥ 0.000E+00 ≥ --- ≥ |              |
| AIRT ≥ for wind speed class 2 and stability class F<br>DFREQ(2,6,16)                                                | ≥ 5.300E-04 ≥ 0.000E+00 ≥ --- ≥ |              |



|                                                                      |             |             |       |   |
|----------------------------------------------------------------------|-------------|-------------|-------|---|
| ≥                                                                    | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in NNW Sector                                 | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 3 and stability class A<br>DFREQ(3,1,16) | ≥ 1.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class B<br>DFREQ(3,2,16) | ≥ 1.000E-05 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class C<br>DFREQ(3,3,16) | ≥ 6.600E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class D<br>DFREQ(3,4,16) | ≥ 1.573E-02 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class E<br>DFREQ(3,5,16) | ≥ 3.000E-04 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 3 and stability class F<br>DFREQ(3,6,16) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                    | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in NNW Sector                                 | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 4 and stability class A<br>DFREQ(4,1,16) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class B<br>DFREQ(4,2,16) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class C<br>DFREQ(4,3,16) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class D<br>DFREQ(4,4,16) | ≥ 2.270E-03 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class E<br>DFREQ(4,5,16) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| AIRT ≥ for wind speed class 4 and stability class F<br>DFREQ(4,6,16) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| ≥                                                                    | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ Joint Frequency in NNW Sector                                 | ≥           | ≥           | ≥     | ≥ |
| AIRT ≥ for wind speed class 5 and stability class A<br>DFREQ(5,1,16) | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ |
| 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          | ≥ 2.000E-05 | ≥ 0.000E+00  | ≥ | --- | ≥           |
| DFREQ(5,4,16)                                                |             |              |   |     |             |
| AIRT ≥ for wind speed class 5 and stability class E          | ≥ 0.000E+00 | ≥ 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          | ≥ 0.000E+00 | ≥ 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)  | ≥ 1.680E+03 | ≥ 1.000E+02  | ≥ | --- | ≥ OFFLPAQW  |
| GWTR ≥ Contamination to Well c/c distance normal to flow, m  | ≥ 2.190E+02 | ≥ 0.000E+00  | ≥ | --- | ≥ OFFLNAQW  |
| GWTR ≥ Distance from d/g edge of cz to surface water, (m)    | ≥ 1.623E+03 | ≥ 4.500E+02  | ≥ | --- | ≥ OFFLPAQS  |
| GWTR ≥ Contamination to near edge of swb, c/c normal to flow | ≥ 1.568E+03 | ≥ -1.500E+02 | ≥ | --- | ≥ OFFLNAQSN |
| GWTR ≥ Contamination to far edge of swb, c/c normal to flow  | ≥ 1.630E+03 | ≥ 1.500E+02  | ≥ | --- | ≥ OFFLNAQSF |

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## Site-Specific Parameter Summary (continued)

| Parameter                                                                                                                           | User      | RESRAD    |          |
|-------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|----------|
| Menu                                                                                                                                | Input     | Default   | computed |
| Parameter                                                                                                                           | Input     | Default   | computed |
| GWTR ≥ Number of main sub zones in saturated stratum                                                                                | 1         | 1         | ---      |
| GWTR ≥ Number of minor sub zones in last main SZ sub zone                                                                           | 1         | 1         | ---      |
| GWTR ≥ Number of main sub zones in each unsaturated stratum                                                                         | 1         | 1         | ---      |
| GWTR ≥ Number of minor sub zones in last main UZ sub zone                                                                           | 1         | 1         | ---      |
| GWTR ≥ Distribution coefficient and longitudinal dispersion                                                                         | 1         | 1         | ---      |
| ≥ 1 = Nuclide specific distrubution coefficients in all subzones. Longitudinal dispersion in all but the subzone of transformation. |           |           |          |
| GWTR ≥ Retardation factor flag for groundwater transport                                                                            | 0         | 0         | ---      |
| ≥ 0 = (total porosity + distribution coefficient*dry bulk density) / total porosity                                                 |           |           |          |
| USZN ≥ Number of unsaturated zone strata                                                                                            | 4         | 1         | ---      |
| USZN ≥ Unsat. zone 1, thickness (m)                                                                                                 | 9.480E+01 | 4.000E+00 | ---      |
| USZN ≥ Unsat. zone 1, soil density (g/cm**3)                                                                                        | 1.240E+00 | 1.500E+00 | ---      |
| USZN ≥ Unsat. zone 1, total porosity                                                                                                | 4.400E-01 | 4.000E-01 | ---      |
| USZN ≥ Unsat. zone 1, effective porosity                                                                                            | 4.400E-01 | 2.000E-01 | ---      |
| USZN ≥ Unsat. zone 1, field capacity                                                                                                | 8.800E-03 | 3.000E-01 | ---      |
| USZN ≥ Unsat. zone 1, hydraulic conductivity (m/yr)                                                                                 | 3.340E+01 | 1.000E+01 | ---      |
| USZN ≥ Unsat. zone 1, soil-specific b parameter                                                                                     | 1.000E+00 | 5.300E+00 | ---      |
| USZN ≥ Unsat. zone 1, longitudinal dispersivity (m)                                                                                 | 1.000E+00 | 1.000E-01 | ---      |
| USZN ≥ Unsat. zone 2, thickness (m)                                                                                                 | 3.200E+01 | 0.000E+00 | ---      |
| USZN ≥ Unsat. zone 2, soil density (g/cm**3)                                                                                        | 1.200E+00 | 1.500E+00 | ---      |
| USZN ≥ Unsat. zone 2, total porosity                                                                                                | 5.000E-01 | 4.000E-01 | ---      |

|                                                     |             |             |       |              |
|-----------------------------------------------------|-------------|-------------|-------|--------------|
| USZN ≥ Unsat. zone 2, effective porosity            | ≥ 5.000E-01 | ≥ 2.000E-01 | ≥ --- | ≥ EPUZ(2)    |
| USZN ≥ Unsat. zone 2, field capacity                | ≥ 3.500E-03 | ≥ 3.000E-01 | ≥ --- | ≥ FCUZ(2)    |
| USZN ≥ Unsat. zone 2, hydraulic conductivity (m/yr) | ≥ 4.100E+01 | ≥ 1.000E+01 | ≥ --- | ≥ HCUZ(2)    |
| USZN ≥ Unsat. zone 2, soil-specific b parameter     | ≥ 2.600E+00 | ≥ 5.300E+00 | ≥ --- | ≥ BUZ(2)     |
| USZN ≥ Unsat. zone 2, longitudinal dispersivity (m) | ≥ 1.000E+00 | ≥ 1.000E-01 | ≥ --- | ≥ ALPHALU(2) |
| ≥                                                   | ≥           | ≥           | ≥     | ≥            |
| USZN ≥ Unsat. zone 3, thickness (m)                 | ≥ 5.670E+01 | ≥ 0.000E+00 | ≥ --- | ≥ H(3)       |
| USZN ≥ Unsat. zone 3, soil density (g/cm**3)        | ≥ 1.170E+00 | ≥ 1.500E+00 | ≥ --- | ≥ DENSUZ(3)  |
| USZN ≥ Unsat. zone 3, total porosity                | ≥ 4.600E-01 | ≥ 4.000E-01 | ≥ --- | ≥ TPUZ(3)    |
| USZN ≥ Unsat. zone 3, effective porosity            | ≥ 4.600E-01 | ≥ 2.000E-01 | ≥ --- | ≥ EPUZ(3)    |
| USZN ≥ Unsat. zone 3, field capacity                | ≥ 2.000E-02 | ≥ 3.000E-01 | ≥ --- | ≥ FCUZ(3)    |
| USZN ≥ Unsat. zone 3, hydraulic conductivity (m/yr) | ≥ 6.690E+01 | ≥ 1.000E+01 | ≥ --- | ≥ HCUZ(3)    |
| USZN ≥ Unsat. zone 3, soil-specific b parameter     | ≥ 1.500E+00 | ≥ 5.300E+00 | ≥ --- | ≥ BUZ(3)     |
| USZN ≥ Unsat. zone 3, longitudinal dispersivity (m) | ≥ 1.000E+00 | ≥ 1.000E-01 | ≥ --- | ≥ ALPHALU(3) |
| ≥                                                   | ≥           | ≥           | ≥     | ≥            |
| USZN ≥ Unsat. zone 4, thickness (m)                 | ≥ 1.360E+02 | ≥ 0.000E+00 | ≥ --- | ≥ H(4)       |
| USZN ≥ Unsat. zone 4, soil density (g/cm**3)        | ≥ 1.610E+00 | ≥ 1.500E+00 | ≥ --- | ≥ DENSUZ(4)  |
| USZN ≥ Unsat. zone 4, total porosity                | ≥ 2.100E-01 | ≥ 4.000E-01 | ≥ --- | ≥ TPUZ(4)    |
| USZN ≥ Unsat. zone 4, effective porosity            | ≥ 2.100E-01 | ≥ 2.000E-01 | ≥ --- | ≥ EPUZ(4)    |
| USZN ≥ Unsat. zone 4, field capacity                | ≥ 2.000E-02 | ≥ 3.000E-01 | ≥ --- | ≥ FCUZ(4)    |
| USZN ≥ Unsat. zone 4, hydraulic conductivity (m/yr) | ≥ 1.270E+01 | ≥ 1.000E+01 | ≥ --- | ≥ HCUZ(4)    |
| USZN ≥ Unsat. zone 4, soil-specific b parameter     | ≥ 9.000E-01 | ≥ 5.300E+00 | ≥ --- | ≥ BUZ(4)     |
| USZN ≥ Unsat. zone 4, longitudinal dispersivity (m) | ≥ 1.000E+00 | ≥ 1.000E-01 | ≥ --- | ≥ ALPHALU(4) |

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|           |           |   |       |   |         |        |                 |
|-----------|-----------|---|-------|---|---------|--------|-----------------|
| 0         | ≥         | ≥ | User  | ≥ | ≥       | RESRAD | ≥               |
| Parameter |           |   |       |   |         |        |                 |
| Menu ≥    | Parameter | ≥ | Input | ≥ | Default | ≥      | computed ≥ Name |

ffffff~ffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff  
 ffffff

|                                                             |             |             |       |              |
|-------------------------------------------------------------|-------------|-------------|-------|--------------|
| SZNE ≥ Well pump intake depth (m below water table)         | ≥ 3.780E+02 | ≥ 1.000E+01 | ≥ --- | ≥ DWIBWT     |
| SZNE ≥ Depth of aquifer contributing to surface water body  | ≥ 1.000E+01 | ≥ 1.000E+01 | ≥ --- | ≥ DPTHAQSW   |
| SZNE ≥ Thickness of saturated zone (m)                      | ≥ 9.360E+02 | ≥ 1.000E+02 | ≥ --- | ≥ DPTHAQ     |
| SZNE ≥ Density of saturated zone (g/cm**3)                  | ≥ 1.610E+00 | ≥ 1.500E+00 | ≥ --- | ≥ DENSAQ     |
| SZNE ≥ Saturated zone total porosity                        | ≥ 1.000E-01 | ≥ 4.000E-01 | ≥ --- | ≥ TPSZ       |
| SZNE ≥ Saturated zone effective porosity                    | ≥ 1.000E-01 | ≥ 2.000E-01 | ≥ --- | ≥ EPSZ       |
| SZNE ≥ Saturated zone hydraulic conductivity (m/yr)         | ≥ 8.400E+02 | ≥ 1.000E+02 | ≥ --- | ≥ HCSZ       |
| SZNE ≥ Saturated zone hydraulic gradient to well            | ≥ 1.400E-02 | ≥ 2.000E-02 | ≥ --- | ≥ HGW        |
| SZNE ≥ Satur. zone hydraulic gradient to surface water body | ≥ 2.000E-02 | ≥ 2.000E-02 | ≥ --- | ≥ HGSW       |
| SZNE ≥ longitudinal dispersivity to well (m)                | ≥ 1.000E+01 | ≥ 3.000E+00 | ≥ --- | ≥ ALPHALOW   |
| SZNE ≥ longitudinal dispersivity to SWB (m)                 | ≥ 1.000E+01 | ≥ 1.000E+01 | ≥ --- | ≥ ALPHALOSW  |
| SZNE ≥ lateral (horizontal) dispersivity to well (m)        | ≥ 1.000E+00 | ≥ 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  | ≥ 2.000E-01 | ≥ --- | ≥ RIAQW      |
| SZNE ≥ Irrigation rate over aquifer to SWB (m/yr)           | ≥ not used  | ≥ 2.000E-01 | ≥ --- | ≥ RIAQSW     |
| SZNE ≥ Evapotranspiration coefficient over aquifer to well  | ≥ not used  | ≥ 5.000E-01 | ≥ --- | ≥ EVAPTRAQW  |
| SZNE ≥ Evapotranspiration coefficient over aquifer to SWB   | ≥ not used  | ≥ 5.000E-01 | ≥ --- | ≥ EVAPTRAQSW |
| SZNE ≥ Runoff coefficient over aquifer to well              | ≥ not used  | ≥ 2.000E-01 | ≥ --- | ≥ RUNOFFAQW  |
| SZNE ≥ Runoff coefficient over aquifer to SWB               | ≥ not used  | ≥ 2.000E-01 | ≥ --- | ≥ RUNOFFAQSW |
| SZNE ≥ Concentration of mobile colloids in the aquifer      | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ CCOL       |
| SZNE ≥ Water - Soil Distribution coefficient of colloids    | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ K1Col      |
| SZNE ≥ Water - Mobile Colloids Distribution coefficient     | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ K3Col      |
| ≥                                                           | ≥           | ≥           | ≥     | ≥            |
| WTRU ≥ Drinking water intake (L/yr)                         | ≥ 5.100E+02 | ≥ 5.100E+02 | ≥ --- | ≥ DWI        |
| WTRU ≥ Fraction of drinking water from surface water        | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ FSWD       |
| WTRU ≥ Fraction of drinking water from well water           | ≥ 1.000E+00 | ≥ 1.000E+00 | ≥ --- | ≥ FWWD       |
| WTRU ≥ Fraction of household water from surface water       | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ FSWHH      |
| WTRU ≥ Fraction of household water from well water          | ≥ 1.000E+00 | ≥ 1.000E+00 | ≥ --- | ≥ FWWHH      |
| WTRU ≥ Livestock water intake for meat 1 (L/day)            | ≥ not used  | ≥ 5.000E+01 | ≥ --- | ≥ LWI(1)     |

|                                                          |             |             |       |             |
|----------------------------------------------------------|-------------|-------------|-------|-------------|
| WTRU ≥ Fraction of livestock water 1 from surface water  | ≥ not used  | ≥ 0.000E+00 | ≥ --- | ≥ FSWLV(1)  |
| WTRU ≥ Fraction of livestock water 1 from well water     | ≥ not used  | ≥ 1.000E+00 | ≥ --- | ≥ FWLV(1)   |
| WTRU ≥ Livestock water intake for milk (L/day)           | ≥ not used  | ≥ 1.600E+02 | ≥ --- | ≥ LWI(2)    |
| WTRU ≥ Fraction of dairy cow water from surface water    | ≥ not used  | ≥ 0.000E+00 | ≥ --- | ≥ FSWLV(2)  |
| WTRU ≥ Fraction of dairy cow water from well water       | ≥ not used  | ≥ 1.000E+00 | ≥ --- | ≥ FWLV(2)   |
| WTRU ≥ Irrigation rate in Agricultural Area 1 (m/yr)     | ≥ 0.000E+00 | ≥ 2.000E-01 | ≥ --- | ≥ RIRRIG(1) |
| WTRU ≥ Fraction of irrigation water 1 from surface water | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ FSWIR(1)  |
| WTRU ≥ Fraction of irrigation water 1 from well water    | ≥ 1.000E+00 | ≥ 1.000E+00 | ≥ --- | ≥ FWIR(1)   |
| WTRU ≥ Irrigation rate in Agricultural Area 2 (m/yr)     | ≥ 0.000E+00 | ≥ 2.000E-01 | ≥ --- | ≥ RIRRIG(2) |
| WTRU ≥ Fraction of irrigation water 2 from surface water | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ FSWIR(2)  |
| WTRU ≥ Fraction of irrigation water 2 from well water    | ≥ 1.000E+00 | ≥ 1.000E+00 | ≥ --- | ≥ FWIR(2)   |
| WTRU ≥ Irrigation rate in Agricultural Area 3 (m/yr)     | ≥ 0.000E+00 | ≥ 2.000E-01 | ≥ --- | ≥ RIRRIG(3) |
| WTRU ≥ Fraction of irrigation water 3 from surface water | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ FSWIR(3)  |
| WTRU ≥ Fraction of irrigation water 3 from well water    | ≥ 1.000E+00 | ≥ 1.000E+00 | ≥ --- | ≥ FWIR(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)  |

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## Site-Specific Parameter Summary (continued)

| 0         | ≥                                                      | ≥ User      | ≥           | ≥ RESRAD   | ≥            |
|-----------|--------------------------------------------------------|-------------|-------------|------------|--------------|
| Parameter |                                                        |             |             |            |              |
| Menu ≥    | Parameter                                              | ≥ Input     | ≥ Default   | ≥ computed | ≥ Name       |
| fffff~    | WTRU ≥ Fraction of irrigation water 4 from well water  | ≥ 1.000E+00 | ≥ 1.000E+00 | ≥ ---      | ≥ FWIR(4)    |
| fffff     | WTRU ≥ Irrigation rate in Offsite dwelling site (m/yr) | ≥ 0.000E+00 | ≥ 2.000E-01 | ≥ ---      | ≥            |
| fffff     | RIRRIGDWELL                                            |             |             |            |              |
|           | WTRU ≥ Fraction of irrigation water from surface water | ≥ 0.000E+00 | ≥ 0.000E+00 | ≥ ---      | ≥ FSWIRDWELL |
|           | WTRU ≥ Fraction of irrigation water from well water    | ≥ 1.000E+00 | ≥ 1.000E+00 | ≥ ---      | ≥ FWIRDWELL  |

|                                                            |             |             |       |             |
|------------------------------------------------------------|-------------|-------------|-------|-------------|
| WTRU ≥ Well pumping rate (m**3/yr)                         | ≥ 1.000E+05 | ≥ 5.100E+03 | ≥ --- | ≥ UW        |
| ≥                                                          | ≥           | ≥           | ≥     | ≥           |
| SWBY ≥ Sediment delivery ratio                             | ≥ 1.000E+00 | ≥ 1.000E+00 | ≥ --- | ≥ SDR       |
| SWBY ≥ Volume of surface water body                        | ≥ 1.500E+05 | ≥ 1.500E+05 | ≥ --- | ≥ VLAKE     |
| SWBY ≥ Mean residence time of water in surface water body  | ≥ 1.000E+00 | ≥ 1.000E+00 | ≥ --- | ≥ TLAKE     |
| SWBY ≥ Surface area of water in surface water body         | ≥ 3.172E+03 | ≥ 9.000E+04 | ≥ --- | ≥ ALAKE     |
| ≥                                                          | ≥           | ≥           | ≥     | ≥           |
| INGE ≥ Fish consumption (kg/yr)                            | ≥ not used  | ≥ 5.400E+00 | ≥ --- | ≥ DFI(1)    |
| INGE ≥ Fraction of Fish from affected area                 | ≥ not used  | ≥ 5.000E-01 | ≥ --- | ≥ FFISH(1)  |
| INGE ≥ Other Aquatic food consumption (kg/yr)              | ≥ not used  | ≥ 9.000E-01 | ≥ --- | ≥ DFI(2)    |
| INGE ≥ Fraction of Aquatic food from affected area         | ≥ not used  | ≥ 5.000E-01 | ≥ --- | ≥ FFISH(2)  |
| INGE ≥ Non-Leafy vegetables consumption (kg/yr)            | ≥ not used  | ≥ 1.600E+02 | ≥ --- | ≥ DVI(1)    |
| INGE ≥ Fraction of vegetable 1 from affected area          | ≥ not used  | ≥ 5.000E-01 | ≥ --- | ≥ FVEG(1)   |
| INGE ≥ Leafy vegetable consumption (kg/yr)                 | ≥ not used  | ≥ 1.400E+01 | ≥ --- | ≥ DVI(2)    |
| INGE ≥ Fraction of vegetable 2 from affected area          | ≥ not used  | ≥ 5.000E-01 | ≥ --- | ≥ FVEG(2)   |
| INGE ≥ Meat 1 consumption (kg/yr)                          | ≥ not used  | ≥ 6.300E+01 | ≥ --- | ≥ DMI(1)    |
| INGE ≥ Fraction of meat 1 from affected area               | ≥ not used  | ≥ 1.000E+00 | ≥ --- | ≥ FMEMI(1)  |
| INGE ≥ Milk consumption (L/yr)                             | ≥ not used  | ≥ 9.200E+01 | ≥ --- | ≥ DMI(2)    |
| INGE ≥ Fraction of milk from affected area                 | ≥ not used  | ≥ 1.000E+00 | ≥ --- | ≥ FMEMI(2)  |
| INGE ≥ Soil ingestion rate (g/yr)                          | ≥ 7.300E+01 | ≥ 3.650E+01 | ≥ --- | ≥ SOIL      |
| ≥                                                          | ≥           | ≥           | ≥     | ≥           |
| VEGE ≥ Wet weight crop yield for Non-Leafy (kg/m**2)       | ≥ not used  | ≥ 7.000E-01 | ≥ --- | ≥ YIELD(1)  |
| VEGE ≥ Growing Season for Non-Leafy (years)                | ≥ not used  | ≥ 1.700E-01 | ≥ --- | ≥           |
| GROWTIME(1)                                                |             |             |       |             |
| VEGE ≥ Translocation Factor for Non-Leafy                  | ≥ not used  | ≥ 1.000E-01 | ≥ --- | ≥ FOLI_F(1) |
| VEGE ≥ Weathering Removal Constant for Non-Leafy           | ≥ not used  | ≥ 2.000E+01 | ≥ --- | ≥           |
| RWEATHER(1)                                                |             |             |       |             |
| VEGE ≥ Foliar Interception Fraction for dust Non-Leafy     | ≥ not used  | ≥ 2.500E-01 | ≥ --- | ≥           |
| FINTCEPT(1,1)                                              |             |             |       |             |
| VEGE ≥ Foliar Intercept-n Fract-n for irrigation Non-Leafy | ≥ not used  | ≥ 2.500E-01 | ≥ --- | ≥           |
| FINTCEPT(1,2)                                              |             |             |       |             |
| VEGE ≥ Depth of roots for Non-Leafy (m)                    | ≥ not used  | ≥ 1.200E+00 | ≥ --- | ≥ DROOT(1)  |
| VEGE ≥ Wet weight crop yield for Leafy (kg/m**2)           | ≥ not used  | ≥ 1.500E+00 | ≥ --- | ≥ YIELD(2)  |

|                                                          |            |             |       |             |
|----------------------------------------------------------|------------|-------------|-------|-------------|
| VEGE ≥ Growing Season for Leafy (years)                  | ≥ not used | ≥ 2.500E-01 | ≥ --- | ≥           |
| GROWTIME(2)                                              |            |             |       |             |
| VEGE ≥ Translocation Factor for Leafy                    | ≥ not used | ≥ 1.000E+00 | ≥ --- | ≥ FOLI_F(2) |
| VEGE ≥ Weathering Removal Constant for Leafy             | ≥ not used | ≥ 2.000E+01 | ≥ --- | ≥           |
| RWEATHER(2)                                              |            |             |       |             |
| VEGE ≥ Foliar Interception Fraction for dust Leafy       | ≥ not used | ≥ 2.500E-01 | ≥ --- | ≥           |
| FINTCEPT(2,1)                                            |            |             |       |             |
| VEGE ≥ Foliar Intercept-n Fract-n for irrigation Leafy   | ≥ not used | ≥ 2.500E-01 | ≥ --- | ≥           |
| FINTCEPT(2,2)                                            |            |             |       |             |
| VEGE ≥ Depth of roots for Leafy (m)                      | ≥ not used | ≥ 9.000E-01 | ≥ --- | ≥ DROOT(2)  |
| VEGE ≥ Wet weight crop yield for Pasture (kg/m**2)       | ≥ not used | ≥ 1.100E+00 | ≥ --- | ≥ YIELD(3)  |
| VEGE ≥ Growing Season for Pasture (years)                | ≥ not used | ≥ 8.000E-02 | ≥ --- | ≥           |
| GROWTIME(3)                                              |            |             |       |             |
| VEGE ≥ Translocation Factor for Pasture                  | ≥ not used | ≥ 1.000E+00 | ≥ --- | ≥ FOLI_F(3) |
| VEGE ≥ Weathering Removal Constant for Pasture           | ≥ not used | ≥ 2.000E+01 | ≥ --- | ≥           |
| RWEATHER(3)                                              |            |             |       |             |
| VEGE ≥ Foliar Interception Fraction for dust Pasture     | ≥ not used | ≥ 2.500E-01 | ≥ --- | ≥           |
| FINTCEPT(3,1)                                            |            |             |       |             |
| VEGE ≥ Foliar Intercept-n Fract-n for irrigation Pasture | ≥ not used | ≥ 2.500E-01 | ≥ --- | ≥           |
| FINTCEPT(3,2)                                            |            |             |       |             |
| VEGE ≥ Depth of roots for Pasture (m)                    | ≥ not used | ≥ 9.000E-01 | ≥ --- | ≥ DROOT(3)  |
| VEGE ≥ Wet weight crop yield for Grain (kg/m**2)         | ≥ not used | ≥ 7.000E-01 | ≥ --- | ≥ YIELD(4)  |

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|           |   |           |   |       |   |         |   |          |   |      |
|-----------|---|-----------|---|-------|---|---------|---|----------|---|------|
| 0         | ≥ |           | ≥ | User  | ≥ |         | ≥ | RESRAD   | ≥ |      |
| Parameter |   |           |   |       |   |         |   |          |   |      |
| Menu      | ≥ | Parameter | ≥ | Input | ≥ | Default | ≥ | computed | ≥ | Name |

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fffff

|                                                            |              |             |               |             |
|------------------------------------------------------------|--------------|-------------|---------------|-------------|
| VEGE ≥ Growing Season for Grain (years)                    | ≥ not used   | ≥ 1.700E-01 | ≥ ---         | ≥           |
| GROWTIME(4)                                                |              |             |               |             |
| VEGE ≥ Translocation Factor for Grain                      | ≥ not used   | ≥ 1.000E-01 | ≥ ---         | ≥ FOLI_F(4) |
| VEGE ≥ Weathering Removal Constant for Grain               | ≥ not used   | ≥ 2.000E+01 | ≥ ---         | ≥           |
| RWEATHER(4)                                                |              |             |               |             |
| VEGE ≥ Foliar Interception Fraction for dust Grain         | ≥ not used   | ≥ 2.500E-01 | ≥ ---         | ≥           |
| FINTCEPT(4,1)                                              |              |             |               |             |
| VEGE ≥ Foliar Intercept-n Fract-n for irrigation Grain     | ≥ not used   | ≥ 2.500E-01 | ≥ ---         | ≥           |
| FINTCEPT(4,2)                                              |              |             |               |             |
| VEGE ≥ Depth of roots for Grain (m)                        | ≥ not used   | ≥ 1.200E+00 | ≥ ---         | ≥ DROOT(4)  |
| ≥                                                          | ≥            | ≥           | ≥             | ≥           |
| LINT ≥ Feed 1 intake by livestock 1 (kg/day)               | ≥ not used   | ≥ 1.400E+01 | ≥ ---         | ≥ LFI(1,1)  |
| LINT ≥ Soil intake with feed 1 by livestock 1 (kg/day)     | ≥ not used   | ≥ 1.000E-01 | ≥ ---         | ≥ LSI(1,1)  |
| LINT ≥ Feed 1 intake by dairy cow (kg/day)                 | ≥ not used   | ≥ 4.400E+01 | ≥ ---         | ≥ LFI(2,1)  |
| LINT ≥ Soil intake with feed 1 by dairy cow (kg/day)       | ≥ not used   | ≥ 4.000E-01 | ≥ ---         | ≥ LSI(2,1)  |
| LINT ≥ Feed 2 intake by livestock 1 (kg/day)               | ≥ not used   | ≥ 5.400E+01 | ≥ ---         | ≥ LFI(1,2)  |
| LINT ≥ Soil intake with feed 2 by livestock 1 (kg/day)     | ≥ not used   | ≥ 4.000E-01 | ≥ ---         | ≥ LSI(1,2)  |
| LINT ≥ Feed 2 intake by dairy cow (kg/day)                 | ≥ not used   | ≥ 1.100E+01 | ≥ ---         | ≥ LFI(2,2)  |
| LINT ≥ Soil intake with feed 2 by dairy cow (kg/day)       | ≥ not used   | ≥ 1.000E-01 | ≥ ---         | ≥ LSI(2,2)  |
| ≥                                                          | ≥            | ≥           | ≥             | ≥           |
| INHE ≥ Inhalation rate (m**3/yr)                           | ≥ 7.780E+03  | ≥ 8.400E+03 | ≥ ---         | ≥ INHALR    |
| INHE ≥ Mass loading above primary contamination (g/m**3)   | ≥ 1.500E-07  | ≥ 1.000E-04 | ≥ ---         | ≥ MLFD      |
| INHE ≥ Mass loading for inhalation (g/m**3)                | ≥ 1.500E-07  | ≥ 1.000E-04 | ≥ ---         | ≥ MLINH     |
| INHE ≥ Indoor dust filtration factor, inhalation           | ≥ 1.000E+00  | ≥ 4.000E-01 | ≥ ---         | ≥ SHF3      |
| INHE ≥ Shielding factor, external gamma                    | ≥ 7.000E-01  | ≥ 7.000E-01 | ≥ ---         | ≥ SHF1      |
| INHE ≥ Shape factor flag, external gamma                   | ≥ -1.000E+00 | ≥ 1.000E+00 | ≥ noncircular | ≥ FS        |
| SEXT ≥ Onsite shape factor array (used if non-circular):   | ≥            | ≥           | ≥             | ≥           |
| SEXT ≥ Radii of shape factor array (used if non-circular): | ≥            | ≥           | ≥             | ≥           |
| SEXT ≥ Outer annular radius (m), ring 1:                   | ≥ 9.000E+00  | ≥ 6.000E+00 | ≥ ---         | ≥           |
| RAD_SHAPE( 1)                                              |              |             |               |             |
| SEXT ≥ Outer annular radius (m), ring 2:                   | ≥ 1.800E+01  | ≥ 1.200E+01 | ≥ ---         | ≥           |
| RAD_SHAPE( 2)                                              |              |             |               |             |

|                                                            |                                 |
|------------------------------------------------------------|---------------------------------|
| SEXT ≥ Outer annular radius (m), ring 3:<br>RAD_SHAPE( 3)  | ≥ 2.700E+01 ≥ 1.800E+01 ≥ --- ≥ |
| SEXT ≥ Outer annular radius (m), ring 4:<br>RAD_SHAPE( 4)  | ≥ 3.600E+01 ≥ 2.400E+01 ≥ --- ≥ |
| SEXT ≥ Outer annular radius (m), ring 5:<br>RAD_SHAPE( 5)  | ≥ 4.500E+01 ≥ 3.000E+01 ≥ --- ≥ |
| SEXT ≥ Outer annular radius (m), ring 6:<br>RAD_SHAPE( 6)  | ≥ 5.400E+01 ≥ 3.600E+01 ≥ --- ≥ |
| SEXT ≥ Outer annular radius (m), ring 7:<br>RAD_SHAPE( 7)  | ≥ 6.300E+01 ≥ 4.200E+01 ≥ --- ≥ |
| SEXT ≥ Outer annular radius (m), ring 8:<br>RAD_SHAPE( 8)  | ≥ 7.200E+01 ≥ 4.800E+01 ≥ --- ≥ |
| SEXT ≥ Outer annular radius (m), ring 9:<br>RAD_SHAPE( 9)  | ≥ 8.100E+01 ≥ 5.400E+01 ≥ --- ≥ |
| SEXT ≥ Outer annular radius (m), ring 10:<br>RAD_SHAPE(10) | ≥ 9.000E+01 ≥ 6.000E+01 ≥ --- ≥ |
| SEXT ≥ Outer annular radius (m), ring 11:<br>RAD_SHAPE(11) | ≥ 9.900E+01 ≥ 6.600E+01 ≥ --- ≥ |
| SEXT ≥ Outer annular radius (m), ring 12:<br>RAD_SHAPE(12) | ≥ 1.080E+02 ≥ 7.200E+01 ≥ --- ≥ |

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|                                                                                                                                             |                                                                                                                 |
|---------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| 0                    ≥                                                                                                                      | ≥ User                    ≥                    ≥ RESRAD                    ≥                                    |
| Parameter                                                                                                                                   |                                                                                                                 |
| Menu ≥                    Parameter                                                                                                         | ≥ Input                    ≥ Default                    ≥ computed                    ≥                    Name |
| fffff~ffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff<br>fffff |                                                                                                                 |
| 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                                              | ≥ 9.600E-01 | ≥ 1.000E+00 | ≥ --- | ≥ FRACA( 7) |
| SEXT ≥ Ring 8                                              | ≥ 7.000E-01 | ≥ 1.000E+00 | ≥ --- | ≥ FRACA( 8) |
| SEXT ≥ Ring 9                                              | ≥ 5.700E-01 | ≥ 7.700E-01 | ≥ --- | ≥ FRACA( 9) |
| SEXT ≥ Ring 10                                             | ≥ 4.800E-01 | ≥ 3.700E-01 | ≥ --- | ≥ FRACA(10) |
| SEXT ≥ Ring 11                                             | ≥ 2.000E-01 | ≥ 1.700E-01 | ≥ --- | ≥ FRACA(11) |
| SEXT ≥ Ring 12                                             | ≥ 4.300E-02 | ≥ 3.100E-02 | ≥ --- | ≥ FRACA(12) |
| SEXT ≥ Nearsite shape factor array (used if non-circular): | ≥           | ≥           | ≥     | ≥           |
| SEXT ≥ Radii of shape factor array (used if non-circular): | ≥           | ≥           | ≥     | ≥           |
| SEXT ≥ Outer annular radius (m), ring 13:<br>RAD_SHAPE(13) | ≥ 9.000E+00 | ≥ 1.325E+01 | ≥ --- | ≥           |
| SEXT ≥ Outer annular radius (m), ring 14:<br>RAD_SHAPE(14) | ≥ 1.800E+01 | ≥ 2.650E+01 | ≥ --- | ≥           |
| SEXT ≥ Outer annular radius (m), ring 15:<br>RAD_SHAPE(15) | ≥ 2.700E+01 | ≥ 3.975E+01 | ≥ --- | ≥           |
| SEXT ≥ Outer annular radius (m), ring 16:<br>RAD_SHAPE(16) | ≥ 3.600E+01 | ≥ 5.300E+01 | ≥ --- | ≥           |
| SEXT ≥ Outer annular radius (m), ring 17:<br>RAD_SHAPE(17) | ≥ 4.500E+01 | ≥ 6.625E+01 | ≥ --- | ≥           |
| SEXT ≥ Outer annular radius (m), ring 18:<br>RAD_SHAPE(18) | ≥ 5.400E+01 | ≥ 7.950E+01 | ≥ --- | ≥           |
| SEXT ≥ Outer annular radius (m), ring 19:<br>RAD_SHAPE(19) | ≥ 6.300E+01 | ≥ 9.275E+01 | ≥ --- | ≥           |
| SEXT ≥ Outer annular radius (m), ring 20:<br>RAD_SHAPE(20) | ≥ 7.200E+01 | ≥ 1.060E+02 | ≥ --- | ≥           |
| SEXT ≥ Outer annular radius (m), ring 21:<br>RAD_SHAPE(21) | ≥ 8.100E+01 | ≥ 1.193E+02 | ≥ --- | ≥           |
| SEXT ≥ Outer annular radius (m), ring 22:                  | ≥ 9.000E+01 | ≥ 1.325E+02 | ≥ --- | ≥           |

## RAD\_SHAPE(22)

|                                           |             |             |       |   |
|-------------------------------------------|-------------|-------------|-------|---|
| SEXT ≥ Outer annular radius (m), ring 23: | ≥ 9.900E+01 | ≥ 1.458E+02 | ≥ --- | ≥ |
|-------------------------------------------|-------------|-------------|-------|---|

## RAD\_SHAPE(23)

|                                           |             |             |       |   |
|-------------------------------------------|-------------|-------------|-------|---|
| SEXT ≥ Outer annular radius (m), ring 24: | ≥ 1.080E+02 | ≥ 1.590E+02 | ≥ --- | ≥ |
|-------------------------------------------|-------------|-------------|-------|---|

## RAD\_SHAPE(24)

|                                                |   |   |   |   |
|------------------------------------------------|---|---|---|---|
| SEXT ≥ Fractions of annular areas within AREA: | ≥ | ≥ | ≥ | ≥ |
|------------------------------------------------|---|---|---|---|

|                |             |             |       |             |
|----------------|-------------|-------------|-------|-------------|
| SEXT ≥ Ring 13 | ≥ 1.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ FRACA(13) |
|----------------|-------------|-------------|-------|-------------|

|                |             |             |       |             |
|----------------|-------------|-------------|-------|-------------|
| SEXT ≥ Ring 14 | ≥ 1.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ FRACA(14) |
|----------------|-------------|-------------|-------|-------------|

|                |             |             |       |             |
|----------------|-------------|-------------|-------|-------------|
| SEXT ≥ Ring 15 | ≥ 1.000E+00 | ≥ 0.000E+00 | ≥ --- | ≥ FRACA(15) |
|----------------|-------------|-------------|-------|-------------|

|                |             |             |       |             |
|----------------|-------------|-------------|-------|-------------|
| SEXT ≥ Ring 16 | ≥ 1.000E+00 | ≥ 2.400E-02 | ≥ --- | ≥ FRACA(16) |
|----------------|-------------|-------------|-------|-------------|

|                |             |             |       |             |
|----------------|-------------|-------------|-------|-------------|
| SEXT ≥ Ring 17 | ≥ 1.000E+00 | ≥ 1.900E-01 | ≥ --- | ≥ FRACA(17) |
|----------------|-------------|-------------|-------|-------------|

|                |             |             |       |             |
|----------------|-------------|-------------|-------|-------------|
| SEXT ≥ Ring 18 | ≥ 1.000E+00 | ≥ 2.400E-01 | ≥ --- | ≥ FRACA(18) |
|----------------|-------------|-------------|-------|-------------|

|                |             |             |       |             |
|----------------|-------------|-------------|-------|-------------|
| SEXT ≥ Ring 19 | ≥ 9.600E-01 | ≥ 2.000E-01 | ≥ --- | ≥ FRACA(19) |
|----------------|-------------|-------------|-------|-------------|

|                |             |             |       |             |
|----------------|-------------|-------------|-------|-------------|
| SEXT ≥ Ring 20 | ≥ 7.000E-01 | ≥ 1.700E-01 | ≥ --- | ≥ FRACA(20) |
|----------------|-------------|-------------|-------|-------------|

|                |             |             |       |             |
|----------------|-------------|-------------|-------|-------------|
| SEXT ≥ Ring 21 | ≥ 5.700E-01 | ≥ 1.500E-01 | ≥ --- | ≥ FRACA(21) |
|----------------|-------------|-------------|-------|-------------|

|                |             |             |       |             |
|----------------|-------------|-------------|-------|-------------|
| SEXT ≥ Ring 22 | ≥ 4.800E-01 | ≥ 1.300E-01 | ≥ --- | ≥ FRACA(22) |
|----------------|-------------|-------------|-------|-------------|

|                |             |             |       |             |
|----------------|-------------|-------------|-------|-------------|
| SEXT ≥ Ring 23 | ≥ 2.000E-01 | ≥ 1.200E-01 | ≥ --- | ≥ FRACA(23) |
|----------------|-------------|-------------|-------|-------------|

|                |             |             |       |             |
|----------------|-------------|-------------|-------|-------------|
| SEXT ≥ Ring 24 | ≥ 4.300E-02 | ≥ 5.200E-02 | ≥ --- | ≥ FRACA(24) |
|----------------|-------------|-------------|-------|-------------|

|   |   |   |   |   |
|---|---|---|---|---|
| ≥ | ≥ | ≥ | ≥ | ≥ |
|---|---|---|---|---|

|                                                            |             |             |       |        |
|------------------------------------------------------------|-------------|-------------|-------|--------|
| 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 | ≥ 2.053E-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 | ≥ 0.000E+00 | ≥ 1.000E-01 | ≥ --- | ≥ |
|--------------------------------------------------------|-------------|-------------|-------|---|

## OCCUPANCY(1)

|                                                        |             |             |       |   |
|--------------------------------------------------------|-------------|-------------|-------|---|
| OCCU ≥ Fraction of time spent outdoors in agri. area 2 | ≥ 0.000E+00 | ≥ 1.000E-01 | ≥ --- | ≥ |
|--------------------------------------------------------|-------------|-------------|-------|---|

## OCCUPANCY(2)

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Site-Specific Parameter Summary (continued)

| 0                                                                                                                                          | ≥ | ≥                                             | User | ≥     | ≥         | RESRAD  | ≥                          |
|--------------------------------------------------------------------------------------------------------------------------------------------|---|-----------------------------------------------|------|-------|-----------|---------|----------------------------|
| Parameter                                                                                                                                  |   |                                               |      |       |           |         |                            |
| Menu                                                                                                                                       | ≥ | Parameter                                     | ≥    | Input | ≥         | Default | ≥ computed ≥ Name          |
| fffff~ffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff~ffffffffffff |   |                                               |      |       |           |         |                            |
| fffff                                                                                                                                      |   |                                               |      |       |           |         |                            |
| 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 foundation material                        |      | ≥     | not used  | ≥       | 3.000E-07 ≥ --- ≥ DIFFL    |
| RADN                                                                                                                                       | ≥ | in contaminated zone soil                     |      | ≥     | not used  | ≥       | 2.000E-06 ≥ --- ≥ DIFCZ    |
| 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)        |      | ≥     | 2.000E+00 | ≥       | 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                                                                                                                                        | ≥ | C-14 evasion flux rate from soil (1/sec)      |      | ≥     | not used  | ≥       | 7.000E-07 ≥ --- ≥ C14EVS   |
| C14                                                                                                                                        | ≥ | C-12 evasion flux rate from soil (1/sec)      |      | ≥     | not used  | ≥       | 1.000E-10 ≥ --- ≥ C12EVS   |
| 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 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)                        | ≥ 5.550E+00 | ≥ 8.000E+00 | ≥ | --- | ≥ HUMID  |
| H3              | ≥ Mass fraction of water in meat 1 (g/g)           | ≥ not used  | ≥ 6.000E-01 | ≥ | --- | ≥        |
| H20MEAT_MILK(1) |                                                    |             |             |   |     |          |
| H3              | ≥ Mass fraction of water in milk (g/g)             | ≥ not used  | ≥ 8.800E-01 | ≥ | --- | ≥        |
| H20MEAT_MILK(2) |                                                    |             |             |   |     |          |
| H3              | ≥ Mass fraction of water in vegetable 1 (g/g)      | ≥ not used  | ≥ 8.000E-01 | ≥ | --- | ≥        |
| H20PLANT(1)     |                                                    |             |             |   |     |          |
| H3              | ≥ Mass fraction of water in vegetable 2 (g/g)      | ≥ not used  | ≥ 8.000E-01 | ≥ | --- | ≥        |
| H20PLANT(2)     |                                                    |             |             |   |     |          |
| H3              | ≥ Mass fraction of water in livestock feed 1 (g/g) | ≥ not used  | ≥ 8.000E-01 | ≥ | --- | ≥        |
| H20PLANT(3)     |                                                    |             |             |   |     |          |
| H3              | ≥ Mass fraction of water in livestock feed 2 (g/g) | ≥ not used  | ≥ 8.000E-01 | ≥ | --- | ≥        |
| H20PLANT(4)     |                                                    |             |             |   |     |          |

[illegible]

Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.ROF

Summary of Pathway Selections

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

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Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.ROF

| Contaminated Zone Dimensions | Initial Soil Concentrations, pCi/g |           |
|------------------------------|------------------------------------|-----------|
| Area: 21000.00 square meters | Ac-227                             | 2.340E+00 |
| Thickness: 7.26 meters       | Al-26                              | 7.640E+02 |
| Cover Depth: 1.00 meters     | Am-241                             | 1.410E+03 |
|                              | Cf-249                             | 3.240E-03 |
|                              | Cf-251                             | 1.340E-02 |
|                              | Cf-252                             | 1.510E-07 |

|         |           |
|---------|-----------|
| Cl-36   | 2.790E-01 |
| Co-60   | 4.860E+00 |
| Cs-134  | 2.620E-06 |
| Cs-137  | 3.050E+03 |
| Eu-154  | 9.920E-03 |
| Eu-155  | 8.720E-03 |
| H-3     | 3.780E+04 |
| Ho-166m | 5.020E-01 |
| Na-22   | 1.120E-03 |
| Np-237  | 1.620E-03 |
| Pb-210  | 2.850E+00 |
| Pm-147  | 1.370E-08 |
| Pu-238  | 1.470E+04 |
| Pu-239  | 9.250E+03 |
| Pu-240  | 2.380E+03 |
| Pu-241  | 3.820E+03 |
| Pu-242  | 2.520E-01 |
| Ra-226  | 3.850E+00 |
| Ra-228  | 4.190E+00 |
| Ru-106  | 7.770E-09 |
| Sb-125  | 5.400E-04 |
| Sm-151  | 2.110E-02 |
| Sn-121m | 5.020E-01 |
| Sn-126  | 1.220E-01 |
| Sr-90   | 4.300E+02 |
| Th-228  | 8.930E-03 |
| Th-230  | 8.370E+01 |
| Th-232  | 9.880E-03 |
| U-233   | 2.790E+00 |
| U-234   | 4.260E+01 |
| U-235   | 2.180E+02 |
| U-236   | 4.070E-01 |
| U-238   | 5.350E+01 |



0

Total Dose TDOSE(t), mrem/yr  
Basic Radiation Dose Limit = 1.500E+01 mrem/yr  
Total Mixture Sum M(t) = Fraction of Basic Dose Limit Received at Time (t)  
ffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffffff  
t (years): 0.000E+00 1.000E+00 6.000E+00 1.200E+01 3.000E+01 1.000E+02 3.000E+02 1.000E+03  
TDOSE(t): 7.266E-02 7.277E-02 7.251E-02 7.192E-02 7.094E-02 7.032E-02 7.213E-02 7.990E-02  
M(t): 4.844E-03 4.851E-03 4.834E-03 4.795E-03 4.730E-03 4.688E-03 4.809E-03 5.327E-03  
0Maximum TDOSE(t): 8.024E-02 mrem/yr at t = 1030 years  
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Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.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 |        |                 |        |                 |        |                 |        |                 |        |                 |        |                 |        |  |
| 0                                                                                   | From releases to ground water and to surface water          |        |                 |        |                 |        |                 |        |                 |        |                 |        |                 |        |  |
| 0                                                                                   | Ground                                                      |        | Fish            |        | Radon           |        | Plant           |        | Meat            |        | Milk            |        | Soil            |        |  |
| Water                                                                               |                                                             |        |                 |        |                 |        |                 |        |                 |        |                 |        |                 |        |  |
| Radio-                                                                              | fffffffffffffff                                             |        | fffffffffffffff |        | fffffffffffffff |        | fffffffffffffff |        | fffffffffffffff |        | fffffffffffffff |        | fffffffffffffff |        |  |
| fffffffffffffff                                                                     |                                                             |        |                 |        |                 |        |                 |        |                 |        |                 |        |                 |        |  |
| Nuclide                                                                             | Dose                                                        | %      | Dose            | %      | Dose            | %      | Dose            | %      | Dose            | %      | Dose            | %      | Dose            | %      |  |
| Dose %                                                                              | ffffffff                                                    | ffffff | fff             | ffffff | fff             | ffffff | fff             | ffffff | fff             | ffffff | fff             | ffffff | fff             | ffffff |  |
| ffffffffff                                                                          | ffffffffff                                                  | fff    | ffffffffff      | fff    | ffffffffff      | fff    | ffffffffff      | fff    | ffffffffff      | fff    | ffffffffff      | fff    | ffffffffff      | fff    |  |
| ffffffffff                                                                          | fff                                                         |        |                 |        |                 |        |                 |        |                 |        |                 |        |                 |        |  |
| Ac-227                                                                              | 0.00E+00                                                    | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      |  |
| 0.00E+00                                                                            | 0                                                           |        |                 |        |                 |        |                 |        |                 |        |                 |        |                 |        |  |
| Al-26                                                                               | 0.00E+00                                                    | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      |  |
| 0.00E+00                                                                            | 0                                                           |        |                 |        |                 |        |                 |        |                 |        |                 |        |                 |        |  |
| Am-241                                                                              | 0.00E+00                                                    | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      |  |
| 0.00E+00                                                                            | 0                                                           |        |                 |        |                 |        |                 |        |                 |        |                 |        |                 |        |  |
| Cf-249                                                                              | 0.00E+00                                                    | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      | 0.00E+00        | 0      |  |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-251   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-252   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cl-36    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Co-60    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-134   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-137   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-154   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-155   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| H-3      | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ho-166m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Na-22    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Np-237   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pb-210   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pm-147   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-238   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-239   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Pu-240   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-241   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-242   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-226   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ru-106   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sb-125   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-121m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-126   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sr-90    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-230   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-232   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-233    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-234    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-235    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

```

0.00E+00  0
U-236  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
0.00E+00  0
U-238  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
0.00E+00  0
00000000 00000000 000 00000000 000 00000000 000 00000000 000 00000000 000 00000000 000 00000000 000
00000000 000
Total  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
0.00E+00  0

```

1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58 Page 69

Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

# Total Dose Contributions TD0SE(i,p,t) for Individual Radionuclides (i) and Pathways

(p)

in mrem/yr and as a Percentage of Total Dose at t = 0 years

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

0 Ground Inhalation Radon Plant Meat Milk Soil

All Pathways\*

```

Radio-  ffffffffffffffff ffffffffffffffff ffffffffffffffff ffffffffffffffff ffffffffffffffff ffffffffffffffff ffffffffffffffff
ffffffffffffffff

```

```

Nuclide Dose % Dose % Dose % Dose % Dose % Dose % Dose %
Dose %

```

```

ffffff fffffff fff fffffff fff fffffff fff fffffff fff fffffff fff fffffff fff fffffff fff
ffffff fff

```

```

Ac-227  2.59E-07  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
2.59E-07  0

```

```

Al-26  6.87E-02  95  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
6.87E-02  95

```

```

Am-241  2.96E-12  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
2.96E-12  0

```

```

Cf-249  4.06E-10  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0

```

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 4.06E-10 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-251   | 3.55E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.55E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-252   | 1.44E-23 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.44E-23 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cl-36    | 9.94E-13 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 9.94E-13 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Co-60    | 2.54E-04 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.54E-04 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-134   | 8.91E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 8.91E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-137   | 3.28E-03 | 5 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.28E-03 | 5        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-154   | 1.23E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.23E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-155   | 6.40E-16 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 6.40E-16 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| H-3      | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ho-166m  | 2.16E-06 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.16E-06 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Na-22    | 1.31E-08 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.31E-08 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Np-237   | 2.10E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.10E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pb-210   | 6.28E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 6.28E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pm-147   | 1.88E-26 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.88E-26 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-238   | 1.64E-13 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.64E-13 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-239   | 2.78E-09 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.78E-09 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Pu-240   | 1.19E-15 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.19E-15 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-241   | 7.94E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 7.94E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-242   | 1.91E-18 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.91E-18 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-226   | 1.95E-04 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.95E-04 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-228   | 1.84E-04 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.84E-04 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ru-106   | 2.02E-15 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.02E-15 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sb-125   | 2.43E-10 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.43E-10 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-121m  | 5.32E-17 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 5.32E-17 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-126   | 4.37E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 4.37E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sr-90    | 1.27E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.27E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-228   | 1.71E-06 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.71E-06 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-230   | 9.19E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 9.19E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-232   | 2.19E-08 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.19E-08 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-233    | 1.30E-10 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.30E-10 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-234    | 1.59E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.59E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-235    | 1.23E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

|          |          |     |          |     |          |     |          |     |          |     |          |     |          |     |          |
|----------|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|
| 1.23E-07 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |          |
| U-236    | 2.35E-17 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 |
| 2.35E-17 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |          |
| U-238    | 4.35E-06 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 |
| 4.35E-06 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |          |
| 00000000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 |
| 00000000 | 000      |     |          |     |          |     |          |     |          |     |          |     |          |     |          |
| Total    | 7.27E-02 | 100 | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 |
| 7.27E-02 | 100      |     |          |     |          |     |          |     |          |     |          |     |          |     |          |

0\*Sum of dose from all releases and from primary contamination.  
1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58    Page 70  
Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.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                                  |          |        |          |        |          |        |          |        |          |        |          |        |          |        |          |
|                                                                                     | Ground   |        | Fish     |        | Radon    |        | Plant    |        | Meat     |        | Milk     |        | Soil     |        |          |
| Water                                                                               |          |        |          |        |          |        |          |        |          |        |          |        |          |        |          |
| Radio-                                                                              | ffffff   | ffffff | ffffff   | ffffff | ffffff   | ffffff | ffffff   | ffffff | ffffff   | ffffff | ffffff   | ffffff | ffffff   | ffffff | ffffff   |
| ffffff                                                                              |          |        |          |        |          |        |          |        |          |        |          |        |          |        |          |
| Nuclide                                                                             | Dose     | %      | Dose     | %      | Dose     | %      | Dose     | %      | Dose     | %      | Dose     | %      | Dose     | %      |          |
| Dose                                                                                | %        |        |          |        |          |        |          |        |          |        |          |        |          |        |          |
| ffffff                                                                              | ffffff   | fff    | ffffff   | fff    | ffffff   | fff    | ffffff   | fff    | ffffff   | fff    | ffffff   | fff    | ffffff   | fff    | ffffff   |
| ffffff                                                                              | fff      |        |          |        |          |        |          |        |          |        |          |        |          |        |          |
| Ac-227                                                                              | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 |
| 0.00E+00                                                                            | 0        |        |          |        |          |        |          |        |          |        |          |        |          |        |          |
| Al-26                                                                               | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 |
| 0.00E+00                                                                            | 0        |        |          |        |          |        |          |        |          |        |          |        |          |        |          |
| Am-241                                                                              | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 | 0      | 0.00E+00 |
| 0.00E+00                                                                            | 0        |        |          |        |          |        |          |        |          |        |          |        |          |        |          |

|                     |               |   |          |   |          |   |          |   |          |   |          |   |          |   |
|---------------------|---------------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Cf-249<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Cf-251<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Cf-252<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Cl-36<br>0.00E+00   | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Co-60<br>0.00E+00   | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Cs-134<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Cs-137<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Eu-154<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Eu-155<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| H-3<br>0.00E+00     | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Ho-166m<br>0.00E+00 | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Na-22<br>0.00E+00   | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Np-237<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Pb-210<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Pm-147<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Pu-238<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Pu-239              | 0.00E+00      | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |



|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-240   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-241   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-242   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-226   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ru-106   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sb-125   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-121m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-126   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sr-90    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-230   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-232   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| U-233    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| U-234    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |

|          |          |     |          |     |          |     |          |     |          |     |          |     |          |     |
|----------|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| U-235    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-236    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-238    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| 00000000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 |
| 00000000 | 000      |     |          |     |          |     |          |     |          |     |          |     |          |     |
| Total    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |

1RESRAD-OFFSITE, Version 2.6

T' Limit = 30 days

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

## Total Dose Contributions TD0SE(i,p,t) for Individual Radionuclides (i) and Pathways

(p)

in mrem/yr and as a Percentage of Total Dose at t = 1 years

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

0 Ground Inhalation Radon Plant Meat Milk Soil

All Pathways\*

Radio- ffffffff ffffffff ffffffff ffffffff ffffffff ffffffff ffffffff  
ffffffffNuclide Dose % Dose % Dose % Dose % Dose % Dose % Dose %  
Dose %ffffff fffffff fff fffffff fff fffffff fff fffffff fff fffffff fff fffffff fff fffffff fff  
ffffff fffAc-227 2.51E-07 0 0.00E+00 0 0.00E+00 0 0.00E+00 0 0.00E+00 0 0.00E+00 0 0.00E+00 0  
2.51E-07 0Al-26 6.87E-02 94 0.00E+00 0 0.00E+00 0 0.00E+00 0 0.00E+00 0 0.00E+00 0 0.00E+00 0  
6.87E-02 94Am-241 8.87E-12 0 0.00E+00 0 0.00E+00 0 0.00E+00 0 0.00E+00 0 0.00E+00 0 0.00E+00 0  
8.87E-12 0

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Cf-249   | 4.06E-10 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 4.06E-10 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-251   | 3.55E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.55E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-252   | 1.11E-23 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.11E-23 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cl-36    | 9.87E-13 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 9.87E-13 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Co-60    | 2.22E-04 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.22E-04 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-134   | 6.37E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 6.37E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-137   | 3.21E-03 | 4 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.21E-03 | 4        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-154   | 1.14E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.14E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-155   | 5.57E-16 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 5.57E-16 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| H-3      | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ho-166m  | 2.16E-06 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.16E-06 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Na-22    | 1.01E-08 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.01E-08 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Np-237   | 2.10E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.10E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pb-210   | 9.95E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 9.95E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pm-147   | 1.44E-26 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.44E-26 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-238   | 1.68E-13 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.68E-13 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-239   | 2.78E-09 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| 2.78E-09 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-240   | 1.19E-15 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.19E-15 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-241   | 7.59E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 7.59E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-242   | 5.09E-18 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 5.09E-18 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-226   | 1.95E-04 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.95E-04 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-228   | 3.92E-04 | 1 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.92E-04 | 1        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ru-106   | 1.01E-15 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.01E-15 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sb-125   | 1.88E-10 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.88E-10 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-121m  | 5.26E-17 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 5.26E-17 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-126   | 4.38E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 4.38E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sr-90    | 1.24E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.24E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-228   | 1.19E-06 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.19E-06 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-230   | 2.76E-06 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.76E-06 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-232   | 1.07E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.07E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-233    | 3.85E-10 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.85E-10 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-234    | 1.00E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.00E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |

|          |          |     |          |     |          |     |          |     |          |     |          |     |          |     |
|----------|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| U-235    | 1.23E-07 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 1.23E-07 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-236    | 1.44E-16 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 1.44E-16 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-238    | 4.35E-06 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 4.35E-06 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| 00000000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 |
| 00000000 | 000      |     |          |     |          |     |          |     |          |     |          |     |          |     |
| Total    | 7.28E-02 | 100 | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 7.28E-02 | 100      |     |          |     |          |     |          |     |          |     |          |     |          |     |

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

1RESRAD-OFFSITE, Version 2.6

T Limit = 30 days

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.R0F

# 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

|              |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
|--------------|--------------|-----|--------------|-----|--------------|-----|--------------|-----|--------------|-----|--------------|-----|--------------|-----|
| 0            |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| 0            | Ground       |     | Fish         |     | Radon        |     | Plant        |     | Meat         |     | Milk         |     | Soil         |     |
| Water        |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Radio-       | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     |
| ffffffffffff |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Nuclide      | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   |
| Dose         | %            |     |              |     |              |     |              |     |              |     |              |     |              |     |
| ffffff       | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff |
| ffffff       | fff          |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Ac-227       | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   |
| 0.00E+00     | 0            |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Al-26        | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   |
| 0.00E+00     | 0            |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Am-241       | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-249   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-251   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-252   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cl-36    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Co-60    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-134   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-137   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-154   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-155   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| H-3      | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ho-166m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Na-22    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Np-237   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pb-210   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pm-147   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-238   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Pu-239   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-240   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-241   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-242   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-226   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ru-106   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sb-125   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-121m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-126   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sr-90    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-230   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-232   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-233    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-234    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

```

0.00E+00  0
U-235  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
0.00E+00  0
U-236  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
0.00E+00  0
U-238  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
0.00E+00  0
00000000 00000000 000 00000000 000 00000000 000 00000000 000 00000000 000 00000000 000 00000000 000
00000000 000
Total  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
0.00E+00  0

```

1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58 Page 73

Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.R0F

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

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

0                      Ground                      Inhalation                      Radon                      Plant                      Meat                      Milk                      Soil

All Pathways\*

```

Radio-  ffffffffff ffffffffff ffffffffff ffffffffff ffffffffff ffffffffff ffffffffff
ffffffff

```

```

Nuclide  Dose    %    Dose    %    Dose    %    Dose    %    Dose    %    Dose    %    Dose    %
Dose    %

```

```

ffffff fffffff fff fffffff fff fffffff fff fffffff fff fffffff fff fffffff fff fffffff fff
ffffff fff

```

```

Ac-227  2.14E-07  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
2.14E-07  0

```

```

Al-26   6.88E-02  95  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
6.88E-02  95

```

```

Am-241  3.83E-11  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0

```



|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 3.83E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-249   | 4.02E-10 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 4.02E-10 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-251   | 3.54E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.54E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-252   | 3.03E-24 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.03E-24 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cl-36    | 9.53E-13 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 9.53E-13 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Co-60    | 1.15E-04 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.15E-04 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-134   | 1.19E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.19E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-137   | 2.86E-03 | 4 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.86E-03 | 4        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-154   | 7.67E-08 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 7.67E-08 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-155   | 2.77E-16 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.77E-16 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| H-3      | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ho-166m  | 2.15E-06 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.15E-06 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Na-22    | 2.66E-09 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.66E-09 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Np-237   | 2.10E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.10E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pb-210   | 9.19E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 9.19E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pm-147   | 3.86E-27 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.86E-27 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-238   | 5.32E-13 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 5.32E-13 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Pu-239   | 2.78E-09 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.78E-09 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-240   | 1.19E-15 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.19E-15 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-241   | 6.45E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 6.45E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-242   | 2.10E-17 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.10E-17 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-226   | 1.95E-04 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.95E-04 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-228   | 5.36E-04 | 1 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 5.36E-04 | 1        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ru-106   | 3.15E-17 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.15E-17 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sb-125   | 5.19E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 5.19E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-121m  | 4.95E-17 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 4.95E-17 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-126   | 4.38E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 4.38E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sr-90    | 1.10E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.10E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-228   | 1.95E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.95E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-230   | 1.19E-05 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.19E-05 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-232   | 8.70E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 8.70E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-233    | 1.66E-09 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.66E-09 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-234    | 1.78E-10 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

|          |          |     |          |     |          |     |          |     |          |     |          |     |          |     |
|----------|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| 1.78E-10 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-235    | 1.23E-07 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 1.23E-07 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-236    | 4.97E-15 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 4.97E-15 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-238    | 4.35E-06 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 4.35E-06 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| 00000000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 |
| 00000000 | 000      |     |          |     |          |     |          |     |          |     |          |     |          |     |
| Total    | 7.25E-02 | 100 | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 7.25E-02 | 100      |     |          |     |          |     |          |     |          |     |          |     |          |     |

0\*Sum of dose from all releases and from primary contamination.  
1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58    Page 74  
Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.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                                  |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
|                                                                                     | Ground       |     | Fish         |     | Radon        |     | Plant        |     | Meat         |     | Milk         |     | Soil         |     |
| Water                                                                               |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Radio-                                                                              | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     |
| ffffffffffff                                                                        |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Nuclide                                                                             | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   |
| Dose                                                                                | %            |     |              |     |              |     |              |     |              |     |              |     |              |     |
| ffffff                                                                              | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff |
| ffffff                                                                              | fff          |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Ac-227                                                                              | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   |
| 0.00E+00                                                                            | 0            |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Al-26                                                                               | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   |
| 0.00E+00                                                                            | 0            |     |              |     |              |     |              |     |              |     |              |     |              |     |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Am-241   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-249   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-251   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-252   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cl-36    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Co-60    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-134   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-137   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-154   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-155   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| H-3      | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ho-166m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Na-22    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Np-237   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pb-210   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pm-147   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-238   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-239   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-240   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-241   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-242   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-226   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ru-106   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sb-125   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-121m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-126   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sr-90    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-230   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-232   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| U-233    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |

|          |          |     |          |     |          |     |          |     |          |     |          |     |          |     |
|----------|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| U-234    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-235    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-236    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-238    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| 00000000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 |
| 00000000 | 000      |     |          |     |          |     |          |     |          |     |          |     |          |     |
| Total    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |

1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58 Page 75  
Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.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                                   |              |              |              |              |              |              |              |     |          |     |          |     |          |     |
| Directly from primary contamination and from release to atmosphere (Inhalation excludes radon) |              |              |              |              |              |              |              |     |          |     |          |     |          |     |
|                                                                                                | Ground       | Inhalation   | Radon        | Plant        | Meat         | Milk         | Soil         |     |          |     |          |     |          |     |
| All Pathways*                                                                                  |              |              |              |              |              |              |              |     |          |     |          |     |          |     |
| Radio-                                                                                         | ffffffffffff | ffffffffffff | ffffffffffff | ffffffffffff | ffffffffffff | ffffffffffff | ffffffffffff |     |          |     |          |     |          |     |
| ffffffffffff                                                                                   |              |              |              |              |              |              |              |     |          |     |          |     |          |     |
| Nuclide                                                                                        | Dose         | %            | Dose         | %            | Dose         | %            | Dose         | %   | Dose     | %   | Dose     | %   | Dose     | %   |
| Dose                                                                                           | %            |              |              |              |              |              |              |     |          |     |          |     |          |     |
| ffffff                                                                                         | ffffff       | fff          | ffffff       | fff          | ffffff       | fff          | ffffff       | fff | ffffff   | fff | ffffff   | fff | ffffff   | fff |
| ffffff                                                                                         | fff          |              |              |              |              |              |              |     |          |     |          |     |          |     |
| Ac-227                                                                                         | 1.77E-07     | 0            | 0.00E+00     | 0            | 0.00E+00     | 0            | 0.00E+00     | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 1.77E-07                                                                                       | 0            |              |              |              |              |              |              |     |          |     |          |     |          |     |
| Al-26                                                                                          | 6.88E-02     | 96           | 0.00E+00     | 0            | 0.00E+00     | 0            | 0.00E+00     | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 6.88E-02                                                                                       | 96           |              |              |              |              |              |              |     |          |     |          |     |          |     |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Am-241   | 7.34E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 7.34E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-249   | 3.98E-10 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.98E-10 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-251   | 3.53E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.53E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-252   | 7.20E-25 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 7.20E-25 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cl-36    | 9.14E-13 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 9.14E-13 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Co-60    | 5.19E-05 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 5.19E-05 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-134   | 1.58E-13 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.58E-13 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-137   | 2.49E-03 | 3 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.49E-03 | 3        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-154   | 4.79E-08 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 4.79E-08 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-155   | 1.20E-16 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.20E-16 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| H-3      | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ho-166m  | 2.15E-06 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.15E-06 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Na-22    | 5.39E-10 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 5.39E-10 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Np-237   | 2.10E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.10E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pb-210   | 7.63E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 7.63E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pm-147   | 7.93E-28 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 7.93E-28 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-238   | 2.77E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 2.77E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-239   | 2.78E-09 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.78E-09 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-240   | 1.21E-15 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.21E-15 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-241   | 6.12E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 6.12E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-242   | 4.01E-17 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 4.01E-17 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-226   | 1.94E-04 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.94E-04 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-228   | 3.11E-04 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.11E-04 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ru-106   | 4.89E-19 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 4.89E-19 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sb-125   | 1.11E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.11E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-121m  | 4.59E-17 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 4.59E-17 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-126   | 4.38E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 4.38E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sr-90    | 9.54E-08 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 9.54E-08 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-228   | 2.22E-08 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.22E-08 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-230   | 2.29E-05 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.29E-05 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-232   | 1.59E-06 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.59E-06 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| U-233    | 3.19E-09 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.19E-09 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |



|          |          |     |          |     |          |     |          |     |          |     |          |     |          |     |
|----------|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| U-234    | 6.58E-10 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 6.58E-10 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-235    | 1.24E-07 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 1.24E-07 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-236    | 2.04E-14 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 2.04E-14 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-238    | 4.35E-06 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 4.35E-06 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| 00000000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 |
| 00000000 | 000      |     |          |     |          |     |          |     |          |     |          |     |          |     |
| Total    | 7.19E-02 | 100 | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 7.19E-02 | 100      |     |          |     |          |     |          |     |          |     |          |     |          |     |

0\*Sum of dose from all releases and from primary contamination.  
1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58    Page 76  
Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.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                                  |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
|                                                                                     | Ground       |     | Fish         |     | Radon        |     | Plant        |     | Meat         |     | Milk         |     | Soil         |     |
| Water                                                                               |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Radio-                                                                              | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     |
| ffffffffffff                                                                        |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Nuclide                                                                             | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   |
| Dose %                                                                              |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| ffffff                                                                              | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff |
| ffffff                                                                              | fff          |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Ac-227                                                                              | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   |
| 0.00E+00                                                                            | 0            |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Al-26                                                                               | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Am-241   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-249   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-251   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-252   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cl-36    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Co-60    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-134   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-137   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-154   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-155   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| H-3      | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ho-166m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Na-22    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Np-237   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pb-210   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pm-147   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Pu-238   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-239   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-240   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-241   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-242   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-226   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ru-106   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sb-125   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-121m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-126   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sr-90    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-230   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-232   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-233    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

```

0.00E+00  0
U-234  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
0.00E+00  0
U-235  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
0.00E+00  0
U-236  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
0.00E+00  0
U-238  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
0.00E+00  0
00000000 00000000 000 00000000 000 00000000 000 00000000 000 00000000 000 00000000 000 00000000 000
00000000 000
Total  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
0.00E+00  0

```

1RESRAD-OFFSITE, Version 2.6

T' Limit = 30 days

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.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

```

0      Directly from primary contamination and from release to atmosphere (Inhalation excludes radon)
0      Ground      Inhalation      Radon      Plant      Meat      Milk      Soil
All Pathways*
Radio- ffffffffff ffffffffff ffffffffff ffffffffff ffffffffff ffffffffff ffffffffff
fffffffff
Nuclide Dose %   Dose %   Dose %   Dose %   Dose %   Dose %   Dose %
Dose %
ffffff fffffff fff fffffff fff fffffff fff fffffff fff fffffff fff fffffff fff fffffff fff
ffffff fff
Ac-227  1.00E-07  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0
1.00E-07  0
Al-26   6.90E-02  97  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0  0.00E+00  0

```

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 6.90E-02 | 97       |   |          |   |          |   |          |   |          |   |          |   |          |
| Am-241   | 1.77E-10 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.77E-10 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-249   | 3.85E-10 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.85E-10 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-251   | 3.50E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.50E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-252   | 3.08E-25 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.08E-25 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cl-36    | 8.05E-13 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 8.05E-13 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Co-60    | 4.82E-06 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 4.82E-06 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-134   | 3.74E-16 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.74E-16 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-137   | 1.65E-03 | 2 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.65E-03 | 2        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-154   | 1.16E-08 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.16E-08 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-155   | 9.77E-18 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 9.77E-18 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| H-3      | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ho-166m  | 2.13E-06 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.13E-06 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Na-22    | 4.47E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 4.47E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Np-237   | 2.11E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.11E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pb-210   | 4.37E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 4.37E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pm-147   | 6.87E-30 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 6.87E-30 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Pu-238   | 3.68E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.68E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-239   | 2.79E-09 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.79E-09 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-240   | 1.39E-15 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.39E-15 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-241   | 9.55E-12 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 9.55E-12 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-242   | 9.75E-17 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 9.75E-17 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-226   | 1.93E-04 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.93E-04 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-228   | 3.74E-05 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.74E-05 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ru-106   | 1.83E-24 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.83E-24 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sb-125   | 1.08E-13 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.08E-13 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-121m  | 3.68E-17 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.68E-17 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-126   | 4.39E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 4.39E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sr-90    | 6.24E-08 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 6.24E-08 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-228   | 3.28E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.28E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-230   | 5.59E-05 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 5.59E-05 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-232   | 2.27E-06 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.27E-06 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| U-233    | 7.79E-09 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

|          |          |     |          |     |          |     |          |     |          |     |          |     |          |     |
|----------|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| 7.79E-09 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-234    | 3.91E-09 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 3.91E-09 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-235    | 1.29E-07 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 1.29E-07 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-236    | 9.50E-14 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 9.50E-14 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-238    | 4.35E-06 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 4.35E-06 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| 00000000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 |
| 00000000 | 000      |     |          |     |          |     |          |     |          |     |          |     |          |     |
| Total    | 7.09E-02 | 100 | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 7.09E-02 | 100      |     |          |     |          |     |          |     |          |     |          |     |          |     |

0\*Sum of dose from all releases and from primary contamination.  
1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58    Page 78  
Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.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 = 100 years                       |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| From releases to ground water and to surface water                                  |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
|                                                                                     | Ground       |     | Fish         |     | Radon        |     | Plant        |     | Meat         |     | Milk         |     | Soil         |     |
| Water                                                                               |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Radio-                                                                              | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     |
| ffffffffffff                                                                        |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Nuclide                                                                             | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   |
| Dose %                                                                              |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| ffffff                                                                              | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff |
| ffffff                                                                              | fff          |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Ac-227                                                                              | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   |
| 0.00E+00                                                                            | 0            |     |              |     |              |     |              |     |              |     |              |     |              |     |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Al-26    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Am-241   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-249   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-251   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-252   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cl-36    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Co-60    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-134   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-137   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-154   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-155   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| H-3      | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ho-166m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Na-22    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Np-237   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pb-210   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pm-147   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |



|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-238   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-239   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-240   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-241   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-242   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-226   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ru-106   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sb-125   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-121m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-126   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sr-90    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-230   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-232   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |

|          |          |     |          |     |          |     |          |     |          |     |          |     |          |     |
|----------|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| U-233    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-234    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-235    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-236    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-238    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| 00000000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 |
| 00000000 | 000      |     |          |     |          |     |          |     |          |     |          |     |          |     |
| Total    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |

1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58 Page 79  
Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.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 = 100 years                                  |              |          |              |          |              |          |              |          |              |          |              |          |     |
| 0                                                                                   | Directly from primary contamination and from release to atmosphere (Inhalation excludes radon) |              |          |              |          |              |          |              |          |              |          |              |          |     |
| 0                                                                                   | Ground                                                                                         | Inhalation   |          | Radon        |          | Plant        |          | Meat         |          | Milk         |          | Soil         |          |     |
| All Pathways*                                                                       |                                                                                                |              |          |              |          |              |          |              |          |              |          |              |          |     |
| Radio-                                                                              | ffffffffffff                                                                                   | ffffffffffff |          | ffffffffffff |          | ffffffffffff |          | ffffffffffff |          | ffffffffffff |          | ffffffffffff |          |     |
| ffffffffffff                                                                        |                                                                                                |              |          |              |          |              |          |              |          |              |          |              |          |     |
| Nuclide                                                                             | Dose                                                                                           | %            | Dose     | %            | Dose     | %            | Dose     | %            | Dose     | %            | Dose     | %            | Dose     | %   |
| Dose                                                                                | %                                                                                              |              |          |              |          |              |          |              |          |              |          |              |          |     |
| ffffff                                                                              | ffffff                                                                                         | fff          | ffffff   | fff          | ffffff   | fff          | ffffff   | fff          | ffffff   | fff          | ffffff   | fff          | ffffff   | fff |
| ffffff                                                                              | fff                                                                                            |              |          |              |          |              |          |              |          |              |          |              |          |     |
| Ac-227                                                                              | 1.09E-08                                                                                       | 0            | 0.00E+00 | 0            | 0.00E+00 | 0            | 0.00E+00 | 0            | 0.00E+00 | 0            | 0.00E+00 | 0            | 0.00E+00 | 0   |
| 1.09E-08                                                                            | 0                                                                                              |              |          |              |          |              |          |              |          |              |          |              |          |     |

|          |          |    |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|----|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Al-26    | 6.96E-02 | 99 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 6.96E-02 | 99       |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Am-241   | 5.59E-10 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 5.59E-10 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-249   | 3.40E-10 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.40E-10 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-251   | 3.38E-12 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.38E-12 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-252   | 1.11E-24 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.11E-24 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cl-36    | 4.92E-13 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 4.92E-13 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Co-60    | 4.63E-10 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 4.63E-10 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-134   | 2.28E-26 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.28E-26 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-137   | 3.30E-04 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.30E-04 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-154   | 4.73E-11 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 4.73E-11 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-155   | 5.64E-22 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 5.64E-22 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| H-3      | 0.00E+00 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Ho-166m  | 2.07E-06 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.07E-06 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Na-22    | 3.59E-20 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.59E-20 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Np-237   | 2.13E-11 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.13E-11 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Pb-210   | 5.02E-12 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 5.02E-12 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Pm-147   | 6.54E-38 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 6.54E-38 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-238   | 1.15E-09 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.15E-09 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-239   | 2.84E-09 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.84E-09 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-240   | 4.58E-15 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 4.58E-15 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-241   | 4.07E-11 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 4.07E-11 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-242   | 3.22E-16 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.22E-16 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-226   | 1.89E-04 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.89E-04 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-228   | 8.16E-09 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 8.16E-09 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ru-106   | 1.40E-45 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.40E-45 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sb-125   | 1.62E-21 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.62E-21 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-121m  | 1.56E-17 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.56E-17 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-126   | 4.44E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 4.44E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sr-90    | 1.19E-08 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.19E-08 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-228   | 3.19E-22 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.19E-22 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-230   | 1.83E-04 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.83E-04 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-232   | 2.38E-06 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.38E-06 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |

|          |          |     |          |     |          |     |          |     |          |     |          |     |          |     |
|----------|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| U-233    | 2.57E-08 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 2.57E-08 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-234    | 4.22E-08 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 4.22E-08 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-235    | 1.62E-07 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 1.62E-07 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-236    | 4.30E-13 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 4.30E-13 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-238    | 4.35E-06 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 4.35E-06 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| 00000000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 |
| 00000000 | 000      |     |          |     |          |     |          |     |          |     |          |     |          |     |
| Total    | 7.03E-02 | 100 | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 7.03E-02 | 100      |     |          |     |          |     |          |     |          |     |          |     |          |     |

0\*Sum of dose from all releases and from primary contamination.  
1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58    Page 80  
Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.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 = 300 years                       |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| From releases to ground water and to surface water                                  |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| 0                                                                                   | Ground       |     | Fish         |     | Radon        |     | Plant        |     | Meat         |     | Milk         |     | Soil         |     |
| 0                                                                                   |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Water                                                                               |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Radio-                                                                              | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     | ffffffffffff |     |
| ffffffffffff                                                                        |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Nuclide                                                                             | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   | Dose         | %   |
| Dose %                                                                              |              |     |              |     |              |     |              |     |              |     |              |     |              |     |
| ffffff                                                                              | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff | ffffff       | fff |
| ffffff                                                                              | fff          |     |              |     |              |     |              |     |              |     |              |     |              |     |
| Ac-227                                                                              | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   | 0.00E+00     | 0   |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Al-26    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Am-241   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-249   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-251   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cf-252   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cl-36    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Co-60    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-134   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Cs-137   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-154   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Eu-155   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| H-3      | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ho-166m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Na-22    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Np-237   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pb-210   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Pm-147   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-238   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-239   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-240   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-241   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Pu-242   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-226   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ra-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Ru-106   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sb-125   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-121m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sn-126   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Sr-90    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-230   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |   |
| Th-232   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

|          |          |     |          |     |          |     |          |     |          |     |          |     |          |     |
|----------|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-233    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-234    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-235    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-236    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-238    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| 00000000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 |
| 00000000 | 000      |     |          |     |          |     |          |     |          |     |          |     |          |     |
| Total    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |

1RESRAD-OFFSITE, Version 2.6      T' Limit = 30 days      09/19/2012 14:58 Page 81

Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

Total Dose Contributions TD0SE(i,p,t) for Individual Radionuclides (i) and Pathways

(p)

in mrem/yr and as a Percentage of Total Dose at t = 300 years

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

0 Ground Inhalation Radon Plant Meat Milk Soil

All Pathways\*

Radio- ffffffff ffffffff ffffffff ffffffff ffffffff ffffffff ffffffff  
 ffffffff

Nuclide Dose % Dose % Dose % Dose % Dose % Dose % Dose %

Dose %

ffffff ffffffff fff ffffffff fff ffffffff fff ffffffff fff ffffffff fff ffffffff fff  
 ffffffff fff

Ac-227 1.94E-11 0 0.00E+00 0 0.00E+00 0 0.00E+00 0 0.00E+00 0 0.00E+00 0 0.00E+00 0



|          |          |    |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|----|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| 1.94E-11 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Al-26    | 7.14E-02 | 99 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 7.14E-02 | 99       |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Am-241   | 1.49E-09 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.49E-09 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-249   | 2.37E-10 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.37E-10 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-251   | 3.05E-12 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.05E-12 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-252   | 3.50E-24 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.50E-24 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cl-36    | 1.20E-13 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.20E-13 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Co-60    | 1.55E-21 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.55E-21 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-134   | 0.00E+00 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-137   | 3.34E-06 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.34E-06 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-154   | 7.00E-18 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 7.00E-18 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-155   | 4.38E-34 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 4.38E-34 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| H-3      | 0.00E+00 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Ho-166m  | 1.91E-06 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.91E-06 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Na-22    | 2.68E-43 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.68E-43 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Np-237   | 2.20E-11 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.20E-11 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Pb-210   | 1.03E-14 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.03E-14 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |

|                     |               |   |          |   |          |   |          |   |          |   |          |   |          |   |
|---------------------|---------------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Pm-147<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Pu-238<br>2.24E-08  | 2.24E-08<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Pu-239<br>2.96E-09  | 2.96E-09<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Pu-240<br>3.63E-14  | 3.63E-14<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Pu-241<br>1.27E-10  | 1.27E-10<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Pu-242<br>9.79E-16  | 9.79E-16<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Ra-226<br>1.78E-04  | 1.78E-04<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Ra-228<br>2.82E-19  | 2.82E-19<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Ru-106<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Sb-125<br>7.01E-44  | 7.01E-44<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Sm-151<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Sn-121m<br>1.34E-18 | 1.34E-18<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Sn-126<br>4.58E-07  | 4.58E-07<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Sr-90<br>1.06E-10   | 1.06E-10<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Th-228<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Th-230<br>5.38E-04  | 5.38E-04<br>1 | 1 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Th-232<br>2.43E-06  | 2.43E-06      | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

|          |          |     |          |     |          |     |          |     |          |     |          |     |          |     |
|----------|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| 2.43E-06 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-233    | 7.72E-08 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 7.72E-08 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-234    | 3.73E-07 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 3.73E-07 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-235    | 2.74E-07 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 2.74E-07 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-236    | 1.40E-12 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 1.40E-12 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-238    | 4.36E-06 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 4.36E-06 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| 00000000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 |
| 00000000 | 000      |     |          |     |          |     |          |     |          |     |          |     |          |     |
| Total    | 7.21E-02 | 100 | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 7.21E-02 | 100      |     |          |     |          |     |          |     |          |     |          |     |          |     |

0\*Sum of dose from all releases and from primary contamination.  
1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58    Page 82  
Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.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 = 1000 years

From releases to ground water and to surface water

|              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 0            | Ground       | Fish         | Radon        | Plant        | Meat         | Milk         | Soil         |
| Water        |              |              |              |              |              |              |              |
| Radio-       | ffffffffffff | ffffffffffff | ffffffffffff | ffffffffffff | ffffffffffff | ffffffffffff | ffffffffffff |
| ffffffffffff |              |              |              |              |              |              |              |
| Nuclide      | Dose %       | Dose %       | Dose %       | Dose %       | Dose %       | Dose %       | Dose %       |
| Dose %       |              |              |              |              |              |              |              |
| ffffff       | ffffff       | fff          | ffffff       | fff          | ffffff       | fff          | ffffff       |
| ffffff       | fff          |              | ffffff       | fff          | ffffff       | fff          | ffffff       |

|                     |               |   |          |   |          |   |          |   |          |   |          |   |          |   |
|---------------------|---------------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Ac-227<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Al-26<br>0.00E+00   | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Am-241<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Cf-249<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Cf-251<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Cf-252<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Cl-36<br>0.00E+00   | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Co-60<br>0.00E+00   | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Cs-134<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Cs-137<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Eu-154<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Eu-155<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| H-3<br>0.00E+00     | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Ho-166m<br>0.00E+00 | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Na-22<br>0.00E+00   | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Np-237<br>0.00E+00  | 0.00E+00<br>0 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| Pb-210              | 0.00E+00      | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pm-147   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-238   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-239   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-240   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-241   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-242   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-226   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ru-106   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sb-125   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-121m  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-126   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sr-90    | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-230   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |

|          |          |     |          |     |          |     |          |     |          |     |          |     |          |     |
|----------|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| Th-232   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-233    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-234    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-235    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-236    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-238    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| 00000000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 |
| 00000000 | 000      |     |          |     |          |     |          |     |          |     |          |     |          |     |
| Total    | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 0.00E+00 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |

1RESRAD-OFFSITE, Version 2.6

T' Limit = 30 days

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.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 = 1000 years

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

0 Ground Inhalation Radon Plant Meat Milk Soil

All Pathways\*

|              |              |              |              |              |              |              |              |
|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Radio-       | ffffffffffff | ffffffffffff | ffffffffffff | ffffffffffff | ffffffffffff | ffffffffffff | ffffffffffff |
| ffffffffffff |              |              |              |              |              |              |              |

| Nuclide | Dose | % | Dose | % | Dose | % | Dose | % | Dose | % | Dose | % | Dose | % |
|---------|------|---|------|---|------|---|------|---|------|---|------|---|------|---|
|---------|------|---|------|---|------|---|------|---|------|---|------|---|------|---|

Dose %

|        |        |     |        |     |        |     |        |     |        |     |        |     |        |     |
|--------|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|--------|-----|
| ffffff | ffffff | fff | ffffff | fff | ffffff | fff | ffffff | fff | ffffff | fff | ffffff | fff | ffffff | fff |
| ffffff | fff    |     |        |     |        |     |        |     |        |     |        |     |        |     |

|          |          |    |          |   |          |   |          |   |          |   |          |   |          |   |
|----------|----------|----|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|
| Ac-227   | 4.59E-21 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 4.59E-21 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Al-26    | 7.80E-02 | 98 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 7.80E-02 | 98       |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Am-241   | 3.53E-09 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.53E-09 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-249   | 6.75E-11 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 6.75E-11 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-251   | 2.16E-12 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.16E-12 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cf-252   | 1.31E-23 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.31E-23 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cl-36    | 8.75E-16 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 8.75E-16 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Co-60    | 0.00E+00 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-134   | 0.00E+00 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Cs-137   | 3.49E-13 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 3.49E-13 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-154   | 8.74E-42 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 8.74E-42 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Eu-155   | 0.00E+00 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| H-3      | 0.00E+00 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Ho-166m  | 1.42E-06 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 1.42E-06 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Na-22    | 0.00E+00 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 0.00E+00 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Np-237   | 2.49E-11 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |
| 2.49E-11 | 0        |    |          |   |          |   |          |   |          |   |          |   |          |   |
| Pb-210   | 4.08E-24 | 0  | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 |

|          |          |   |          |   |          |   |          |   |          |   |          |   |          |
|----------|----------|---|----------|---|----------|---|----------|---|----------|---|----------|---|----------|
| 4.08E-24 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pm-147   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-238   | 3.89E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.89E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-239   | 3.43E-09 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.43E-09 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-240   | 4.18E-13 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 4.18E-13 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-241   | 3.16E-10 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.16E-10 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Pu-242   | 3.46E-15 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 3.46E-15 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-226   | 1.44E-04 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.44E-04 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ra-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Ru-106   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sb-125   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sm-151   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-121m  | 2.46E-22 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 2.46E-22 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sn-126   | 5.09E-07 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 5.09E-07 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Sr-90    | 7.11E-18 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 7.11E-18 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-228   | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 0.00E+00 | 0        |   |          |   |          |   |          |   |          |   |          |   |          |
| Th-230   | 1.69E-03 | 2 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 | 0 | 0.00E+00 |
| 1.69E-03 | 2        |   |          |   |          |   |          |   |          |   |          |   |          |



|          |          |     |          |     |          |     |          |     |          |     |          |     |          |     |
|----------|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|----------|-----|
| Th-232   | 2.63E-06 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 2.63E-06 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-233    | 2.61E-07 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 2.61E-07 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-234    | 3.96E-06 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 3.96E-06 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-235    | 7.04E-07 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 7.04E-07 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-236    | 4.92E-12 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 4.92E-12 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| U-238    | 4.41E-06 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 4.41E-06 | 0        |     |          |     |          |     |          |     |          |     |          |     |          |     |
| 00000000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 | 00000000 | 000 |
| 00000000 | 000      |     |          |     |          |     |          |     |          |     |          |     |          |     |
| Total    | 7.99E-02 | 100 | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   | 0.00E+00 | 0   |
| 7.99E-02 | 100      |     |          |     |          |     |          |     |          |     |          |     |          |     |

0\*Sum of dose from all releases and from primary contamination.  
1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58 Page 84  
Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.R0F

| Dose/Source Ratios Summed Over All Pathways                       |          |           |                            |           |           |           |           |           |           |        |        |        |        |
|-------------------------------------------------------------------|----------|-----------|----------------------------|-----------|-----------|-----------|-----------|-----------|-----------|--------|--------|--------|--------|
| Parent and Progeny Principal Radionuclide Contributions Indicated |          |           |                            |           |           |           |           |           |           |        |        |        |        |
| 0 Parent                                                          | Product  | Thread    | DSR(j,t) (mrem/yr)/(pCi/g) |           |           |           |           |           |           |        |        |        |        |
| (i)                                                               | (j)      | Fraction  | 0.000E+00                  | 1.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 |        |        |        |        |
| 1.000E+03                                                         |          |           |                            |           |           |           |           |           |           |        |        |        |        |
| ffffff                                                            | ffffff   | ffffff    | ffffff                     | ffffff    | ffffff    | ffffff    | ffffff    | ffffff    | ffffff    | ffffff | ffffff | ffffff | ffffff |
| ffffff                                                            |          |           |                            |           |           |           |           |           |           |        |        |        |        |
| Ac-227+D                                                          | Ac-227+D | 1.000E+00 | 1.106E-07                  | 1.072E-07 | 9.146E-08 | 7.564E-08 | 4.278E-08 | 4.662E-09 | 8.286E-12 |        |        |        |        |
| 1.961E-21                                                         |          |           |                            |           |           |           |           |           |           |        |        |        |        |
| 0Al-26                                                            | Al-26    | 1.000E+00 | 8.996E-05                  | 8.998E-05 | 9.003E-05 | 9.010E-05 | 9.031E-05 | 9.112E-05 | 9.346E-05 |        |        |        |        |
| 1.022E-04                                                         |          |           |                            |           |           |           |           |           |           |        |        |        |        |

|                      |          |           |           |           |           |           |           |           |           |
|----------------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0Am-241<br>2.428E-22 | Am-241   | 1.000E+00 | 6.987E-22 | 6.979E-22 | 6.942E-22 | 6.898E-22 | 6.768E-22 | 6.286E-22 | 5.088E-22 |
| Am-241<br>2.489E-12  | Np-237+D | 1.000E+00 | 2.098E-15 | 6.290E-15 | 2.717E-14 | 5.206E-14 | 1.256E-13 | 3.967E-13 | 1.056E-12 |
| Am-241<br>4.736E-19  | U-233    | 1.000E+00 | 2.399E-25 | 1.518E-24 | 2.701E-23 | 9.945E-23 | 5.878E-22 | 6.227E-21 | 5.208E-20 |
| Am-241<br>1.615E-14  | Th-229+D | 1.000E+00 | 6.779E-24 | 8.534E-23 | 5.979E-21 | 4.214E-20 | 6.071E-19 | 2.122E-17 | 5.326E-16 |
| Am-241<br>2.505E-12  | %DSR(j)  |           | 2.098E-15 | 6.290E-15 | 2.717E-14 | 5.206E-14 | 1.256E-13 | 3.967E-13 | 1.057E-12 |
| 0Cf-249<br>1.083E-16 | Cf-249   | 5.200E-09 | 6.520E-16 | 6.509E-16 | 6.450E-16 | 6.381E-16 | 6.179E-16 | 5.449E-16 | 3.806E-16 |
| 0Cf-249<br>2.083E-08 | Cf-249   | 1.000E+00 | 1.254E-07 | 1.252E-07 | 1.240E-07 | 1.227E-07 | 1.188E-07 | 1.048E-07 | 7.318E-08 |
| Cf-249<br>2.668E-13  | Cm-245   | 1.000E+00 | 2.432E-16 | 7.293E-16 | 3.149E-15 | 6.028E-15 | 1.451E-14 | 4.545E-14 | 1.185E-13 |
| Cf-249<br>1.007E-18  | Pu-241   | 1.000E+00 | 1.616E-23 | 1.010E-22 | 1.665E-21 | 5.605E-21 | 2.593E-20 | 1.369E-19 | 4.206E-19 |
| Cf-249<br>2.486E-23  | Am-241   | 1.000E+00 | 2.277E-31 | 2.838E-30 | 1.879E-28 | 1.238E-27 | 1.477E-26 | 2.945E-25 | 3.020E-24 |
| Cf-249<br>4.565E-14  | Np-237+D | 1.000E+00 | 3.093E-25 | 7.383E-24 | 1.877E-21 | 2.391E-20 | 7.175E-19 | 5.097E-17 | 1.672E-15 |
| Cf-249<br>4.048E-21  | U-233    | 1.000E+00 | 2.424E-34 | 7.650E-34 | 7.608E-31 | 1.864E-29 | 1.397E-27 | 3.512E-25 | 3.806E-23 |
| Cf-249<br>8.057E-17  | Th-229+D | 1.000E+00 | 1.669E-26 | 9.723E-29 | 4.011E-27 | 1.304E-26 | 7.384E-25 | 6.438E-22 | 2.200E-19 |
| Cf-249<br>2.084E-08  | %DSR(j)  |           | 1.254E-07 | 1.252E-07 | 1.240E-07 | 1.227E-07 | 1.188E-07 | 1.048E-07 | 7.318E-08 |
| 0Cf-249<br>5.105E-13 | Cf-249   | 2.450E-05 | 3.072E-12 | 3.067E-12 | 3.039E-12 | 3.007E-12 | 2.911E-12 | 2.567E-12 | 1.793E-12 |
| Cf-249<br>6.537E-18  | Cm-245   | 2.450E-05 | 5.960E-21 | 1.787E-20 | 7.714E-20 | 1.477E-19 | 3.556E-19 | 1.114E-18 | 2.902E-18 |
| Cf-249               | Pu-241+D | 2.450E-05 | 1.531E-21 | 9.560E-21 | 1.576E-19 | 5.305E-19 | 2.452E-18 | 1.290E-17 | 3.927E-17 |

|           |          |           |           |           |           |           |           |           |           |  |
|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| 9.096E-17 |          |           |           |           |           |           |           |           |           |  |
| Cf-249    | Np-237+D | 2.450E-05 | 2.089E-26 | 2.604E-25 | 1.724E-23 | 1.136E-22 | 1.358E-21 | 2.731E-20 | 2.898E-19 |  |
| 2.705E-18 |          |           |           |           |           |           |           |           |           |  |
| Cf-249    | U-233    | 2.450E-05 | 1.444E-36 | 3.432E-35 | 8.747E-33 | 1.116E-31 | 3.371E-30 | 2.457E-28 | 8.706E-27 |  |
| 3.102E-25 |          |           |           |           |           |           |           |           |           |  |
| Cf-249    | Th-229+D | 2.450E-05 | 3.850E-31 | 2.243E-33 | 1.095E-30 | 2.899E-29 | 2.176E-27 | 5.539E-25 | 6.233E-23 |  |
| 7.536E-21 |          |           |           |           |           |           |           |           |           |  |
| Cf-249    | %DSR(j)  |           | 3.072E-12 | 3.067E-12 | 3.039E-12 | 3.007E-12 | 2.911E-12 | 2.567E-12 | 1.793E-12 |  |
| 5.106E-13 |          |           |           |           |           |           |           |           |           |  |
| 0Cf-251   | Cf-251   | 1.000E+00 | 2.650E-10 | 2.649E-10 | 2.642E-10 | 2.634E-10 | 2.609E-10 | 2.514E-10 | 2.262E-10 |  |
| 1.562E-10 |          |           |           |           |           |           |           |           |           |  |
| Cf-251    | Cm-247+D | 1.000E+00 | 3.090E-15 | 9.270E-15 | 4.013E-14 | 7.707E-14 | 1.874E-13 | 6.086E-13 | 1.749E-12 |  |
| 5.148E-12 |          |           |           |           |           |           |           |           |           |  |
| Cf-251    | Am-243+D | 1.000E+00 | 3.965E-22 | 2.510E-21 | 4.472E-20 | 1.649E-19 | 9.803E-19 | 1.061E-17 | 9.401E-17 |  |
| 1.020E-15 |          |           |           |           |           |           |           |           |           |  |
| Cf-251    | Pu-239   | 1.000E+00 | 1.890E-30 | 2.377E-29 | 1.668E-27 | 1.178E-26 | 1.708E-25 | 6.112E-24 | 1.638E-22 |  |
| 6.140E-21 |          |           |           |           |           |           |           |           |           |  |
| Cf-251    | U-235+D  | 1.000E+00 | 1.190E-35 | 1.202E-35 | 5.064E-33 | 6.811E-32 | 2.404E-30 | 2.837E-28 | 2.283E-26 |  |
| 2.884E-24 |          |           |           |           |           |           |           |           |           |  |
| Cf-251    | Pa-231   | 1.000E+00 | 0.000E+00 | 3.667E-35 | 1.321E-34 | 2.258E-34 | 1.560E-33 | 6.914E-31 | 1.660E-28 |  |
| 6.940E-26 |          |           |           |           |           |           |           |           |           |  |
| Cf-251    | Ac-227+D | 1.000E+00 | 0.000E+00 | 8.963E-34 | 2.376E-33 | 1.245E-33 | 0.000E+00 | 8.675E-30 | 3.688E-27 |  |
| 2.035E-24 |          |           |           |           |           |           |           |           |           |  |
| Cf-251    | %DSR(j)  |           | 2.650E-10 | 2.649E-10 | 2.642E-10 | 2.634E-10 | 2.611E-10 | 2.520E-10 | 2.279E-10 |  |
| 1.614E-10 |          |           |           |           |           |           |           |           |           |  |
| 0Cf-252   | Cf-252   | 3.092E-02 | 2.957E-18 | 2.274E-18 | 6.126E-19 | 1.269E-19 | 1.128E-21 | 1.185E-29 | 0.000E+00 |  |
| 0.000E+00 |          |           |           |           |           |           |           |           |           |  |
| 0Cf-252   | Cf-252   | 8.005E-02 | 7.654E-18 | 5.888E-18 | 1.586E-18 | 3.286E-19 | 2.921E-21 | 3.068E-29 | 0.000E+00 |  |
| 0.000E+00 |          |           |           |           |           |           |           |           |           |  |
| Cf-252    | Cm-248   | 8.005E-02 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |  |
| 0.000E+00 |          |           |           |           |           |           |           |           |           |  |
| Cf-252    | %DSR(j)  |           | 7.654E-18 | 5.888E-18 | 1.586E-18 | 3.286E-19 | 2.921E-21 | 3.068E-29 | 0.000E+00 |  |
| 0.000E+00 |          |           |           |           |           |           |           |           |           |  |

1RESRAD-OFFSITE, Version 2.6

T' Limit = 30 days

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

| Dose/Source Ratios Summed Over All Pathways                       |                |                    |                            |            |            |            |            |            |            |            |
|-------------------------------------------------------------------|----------------|--------------------|----------------------------|------------|------------|------------|------------|------------|------------|------------|
| Parent and Progeny Principal Radionuclide Contributions Indicated |                |                    |                            |            |            |            |            |            |            |            |
| Parent<br>(i)                                                     | Product<br>(j) | Thread<br>Fraction | DSR(j,t) (mrem/yr)/(pCi/g) |            |            |            |            |            |            |            |
| 1.000E+03                                                         |                |                    | 0.000E+00                  | 1.000E+00  | 6.000E+00  | 1.200E+01  | 3.000E+01  | 1.000E+02  | 3.000E+02  |            |
| ffffffffff                                                        | ffffffffff     | ffffffffff         | ffffffffff                 | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff |
| 0.000E+00                                                         | Cf-252         | 1.111E-03          | 1.063E-19                  | 8.174E-20  | 2.202E-20  | 4.562E-21  | 4.055E-23  | 4.259E-31  | 0.000E+00  |            |
| 0.000E+00                                                         | Cf-252         | 1.111E-03          | 0.000E+00                  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  |            |
| 0.000E+00                                                         | Cf-252         | 1.111E-03          | 0.000E+00                  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  |            |
| 0.000E+00                                                         | Cf-252         | %DSR(j)            | 1.063E-19                  | 8.174E-20  | 2.202E-20  | 4.562E-21  | 4.055E-23  | 4.259E-31  | 0.000E+00  |            |
| 0.000E+00                                                         | Cf-252         | 4.395E-08          | 4.203E-24                  | 3.233E-24  | 8.708E-25  | 1.804E-25  | 1.604E-27  | 1.684E-35  | 0.000E+00  |            |
| 0.000E+00                                                         | Cf-252         | 4.395E-08          | 0.000E+00                  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  |            |
| 0.000E+00                                                         | Cf-252         | 4.395E-08          | 1.697E-28                  | 1.004E-27  | 1.252E-26  | 3.270E-26  | 9.904E-26  | 3.626E-25  | 1.147E-24  |            |
| 4.286E-24                                                         | Cf-252         | 4.395E-08          | 0.000E+00                  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 9.280E-39  |            |
| 1.021E-37                                                         | Cf-252         | %DSR(j)            | 4.203E-24                  | 3.234E-24  | 8.833E-25  | 2.131E-25  | 1.006E-25  | 3.626E-25  | 1.147E-24  |            |
| 4.286E-24                                                         | Cf-252         | 8.879E-01          | 8.490E-17                  | 6.531E-17  | 1.759E-17  | 3.645E-18  | 3.240E-20  | 3.403E-28  | 0.000E+00  |            |
| 0.000E+00                                                         | Cf-252         | 8.879E-01          | 0.000E+00                  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  |            |

|           |          |           |           |           |           |           |           |           |           |  |
|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| 0.000E+00 |          |           |           |           |           |           |           |           |           |  |
| Cf-252    | Pu-244+D | 8.879E-01 | 3.429E-21 | 2.028E-20 | 2.530E-19 | 6.606E-19 | 2.001E-18 | 7.325E-18 | 2.317E-17 |  |
| 8.658E-17 |          |           |           |           |           |           |           |           |           |  |
| Cf-252    | Pu-240   | 8.879E-01 | 3.712E-38 | 4.826E-37 | 2.556E-35 | 1.374E-34 | 1.128E-33 | 1.488E-32 | 1.498E-31 |  |
| 2.148E-30 |          |           |           |           |           |           |           |           |           |  |
| Cf-252    | U-236    | 8.879E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.856E-38 | 6.774E-37 | 2.064E-35 |  |
| 9.520E-34 |          |           |           |           |           |           |           |           |           |  |
| Cf-252    | Th-232   | 8.879E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |  |
| 0.000E+00 |          |           |           |           |           |           |           |           |           |  |
| Cf-252    | Ra-228+D | 8.879E-01 | 2.784E-38 | 3.712E-38 | 1.856E-38 | 9.280E-38 | 8.816E-37 | 2.449E-34 | 2.688E-32 |  |
| 3.937E-30 |          |           |           |           |           |           |           |           |           |  |
| Cf-252    | Th-228+D | 8.879E-01 | 4.362E-37 | 4.547E-37 | 0.000E+00 | 1.299E-37 | 1.073E-35 | 4.920E-33 | 5.813E-31 |  |
| 8.535E-29 |          |           |           |           |           |           |           |           |           |  |
| Cf-252    | %DSR(j)  |           | 8.491E-17 | 6.533E-17 | 1.785E-17 | 4.305E-18 | 2.033E-18 | 7.325E-18 | 2.317E-17 |  |
| 8.658E-17 |          |           |           |           |           |           |           |           |           |  |
| 0Cl-36    | Cl-36    | 1.000E+00 | 3.563E-12 | 3.538E-12 | 3.415E-12 | 3.274E-12 | 2.885E-12 | 1.763E-12 | 4.316E-13 |  |
| 3.135E-15 |          |           |           |           |           |           |           |           |           |  |
| 0Co-60    | Co-60    | 1.000E+00 | 5.217E-05 | 4.571E-05 | 2.361E-05 | 1.069E-05 | 9.912E-07 | 9.534E-11 | 3.183E-22 |  |
| 0.000E+00 |          |           |           |           |           |           |           |           |           |  |
| 0Cs-134   | Cs-134   | 1.000E+00 | 3.400E-06 | 2.430E-06 | 4.533E-07 | 6.041E-08 | 1.429E-10 | 8.698E-21 | 0.000E+00 |  |
| 0.000E+00 |          |           |           |           |           |           |           |           |           |  |
| 0Cs-137+D | Cs-137+D | 1.000E+00 | 1.076E-06 | 1.051E-06 | 9.374E-07 | 8.167E-07 | 5.402E-07 | 1.083E-07 | 1.096E-09 |  |
| 1.144E-16 |          |           |           |           |           |           |           |           |           |  |
| 0Eu-154   | Eu-154   | 1.000E+00 | 1.240E-05 | 1.146E-05 | 7.734E-06 | 4.825E-06 | 1.172E-06 | 4.770E-09 | 7.061E-16 |  |
| 8.812E-40 |          |           |           |           |           |           |           |           |           |  |
| 0Eu-155   | Eu-155   | 1.000E+00 | 7.339E-14 | 6.385E-14 | 3.180E-14 | 1.378E-14 | 1.121E-15 | 6.469E-20 | 5.023E-32 |  |
| 0.000E+00 |          |           |           |           |           |           |           |           |           |  |
| 0H-3      | H-3      | 1.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |  |
| 0.000E+00 |          |           |           |           |           |           |           |           |           |  |
| 0Ho-166m  | Ho-166m  | 1.000E+00 | 4.300E-06 | 4.299E-06 | 4.290E-06 | 4.279E-06 | 4.247E-06 | 4.125E-06 | 3.795E-06 |  |
| 2.835E-06 |          |           |           |           |           |           |           |           |           |  |
| 0Na-22    | Na-22    | 1.000E+00 | 1.174E-05 | 8.993E-06 | 2.376E-06 | 4.811E-07 | 3.991E-09 | 3.205E-17 | 2.390E-40 |  |
| 0.000E+00 |          |           |           |           |           |           |           |           |           |  |

|           |          |           |           |           |           |           |           |           |           |
|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0Np-237+D | Np-237+D | 1.000E+00 | 1.296E-08 | 1.296E-08 | 1.297E-08 | 1.298E-08 | 1.302E-08 | 1.316E-08 | 1.358E-08 |
| 1.514E-08 |          |           |           |           |           |           |           |           |           |
| Np-237+D  | U-233    | 1.000E+00 | 1.972E-18 | 5.917E-18 | 2.566E-17 | 4.939E-17 | 1.208E-16 | 4.021E-16 | 1.237E-15 |
| 4.554E-15 |          |           |           |           |           |           |           |           |           |
| Np-237+D  | Th-229+D | 1.000E+00 | 7.518E-17 | 4.760E-16 | 8.484E-15 | 3.131E-14 | 1.864E-13 | 2.030E-12 | 1.831E-11 |
| 2.095E-10 |          |           |           |           |           |           |           |           |           |
| Np-237    | %DSR(j)  |           | 1.296E-08 | 1.296E-08 | 1.297E-08 | 1.298E-08 | 1.302E-08 | 1.317E-08 | 1.360E-08 |
| 1.534E-08 |          |           |           |           |           |           |           |           |           |

1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58 Page 86

Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.R0F

#### Dose/Source Ratios Summed Over All Pathways

#### Parent and Progeny Principal Radionuclide Contributions Indicated

| 0 Parent<br>(i) | Product<br>(j) | Thread<br>Fraction | DSR(j,t) (mrem/yr)/(pCi/g) |            |            |            |            |            |            |  |
|-----------------|----------------|--------------------|----------------------------|------------|------------|------------|------------|------------|------------|--|
|                 |                |                    | 0.000E+00                  | 1.000E+00  | 6.000E+00  | 1.200E+01  | 3.000E+01  | 1.000E+02  | 3.000E+02  |  |
| 1.000E+03       |                |                    | ffffffffff                 | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff |  |
| Pb-210+D        | Pb-210+D       | 1.000E+00          | 5.184E-12                  | 5.027E-12  | 4.308E-12  | 3.580E-12  | 2.054E-12  | 2.367E-13  | 4.935E-16  |  |
| 2.041E-25       |                |                    |                            |            |            |            |            |            |            |  |
| Pb-210+D        | Po-210         | 1.000E+00          | 1.686E-11                  | 2.989E-11  | 2.793E-11  | 2.320E-11  | 1.329E-11  | 1.524E-12  | 3.129E-15  |  |
| 1.228E-24       |                |                    |                            |            |            |            |            |            |            |  |
| Pb-210          | %DSR(j)        |                    | 2.205E-11                  | 3.492E-11  | 3.224E-11  | 2.678E-11  | 1.535E-11  | 1.761E-12  | 3.623E-15  |  |
| 1.432E-24       |                |                    |                            |            |            |            |            |            |            |  |
| 0Pm-147         | Pm-147         | 1.000E+00          | 1.372E-18                  | 1.054E-18  | 2.818E-19  | 5.790E-20  | 5.016E-22  | 4.770E-30  | 0.000E+00  |  |
| 0.000E+00       |                |                    |                            |            |            |            |            |            |            |  |
| Pm-147          | Sm-147         | 1.000E+00          | 0.000E+00                  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  | 0.000E+00  |  |
| 0.000E+00       |                |                    |                            |            |            |            |            |            |            |  |
| Pm-147          | %DSR(j)        |                    | 1.372E-18                  | 1.054E-18  | 2.818E-19  | 5.790E-20  | 5.016E-22  | 4.770E-30  | 0.000E+00  |  |
| 0.000E+00       |                |                    |                            |            |            |            |            |            |            |  |
| 0Pu-238         | Pu-238         | 1.840E-09          | 2.047E-26                  | 2.032E-26  | 1.956E-26  | 1.870E-26  | 1.632E-26  | 9.613E-27  | 2.120E-27  |  |

|           |          |           |           |           |           |           |           |           |           |  |
|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| 1.068E-29 |          |           |           |           |           |           |           |           |           |  |
| 0Pu-238   | Pu-238   | 1.000E+00 | 1.113E-17 | 1.104E-17 | 1.063E-17 | 1.016E-17 | 8.868E-18 | 5.225E-18 | 1.152E-18 |  |
| 5.806E-21 |          |           |           |           |           |           |           |           |           |  |
| Pu-238    | U-234    | 1.000E+00 | 1.350E-22 | 4.037E-22 | 1.718E-21 | 3.233E-21 | 7.397E-21 | 1.927E-20 | 3.339E-20 |  |
| 4.228E-20 |          |           |           |           |           |           |           |           |           |  |
| Pu-238    | Th-230   | 1.000E+00 | 4.374E-27 | 2.764E-26 | 4.869E-25 | 1.772E-24 | 1.011E-23 | 9.450E-23 | 5.940E-22 |  |
| 3.340E-21 |          |           |           |           |           |           |           |           |           |  |
| Pu-238    | Ra-226+D | 1.000E+00 | 2.926E-20 | 3.678E-19 | 2.556E-17 | 1.784E-16 | 2.497E-15 | 7.843E-14 | 1.521E-12 |  |
| 2.647E-11 |          |           |           |           |           |           |           |           |           |  |
| Pu-238    | Pb-210+D | 1.000E+00 | 2.123E-29 | 5.077E-28 | 1.306E-25 | 1.684E-24 | 5.221E-23 | 3.942E-21 | 1.252E-19 |  |
| 2.847E-18 |          |           |           |           |           |           |           |           |           |  |
| Pu-238    | Po-210   | 1.000E+00 | 3.600E-29 | 1.332E-27 | 6.156E-25 | 9.115E-24 | 3.107E-22 | 2.449E-20 | 7.767E-19 |  |
| 1.682E-17 |          |           |           |           |           |           |           |           |           |  |
| Pu-238    | %DSR(j)  |           | 1.115E-17 | 1.141E-17 | 3.620E-17 | 1.886E-16 | 2.506E-15 | 7.843E-14 | 1.521E-12 |  |
| 2.647E-11 |          |           |           |           |           |           |           |           |           |  |
| 0Pu-239   | Pu-239   | 1.000E+00 | 3.002E-13 | 3.003E-13 | 3.006E-13 | 3.010E-13 | 3.021E-13 | 3.065E-13 | 3.194E-13 |  |
| 3.691E-13 |          |           |           |           |           |           |           |           |           |  |
| Pu-239    | U-235+D  | 1.000E+00 | 2.768E-19 | 8.304E-19 | 3.601E-18 | 6.932E-18 | 1.696E-17 | 5.649E-17 | 1.742E-16 |  |
| 6.465E-16 |          |           |           |           |           |           |           |           |           |  |
| Pu-239    | Pa-231   | 1.000E+00 | 1.261E-23 | 7.986E-23 | 1.424E-21 | 5.259E-21 | 3.136E-20 | 3.437E-19 | 3.159E-18 |  |
| 3.857E-17 |          |           |           |           |           |           |           |           |           |  |
| Pu-239    | Ac-227+D | 1.000E+00 | 3.873E-24 | 4.845E-23 | 3.276E-21 | 2.212E-20 | 2.823E-19 | 6.729E-18 | 8.893E-17 |  |
| 1.231E-15 |          |           |           |           |           |           |           |           |           |  |
| Pu-239    | %DSR(j)  |           | 3.002E-13 | 3.003E-13 | 3.006E-13 | 3.010E-13 | 3.021E-13 | 3.066E-13 | 3.197E-13 |  |
| 3.710E-13 |          |           |           |           |           |           |           |           |           |  |
| 0Pu-240   | Pu-240   | 4.950E-08 | 2.472E-26 | 2.473E-26 | 2.476E-26 | 2.480E-26 | 2.492E-26 | 2.541E-26 | 2.684E-26 |  |
| 3.252E-26 |          |           |           |           |           |           |           |           |           |  |
| 0Pu-240   | Pu-240   | 1.000E+00 | 4.994E-19 | 4.995E-19 | 5.002E-19 | 5.010E-19 | 5.035E-19 | 5.133E-19 | 5.422E-19 |  |
| 6.570E-19 |          |           |           |           |           |           |           |           |           |  |
| Pu-240    | U-236    | 1.000E+00 | 3.542E-25 | 1.063E-24 | 4.610E-24 | 8.877E-24 | 2.175E-23 | 7.277E-23 | 2.274E-22 |  |
| 8.834E-22 |          |           |           |           |           |           |           |           |           |  |
| Pu-240    | Th-232   | 1.000E+00 | 5.399E-36 | 3.419E-35 | 6.101E-34 | 2.255E-33 | 1.348E-32 | 1.492E-31 | 1.411E-30 |  |
| 1.903E-29 |          |           |           |           |           |           |           |           |           |  |

|           |          |           |           |           |           |           |           |           |           |
|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Pu-240    | Ra-228+D | 1.000E+00 | 8.998E-26 | 1.106E-24 | 6.781E-23 | 4.116E-22 | 4.102E-21 | 6.322E-20 | 6.382E-19 |
| 7.679E-18 |          |           |           |           |           |           |           |           |           |
| Pu-240    | Th-228+D | 1.000E+00 | 1.569E-25 | 3.499E-24 | 6.231E-22 | 5.491E-21 | 7.484E-20 | 1.348E-18 | 1.407E-17 |
| 1.674E-16 |          |           |           |           |           |           |           |           |           |
| Pu-240    | %DSR(j)  |           | 4.994E-19 | 4.995E-19 | 5.009E-19 | 5.069E-19 | 5.825E-19 | 1.924E-18 | 1.525E-17 |
| 1.758E-16 |          |           |           |           |           |           |           |           |           |
| 0Pu-241   | Pu-241   | 1.000E+00 | 2.170E-17 | 2.069E-17 | 1.629E-17 | 1.222E-17 | 5.168E-18 | 1.817E-19 | 1.274E-23 |
| 3.672E-38 |          |           |           |           |           |           |           |           |           |
| Pu-241    | Am-241   | 1.000E+00 | 5.504E-25 | 1.618E-24 | 6.242E-24 | 1.048E-23 | 1.768E-23 | 2.146E-23 | 1.754E-23 |
| 8.367E-24 |          |           |           |           |           |           |           |           |           |
| Pu-241    | Np-237+D | 1.000E+00 | 1.248E-18 | 7.793E-18 | 1.285E-16 | 4.328E-16 | 2.005E-15 | 1.064E-14 | 3.325E-14 |
| 8.228E-14 |          |           |           |           |           |           |           |           |           |
| Pu-241    | U-233    | 1.000E+00 | 1.060E-28 | 1.322E-27 | 8.755E-26 | 5.774E-25 | 6.918E-24 | 1.404E-22 | 1.527E-21 |
| 1.529E-20 |          |           |           |           |           |           |           |           |           |
| Pu-241    | Th-229+D | 1.000E+00 | 2.405E-27 | 5.808E-26 | 1.480E-23 | 1.888E-22 | 5.699E-21 | 4.148E-19 | 1.465E-17 |
| 5.099E-16 |          |           |           |           |           |           |           |           |           |
| Pu-241    | %DSR(j)  |           | 2.295E-17 | 2.848E-17 | 1.448E-16 | 4.451E-16 | 2.010E-15 | 1.064E-14 | 3.326E-14 |
| 8.279E-14 |          |           |           |           |           |           |           |           |           |

1RESRAD-OFFSITE, Version 2.6      T' Limit = 30 days      09/19/2012 14:58 Page 87

Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.R0F

| Dose/Source Ratios Summed Over All Pathways                       |          |            |                            |            |            |            |            |            |            |
|-------------------------------------------------------------------|----------|------------|----------------------------|------------|------------|------------|------------|------------|------------|
| Parent and Progeny Principal Radionuclide Contributions Indicated |          |            |                            |            |            |            |            |            |            |
| 0 Parent                                                          | Product  | Parent and | DSR(j,t) (mrem/yr)/(pCi/g) |            |            |            |            |            |            |
| (i)                                                               | (j)      | Thread     | 0.000E+00                  | 1.000E+00  | 6.000E+00  | 1.200E+01  | 3.000E+01  | 1.000E+02  | 3.000E+02  |
| 1.000E+03                                                         |          |            | ffffffffff                 | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff |
| Pu-241+D                                                          | Pu-241+D | 2.450E-05  | 2.055E-15                  | 1.959E-15  | 1.542E-15  | 1.157E-15  | 4.887E-16  | 1.712E-17  | 1.189E-21  |
| 3.317E-36                                                         |          |            |                            |            |            |            |            |            |            |
| Pu-241+D                                                          | Np-237+D | 2.450E-05  | 5.051E-20                  | 1.486E-19  | 5.744E-19  | 9.679E-19  | 1.653E-18  | 2.155E-18  | 2.241E-18  |



|           |          |           |           |           |           |           |           |           |           |  |  |
|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|
| 2.498E-18 |          |           |           |           |           |           |           |           |           |  |  |
| Pu-241+D  | U-233    | 2.450E-05 | 5.802E-30 | 3.626E-29 | 5.996E-28 | 2.026E-27 | 9.484E-27 | 5.278E-26 | 1.902E-25 |  |  |
| 7.367E-25 |          |           |           |           |           |           |           |           |           |  |  |
| Pu-241+D  | Th-229+D | 2.450E-05 | 1.644E-28 | 2.050E-27 | 1.360E-25 | 8.983E-25 | 1.082E-23 | 2.250E-22 | 2.635E-21 |  |  |
| 3.320E-20 |          |           |           |           |           |           |           |           |           |  |  |
| Pu-241    | %DSR(j)  |           | 2.055E-15 | 1.959E-15 | 1.542E-15 | 1.158E-15 | 4.904E-16 | 1.928E-17 | 2.245E-18 |  |  |
| 2.531E-18 |          |           |           |           |           |           |           |           |           |  |  |
| 0Pu-242   | Pu-242   | 5.500E-06 | 7.093E-24 | 7.095E-24 | 7.108E-24 | 7.124E-24 | 7.171E-24 | 7.357E-24 | 7.916E-24 |  |  |
| 1.023E-23 |          |           |           |           |           |           |           |           |           |  |  |
| 0Pu-242   | Pu-242   | 5.400E-05 | 6.964E-23 | 6.966E-23 | 6.979E-23 | 6.994E-23 | 7.041E-23 | 7.223E-23 | 7.773E-23 |  |  |
| 1.004E-22 |          |           |           |           |           |           |           |           |           |  |  |
| Pu-242    | U-238    | 5.400E-05 | 0.000E+00 | 0.000E+00 | 5.605E-45 | 5.605E-45 | 1.682E-44 | 5.605E-44 | 1.836E-43 |  |  |
| 9.949E-43 |          |           |           |           |           |           |           |           |           |  |  |
| Pu-242    | %DSR(j)  |           | 6.964E-23 | 6.966E-23 | 6.979E-23 | 6.994E-23 | 7.041E-23 | 7.223E-23 | 7.773E-23 |  |  |
| 1.004E-22 |          |           |           |           |           |           |           |           |           |  |  |
| 0Pu-242   | Pu-242   | 9.999E-01 | 1.290E-18 | 1.290E-18 | 1.292E-18 | 1.295E-18 | 1.304E-18 | 1.338E-18 | 1.439E-18 |  |  |
| 1.860E-18 |          |           |           |           |           |           |           |           |           |  |  |
| Pu-242    | U-238+D  | 9.999E-01 | 6.303E-18 | 1.891E-17 | 8.197E-17 | 1.577E-16 | 3.854E-16 | 1.277E-15 | 3.884E-15 |  |  |
| 1.372E-14 |          |           |           |           |           |           |           |           |           |  |  |
| Pu-242    | U-234    | 9.999E-01 | 7.891E-33 | 4.997E-32 | 8.916E-31 | 3.294E-30 | 1.968E-29 | 2.173E-28 | 2.039E-27 |  |  |
| 2.676E-26 |          |           |           |           |           |           |           |           |           |  |  |
| Pu-242    | Th-230   | 9.999E-01 | 1.891E-37 | 2.390E-36 | 1.676E-34 | 1.185E-33 | 1.725E-32 | 6.279E-31 | 1.765E-29 |  |  |
| 7.768E-28 |          |           |           |           |           |           |           |           |           |  |  |
| Pu-242    | Ra-226+D | 9.999E-01 | 5.571E-29 | 4.341E-28 | 6.735E-27 | 8.864E-26 | 3.135E-24 | 3.688E-22 | 2.939E-20 |  |  |
| 3.577E-18 |          |           |           |           |           |           |           |           |           |  |  |
| Pu-242    | Pb-210+D | 9.999E-01 | 5.504E-36 | 4.136E-35 | 3.643E-35 | 6.393E-34 | 5.339E-32 | 1.562E-29 | 2.156E-27 |  |  |
| 3.645E-25 |          |           |           |           |           |           |           |           |           |  |  |
| Pu-242    | Po-210   | 9.999E-01 | 6.383E-35 | 3.913E-34 | 3.180E-34 | 3.423E-33 | 3.122E-31 | 9.642E-29 | 1.334E-26 |  |  |
| 2.151E-24 |          |           |           |           |           |           |           |           |           |  |  |
| Pu-242    | %DSR(j)  |           | 7.592E-18 | 2.020E-17 | 8.327E-17 | 1.590E-16 | 3.867E-16 | 1.279E-15 | 3.886E-15 |  |  |
| 1.373E-14 |          |           |           |           |           |           |           |           |           |  |  |
| 0Ra-226+D | Ra-226+D | 1.000E+00 | 5.066E-05 | 5.065E-05 | 5.057E-05 | 5.048E-05 | 5.020E-05 | 4.915E-05 | 4.627E-05 |  |  |
| 3.744E-05 |          |           |           |           |           |           |           |           |           |  |  |

|                        |           |           |           |           |           |           |           |           |           |
|------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Ra-226+D<br>4.363E-12  | Pb-210+D  | 1.000E+00 | 8.087E-14 | 2.395E-13 | 9.628E-13 | 1.695E-12 | 3.222E-12 | 4.990E-12 | 5.023E-12 |
| Ra-226+D<br>2.581E-11  | Po-210    | 1.000E+00 | 2.292E-13 | 1.019E-12 | 5.663E-12 | 1.040E-11 | 2.028E-11 | 3.156E-11 | 3.132E-11 |
| Ra-226<br>3.744E-05    | %DSR(j)   |           | 5.066E-05 | 5.065E-05 | 5.057E-05 | 5.048E-05 | 5.020E-05 | 4.915E-05 | 4.627E-05 |
| Ra-228+D<br>0.000E+00  | Ra-228+D  | 1.000E+00 | 9.457E-06 | 8.384E-06 | 4.592E-06 | 2.230E-06 | 2.554E-07 | 5.582E-11 | 1.945E-21 |
| Ra-228+D<br>0.000E+00  | Th-228+D  | 1.000E+00 | 3.453E-05 | 8.523E-05 | 1.234E-04 | 7.209E-05 | 8.671E-06 | 1.892E-09 | 6.546E-20 |
| Ra-228<br>0.000E+00    | %DSR(j)   |           | 4.398E-05 | 9.362E-05 | 1.280E-04 | 7.432E-05 | 8.927E-06 | 1.948E-09 | 6.740E-20 |
| Ru-106+D<br>0.000E+00  | Ru-106+D  | 1.000E+00 | 2.605E-07 | 1.301E-07 | 4.050E-09 | 6.292E-11 | 2.349E-16 | 1.803E-37 | 0.000E+00 |
| Sb-125<br>0.000E+00    | Sb-125    | 7.720E-01 | 3.474E-07 | 2.686E-07 | 7.421E-08 | 1.585E-08 | 1.545E-10 | 2.321E-18 | 1.012E-40 |
| Sb-125<br>0.000E+00    | Sb-125    | 2.280E-01 | 1.026E-07 | 7.932E-08 | 2.192E-08 | 4.682E-09 | 4.563E-11 | 6.855E-19 | 2.854E-41 |
| Sb-125<br>0.000E+00    | Te-125m   | 2.280E-01 | 3.078E-27 | 3.648E-27 | 1.017E-27 | 2.178E-28 | 2.141E-30 | 3.324E-38 | 0.000E+00 |
| Sb-125<br>0.000E+00    | %DSR(j)   |           | 1.026E-07 | 7.932E-08 | 2.192E-08 | 4.682E-09 | 4.563E-11 | 6.855E-19 | 2.854E-41 |
| Sm-151<br>0.000E+00    | Sm-151    | 1.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| Sn-121m+D<br>4.907E-22 | Sn-121m+D | 1.000E+00 | 1.061E-16 | 1.048E-16 | 9.852E-17 | 9.152E-17 | 7.337E-17 | 3.105E-17 | 2.662E-18 |

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T' Limit = 30 days

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

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

| 0 Parent<br>(i) | Product<br>(j) | Thread<br>Fraction | DSR(j,t) (mrem/yr)/(pCi/g) |            |            |            |            |            |            |            |
|-----------------|----------------|--------------------|----------------------------|------------|------------|------------|------------|------------|------------|------------|
| 1.000E+03       |                |                    | 0.000E+00                  | 1.000E+00  | 6.000E+00  | 1.200E+01  | 3.000E+01  | 1.000E+02  | 3.000E+02  |            |
| ffffffffff      | ffffffffff     | ffffffffff         | ffffffffff                 | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff |
| Sn-126+D        | Sn-126+D       | 1.000E+00          | 3.586E-06                  | 3.586E-06  | 3.589E-06  | 3.592E-06  | 3.602E-06  | 3.641E-06  | 3.753E-06  |            |
| 4.173E-06       |                |                    |                            |            |            |            |            |            |            |            |
| 0Sr-90+D        | Sr-90+D        | 1.000E+00          | 2.944E-10                  | 2.875E-10  | 2.555E-10  | 2.218E-10  | 1.450E-10  | 2.779E-11  | 2.476E-13  |            |
| 1.654E-20       |                |                    |                            |            |            |            |            |            |            |            |
| 0Th-228+D       | Th-228+D       | 1.000E+00          | 1.916E-04                  | 1.334E-04  | 2.183E-05  | 2.486E-06  | 3.672E-09  | 3.572E-20  | 0.000E+00  |            |
| 0.000E+00       |                |                    |                            |            |            |            |            |            |            |            |
| 0Th-230         | Th-230         | 1.000E+00          | 9.143E-16                  | 9.145E-16  | 9.160E-16  | 9.177E-16  | 9.230E-16  | 9.438E-16  | 1.006E-15  |            |
| 1.256E-15       |                |                    |                            |            |            |            |            |            |            |            |
| Th-230          | Ra-226+D       | 1.000E+00          | 1.097E-08                  | 3.292E-08  | 1.426E-07  | 2.741E-07  | 6.677E-07  | 2.186E-06  | 6.424E-06  |            |
| 2.022E-05       |                |                    |                            |            |            |            |            |            |            |            |
| Th-230          | Pb-210+D       | 1.000E+00          | 1.320E-17                  | 8.289E-17  | 1.406E-15  | 4.894E-15  | 2.468E-14  | 1.599E-13  | 6.180E-13  |            |
| 2.263E-12       |                |                    |                            |            |            |            |            |            |            |            |
| Th-230          | Po-210         | 1.000E+00          | 2.992E-17                  | 2.871E-16  | 7.623E-15  | 2.871E-14  | 1.522E-13  | 1.004E-12  | 3.845E-12  |            |
| 1.338E-11       |                |                    |                            |            |            |            |            |            |            |            |
| Th-230          | %DSR(j)        |                    | 1.097E-08                  | 3.292E-08  | 1.426E-07  | 2.741E-07  | 6.677E-07  | 2.186E-06  | 6.424E-06  |            |
| 2.022E-05       |                |                    |                            |            |            |            |            |            |            |            |
| 0Th-232         | Th-232         | 1.000E+00          | 1.968E-17                  | 1.968E-17  | 1.972E-17  | 1.976E-17  | 1.989E-17  | 2.041E-17  | 2.194E-17  |            |
| 2.830E-17       |                |                    |                            |            |            |            |            |            |            |            |
| Th-232          | Ra-228+D       | 1.000E+00          | 5.784E-07                  | 1.652E-06  | 5.451E-06  | 7.822E-06  | 9.823E-06  | 1.018E-05  | 1.048E-05  |            |
| 1.160E-05       |                |                    |                            |            |            |            |            |            |            |            |
| Th-232          | Th-228+D       | 1.000E+00          | 1.638E-06                  | 9.139E-06  | 8.261E-05  | 1.535E-04  | 2.198E-04  | 2.303E-04  | 2.354E-04  |            |
| 2.543E-04       |                |                    |                            |            |            |            |            |            |            |            |
| Th-232          | %DSR(j)        |                    | 2.217E-06                  | 1.079E-05  | 8.806E-05  | 1.613E-04  | 2.296E-04  | 2.404E-04  | 2.459E-04  |            |
| 2.659E-04       |                |                    |                            |            |            |            |            |            |            |            |
| 0U-233          | U-233          | 1.000E+00          | 9.019E-13                  | 9.019E-13  | 9.024E-13  | 9.029E-13  | 9.044E-13  | 9.104E-13  | 9.277E-13  |            |
| 9.908E-13       |                |                    |                            |            |            |            |            |            |            |            |
| U-233           | Th-229+D       | 1.000E+00          | 4.575E-11                  | 1.373E-10  | 5.949E-10  | 1.144E-09  | 2.793E-09  | 9.216E-09  | 2.767E-08  |            |
| 9.355E-08       |                |                    |                            |            |            |            |            |            |            |            |

|           |          |           |           |           |           |           |           |           |           |
|-----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| U-233     | %DSR(j)  |           | 4.665E-11 | 1.382E-10 | 5.958E-10 | 1.145E-09 | 2.794E-09 | 9.217E-09 | 2.768E-08 |
| 9.355E-08 |          |           |           |           |           |           |           |           |           |
| 0U-234    | U-234    | 1.000E+00 | 9.551E-17 | 9.552E-17 | 9.562E-17 | 9.573E-17 | 9.606E-17 | 9.735E-17 | 1.012E-16 |
| 1.157E-16 |          |           |           |           |           |           |           |           |           |
| U-234     | Th-230   | 1.000E+00 | 4.115E-21 | 1.235E-20 | 5.357E-20 | 1.032E-19 | 2.529E-19 | 8.479E-19 | 2.665E-18 |
| 1.057E-17 |          |           |           |           |           |           |           |           |           |
| U-234     | Ra-226+D | 1.000E+00 | 3.712E-14 | 2.350E-13 | 4.187E-12 | 1.544E-11 | 9.174E-11 | 9.914E-10 | 8.751E-09 |
| 9.298E-08 |          |           |           |           |           |           |           |           |           |
| U-234     | Pb-210+D | 1.000E+00 | 3.316E-23 | 4.149E-22 | 2.807E-20 | 1.897E-19 | 2.426E-18 | 5.800E-17 | 7.616E-16 |
| 1.008E-14 |          |           |           |           |           |           |           |           |           |
| U-234     | Po-210   | 1.000E+00 | 6.422E-23 | 1.233E-21 | 1.414E-19 | 1.067E-18 | 1.469E-17 | 3.621E-16 | 4.729E-15 |
| 5.955E-14 |          |           |           |           |           |           |           |           |           |
| U-234     | %DSR(j)  |           | 3.722E-14 | 2.351E-13 | 4.187E-12 | 1.544E-11 | 9.174E-11 | 9.914E-10 | 8.751E-09 |
| 9.298E-08 |          |           |           |           |           |           |           |           |           |
| 0U-235+D  | U-235+D  | 1.000E+00 | 5.620E-10 | 5.620E-10 | 5.623E-10 | 5.626E-10 | 5.636E-10 | 5.674E-10 | 5.785E-10 |
| 6.190E-10 |          |           |           |           |           |           |           |           |           |
| U-235+D   | Pa-231   | 1.000E+00 | 3.408E-14 | 1.023E-13 | 4.434E-13 | 8.533E-13 | 2.087E-12 | 6.933E-12 | 2.123E-11 |
| 7.693E-11 |          |           |           |           |           |           |           |           |           |
| U-235+D   | Ac-227+D | 1.000E+00 | 1.409E-14 | 8.846E-14 | 1.499E-12 | 5.212E-12 | 2.621E-11 | 1.691E-10 | 6.590E-10 |
| 2.533E-09 |          |           |           |           |           |           |           |           |           |
| U-235     | %DSR(j)  |           | 5.620E-10 | 5.622E-10 | 5.643E-10 | 5.687E-10 | 5.919E-10 | 7.435E-10 | 1.259E-09 |
| 3.229E-09 |          |           |           |           |           |           |           |           |           |
| 0U-236    | U-236    | 1.000E+00 | 2.393E-17 | 2.393E-17 | 2.396E-17 | 2.398E-17 | 2.407E-17 | 2.441E-17 | 2.542E-17 |
| 2.927E-17 |          |           |           |           |           |           |           |           |           |
| U-236     | Th-232   | 1.000E+00 | 4.854E-28 | 1.457E-27 | 6.321E-27 | 1.218E-26 | 2.987E-26 | 1.004E-25 | 3.184E-25 |
| 1.301E-24 |          |           |           |           |           |           |           |           |           |
| U-236     | Ra-228+D | 1.000E+00 | 1.085E-17 | 6.648E-17 | 9.895E-16 | 2.996E-15 | 1.113E-14 | 4.600E-14 | 1.479E-13 |
| 5.290E-13 |          |           |           |           |           |           |           |           |           |
| U-236     | Th-228+D | 1.000E+00 | 2.307E-17 | 2.644E-16 | 1.121E-14 | 4.708E-14 | 2.224E-13 | 1.009E-12 | 3.292E-12 |
| 1.157E-11 |          |           |           |           |           |           |           |           |           |
| U-236     | %DSR(j)  |           | 5.785E-17 | 3.548E-16 | 1.222E-14 | 5.010E-14 | 2.335E-13 | 1.055E-12 | 3.440E-12 |
| 1.210E-11 |          |           |           |           |           |           |           |           |           |
| 0U-238    | U-238    | 5.400E-05 | 3.254E-36 | 3.256E-36 | 3.266E-36 | 3.278E-36 | 3.314E-36 | 3.458E-36 | 3.904E-36 |

5.970E-36  
1RESRAD-OFFSITE, Version 2.6                    T' Limit = 30 days                    09/19/2012 14:58 Page 89  
Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.ROF

| Dose/Source Ratios Summed Over All Pathways                       |               |                |                    |                            |            |            |            |            |            |            |
|-------------------------------------------------------------------|---------------|----------------|--------------------|----------------------------|------------|------------|------------|------------|------------|------------|
| Parent and Progeny Principal Radionuclide Contributions Indicated |               |                |                    |                            |            |            |            |            |            |            |
| 0                                                                 | Parent<br>(i) | Product<br>(j) | Thread<br>Fraction | DSR(j,t) (mrem/yr)/(pCi/g) |            |            |            |            |            |            |
| 1.000E+03                                                         |               |                |                    | 0.000E+00                  | 1.000E+00  | 6.000E+00  | 1.200E+01  | 3.000E+01  | 1.000E+02  | 3.000E+02  |
| 1.000E+03                                                         | ffffffffff    | ffffffffff     | ffffffffff         | ffffffffff                 | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff |
| 8.227E-08                                                         | U-238+D       | U-238+D        | 9.999E-01          | 8.125E-08                  | 8.125E-08  | 8.126E-08  | 8.126E-08  | 8.128E-08  | 8.135E-08  | 8.155E-08  |
| 3.286E-19                                                         | U-238+D       | U-234          | 9.999E-01          | 1.354E-22                  | 4.062E-22  | 1.762E-21  | 3.392E-21  | 8.306E-21  | 2.774E-20  | 8.621E-20  |
| 1.465E-20                                                         | U-238+D       | Th-230         | 9.999E-01          | 4.383E-27                  | 2.775E-26  | 4.952E-25  | 1.829E-24  | 1.093E-23  | 1.205E-22  | 1.127E-21  |
| 8.892E-11                                                         | U-238+D       | Ra-226+D       | 9.999E-01          | 2.928E-20                  | 3.686E-19  | 2.589E-17  | 1.828E-16  | 2.646E-15  | 9.427E-14  | 2.494E-12  |
| 9.345E-18                                                         | U-238+D       | Pb-210+D       | 9.999E-01          | 1.861E-29                  | 4.738E-28  | 1.319E-25  | 1.718E-24  | 5.477E-23  | 4.625E-21  | 1.985E-19  |
| 5.518E-17                                                         | U-238+D       | Po-210         | 9.999E-01          | 0.000E+00                  | 1.009E-27  | 6.213E-25  | 9.288E-24  | 3.257E-22  | 2.871E-20  | 1.230E-18  |
| 8.236E-08                                                         | U-238         | %DSR(j)        |                    | 8.125E-08                  | 8.125E-08  | 8.126E-08  | 8.126E-08  | 8.128E-08  | 8.135E-08  | 8.156E-08  |
| 0000000000                                                        | 0000000000    | 0000000000     | 0000000000         | 0000000000                 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |

The DSR includes contributions from associated (half-life  $\hat{=}$  30 days) daughters.  
1RESRAD-OFFSITE, Version 2.6                    T' Limit = 30 days                    09/19/2012 14:58 Page 90  
Parent Dose Report  
Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

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

Basic Radiation Dose Limit = 1.500E+01 mrem/yr

| 0Nuclide | (i)    | t= 0.000E+00 | 1.000E+00  | 6.000E+00  | 1.200E+01  | 3.000E+01  | 1.000E+02  | 3.000E+02  | 1.000E+03  |
|----------|--------|--------------|------------|------------|------------|------------|------------|------------|------------|
| ffffff   | ffffff | ffffff       | ffffff     | ffffff     | ffffff     | ffffff     | ffffff     | ffffff     | ffffff     |
| Ac-227   |        | 1.356E+08    | 1.400E+08  | 1.640E+08  | 1.983E+08  | 3.507E+08  | 3.217E+09  | 1.810E+12  | *7.232E+13 |
| Al-26    |        | 1.667E+05    | 1.667E+05  | 1.666E+05  | 1.665E+05  | 1.661E+05  | 1.646E+05  | 1.605E+05  | 1.468E+05  |
| Am-241   |        | *3.431E+12   | *3.431E+12 | *3.431E+12 | *3.431E+12 | *3.431E+12 | *3.431E+12 | *3.431E+12 | *3.431E+12 |
| Cf-249   |        | 1.196E+08    | 1.198E+08  | 1.209E+08  | 1.222E+08  | 1.262E+08  | 1.431E+08  | 2.050E+08  | 7.199E+08  |
| Cf-251   |        | 5.659E+10    | 5.662E+10  | 5.677E+10  | 5.694E+10  | 5.746E+10  | 5.952E+10  | 6.581E+10  | 9.294E+10  |
| Cf-252   |        | *5.376E+14   | *5.376E+14 | *5.376E+14 | *5.376E+14 | *5.376E+14 | *5.376E+14 | *5.376E+14 | *5.376E+14 |
| Cl-36    |        | *3.302E+10   | *3.302E+10 | *3.302E+10 | *3.302E+10 | *3.302E+10 | *3.302E+10 | *3.302E+10 | *3.302E+10 |
| Co-60    |        | 2.875E+05    | 3.281E+05  | 6.352E+05  | 1.403E+06  | 1.513E+07  | 1.573E+11  | *1.132E+15 | *1.132E+15 |
| Cs-134   |        | 4.411E+06    | 6.172E+06  | 3.309E+07  | 2.483E+08  | 1.050E+11  | *1.295E+15 | *1.295E+15 | *1.295E+15 |
| Cs-137   |        | 1.394E+07    | 1.427E+07  | 1.600E+07  | 1.837E+07  | 2.777E+07  | 1.386E+08  | 1.369E+10  | *8.704E+13 |
| Eu-154   |        | 1.210E+06    | 1.309E+06  | 1.939E+06  | 3.109E+06  | 1.280E+07  | 3.145E+09  | *2.639E+14 | *2.639E+14 |
| Eu-155   |        | 2.044E+14    | 2.349E+14  | *4.652E+14 | *4.652E+14 | *4.652E+14 | *4.652E+14 | *4.652E+14 | *4.652E+14 |
| H-3      |        | *9.597E+15   | *9.597E+15 | *9.597E+15 | *9.597E+15 | *9.597E+15 | *9.597E+15 | *9.597E+15 | *9.597E+15 |
| Ho-166m  |        | 3.488E+06    | 3.489E+06  | 3.497E+06  | 3.505E+06  | 3.532E+06  | 3.636E+06  | 3.952E+06  | 5.291E+06  |
| Na-22    |        | 1.278E+06    | 1.668E+06  | 6.312E+06  | 3.118E+07  | 3.758E+09  | *6.247E+15 | *6.247E+15 | *6.247E+15 |
| Np-237   |        | *7.047E+08   | *7.047E+08 | *7.047E+08 | *7.047E+08 | *7.047E+08 | *7.047E+08 | *7.047E+08 | *7.047E+08 |
| Pb-210   |        | 6.803E+11    | 4.295E+11  | 4.653E+11  | 5.602E+11  | 9.775E+11  | 8.520E+12  | *7.634E+13 | *7.634E+13 |
| Pm-147   |        | *9.275E+14   | *9.275E+14 | *9.275E+14 | *9.275E+14 | *9.275E+14 | *9.275E+14 | *9.275E+14 | *9.275E+14 |
| Pu-238   |        | *1.712E+13   | *1.712E+13 | *1.712E+13 | *1.712E+13 | *1.712E+13 | *1.712E+13 | 9.862E+12  | 5.667E+11  |
| Pu-239   |        | *6.214E+10   | *6.214E+10 | *6.214E+10 | *6.214E+10 | *6.214E+10 | *6.214E+10 | *6.214E+10 | *6.214E+10 |
| Pu-240   |        | *2.278E+11   | *2.278E+11 | *2.278E+11 | *2.278E+11 | *2.278E+11 | *2.278E+11 | *2.278E+11 | *2.278E+11 |
| Pu-241   |        | *1.030E+14   | *1.030E+14 | *1.030E+14 | *1.030E+14 | *1.030E+14 | *1.030E+14 | *1.030E+14 | *1.030E+14 |
| Pu-242   |        | *3.925E+09   | *3.925E+09 | *3.925E+09 | *3.925E+09 | *3.925E+09 | *3.925E+09 | *3.925E+09 | *3.925E+09 |
| Ra-226   |        | 2.961E+05    | 2.962E+05  | 2.966E+05  | 2.972E+05  | 2.988E+05  | 3.052E+05  | 3.242E+05  | 4.007E+05  |
| Ra-228   |        | 3.410E+05    | 1.602E+05  | 1.172E+05  | 2.018E+05  | 1.680E+06  | 7.701E+09  | *2.726E+14 | *2.726E+14 |
| Ru-106   |        | 5.759E+07    | 1.153E+08  | 3.704E+09  | 2.384E+11  | *3.348E+15 | *3.348E+15 | *3.348E+15 | *3.348E+15 |

|          |            |            |            |            |            |            |            |            |
|----------|------------|------------|------------|------------|------------|------------|------------|------------|
| Sb-125   | 3.334E+07  | 4.312E+07  | 1.560E+08  | 7.304E+08  | 7.495E+10  | *1.033E+15 | *1.033E+15 | *1.033E+15 |
| Sm-151   | *2.632E+13 | *2.632E+13 | *2.632E+13 | *2.632E+13 | *2.632E+13 | *2.632E+13 | *2.632E+13 | *2.632E+13 |
| Sn-121m  | *5.376E+13 | *5.376E+13 | *5.376E+13 | *5.376E+13 | *5.376E+13 | *5.376E+13 | *5.376E+13 | *5.376E+13 |
| Sn-126   | 4.183E+06  | 4.183E+06  | 4.179E+06  | 4.176E+06  | 4.164E+06  | 4.120E+06  | 3.997E+06  | 3.595E+06  |
| Sr-90    | 5.095E+10  | 5.217E+10  | 5.870E+10  | 6.763E+10  | 1.034E+11  | 5.398E+11  | 6.057E+13  | *1.365E+14 |
| Th-228   | 7.830E+04  | 1.125E+05  | 6.872E+05  | 6.033E+06  | 4.085E+09  | *8.195E+14 | *8.195E+14 | *8.195E+14 |
| Th-230   | 1.367E+09  | 4.556E+08  | 1.052E+08  | 5.473E+07  | 2.247E+07  | 6.861E+06  | 2.335E+06  | 7.419E+05  |
| Th-232   | *1.097E+05 | *1.097E+05 | *1.097E+05 | 9.301E+04  | 6.532E+04  | 6.239E+04  | 6.101E+04  | 5.642E+04  |
| U-233    | *9.678E+09 | *9.678E+09 | *9.678E+09 | *9.678E+09 | 5.369E+09  | 1.627E+09  | 5.420E+08  | 1.603E+08  |
| U-234    | *6.247E+09 | *6.247E+09 | *6.247E+09 | *6.247E+09 | *6.247E+09 | *6.247E+09 | 1.714E+09  | 1.613E+08  |
| U-235    | *2.161E+06 | *2.161E+06 | *2.161E+06 | *2.161E+06 | *2.161E+06 | *2.161E+06 | *2.161E+06 | *2.161E+06 |
| U-236    | *6.468E+07 | *6.468E+07 | *6.468E+07 | *6.468E+07 | *6.468E+07 | *6.468E+07 | *6.468E+07 | *6.468E+07 |
| U-238    | *3.361E+05 | *3.361E+05 | *3.361E+05 | *3.361E+05 | *3.361E+05 | *3.361E+05 | *3.361E+05 | *3.361E+05 |
| 00000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |

\*At specific activity limit

1RESRAD-OFFSITE, Version 2.6

T' Limit = 30 days

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

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 = 1030 years

| 0Nuclide   | Initial    | tmin       | DSR(i,tmin) | G(i,tmin)  | DSR(i,tmax) | G(i,tmax)  |
|------------|------------|------------|-------------|------------|-------------|------------|
| (i)        | (pCi/g)    | (years)    |             | (pCi/g)    |             | (pCi/g)    |
| ffffffffff | ffffffffff | ffffffffff | ffffffffff  | ffffffffff | ffffffffff  | ffffffffff |
| Ac-227     | 2.340E+00  | 0          | 1.106E-07   | 1.356E+08  | 7.704E-22   | *7.232E+13 |
| Al-26      | 7.640E+02  | 1030       | 1.025E-04   | 1.463E+05  | 1.025E-04   | 1.463E+05  |
| Am-241     | 1.410E+03  | 1030       | 2.548E-12   | 5.886E+12  | 2.548E-12   | *3.431E+12 |
| Cf-249     | 3.240E-03  | 0          | 1.254E-07   | *4.094E+12 | 3.952E-08   | 3.795E+08  |
| Cf-251     | 1.340E-02  | 0          | 2.650E-10   | *1.586E+12 | 1.591E-10   | 9.428E+10  |
| Cf-252     | 1.510E-07  | 0          | 9.562E-17   | *5.376E+14 | 8.954E-17   | *5.376E+14 |

|         |           |      |           |            |           |            |
|---------|-----------|------|-----------|------------|-----------|------------|
| Cl-36   | 2.790E-01 | 0    | 3.563E-12 | *3.302E+10 | 2.547E-15 | *3.302E+10 |
| Co-60   | 4.860E+00 | 0    | 5.217E-05 | 2.875E+05  | 0.000E+00 | *1.132E+15 |
| Cs-134  | 2.620E-06 | 0    | 3.400E-06 | *1.295E+15 | 0.000E+00 | *1.295E+15 |
| Cs-137  | 3.050E+03 | 0    | 1.076E-06 | 1.394E+07  | 5.811E-17 | *8.704E+13 |
| Eu-154  | 9.920E-03 | 0    | 1.240E-05 | 1.210E+06  | 8.659E-41 | *2.639E+14 |
| Eu-155  | 8.720E-03 | 0    | 7.339E-14 | *4.652E+14 | 0.000E+00 | *4.652E+14 |
| H-3     | 3.780E+04 | 0    | 0.000E+00 | *9.597E+15 | 0.000E+00 | *9.597E+15 |
| Ho-166m | 5.020E-01 | 0    | 4.300E-06 | 3.488E+06  | 2.800E-06 | 5.356E+06  |
| Na-22   | 1.120E-03 | 0    | 1.174E-05 | 1.278E+06  | 0.000E+00 | *6.247E+15 |
| Np-237  | 1.620E-03 | 1030 | 1.543E-08 | *7.047E+08 | 1.543E-08 | *7.047E+08 |
| Pb-210  | 2.850E+00 | 2.01 | 3.605E-11 | 4.161E+11  | 5.751E-25 | *7.634E+13 |
| Pm-147  | 1.370E-08 | 0    | 1.372E-18 | *9.275E+14 | 0.000E+00 | *9.275E+14 |
| Pu-238  | 1.470E+04 | 1030 | 2.821E-11 | 5.318E+11  | 2.821E-11 | 5.318E+11  |
| Pu-239  | 9.250E+03 | 1030 | 3.734E-13 | 4.017E+13  | 3.734E-13 | *6.214E+10 |
| Pu-240  | 2.380E+03 | 1030 | 1.865E-16 | 8.042E+16  | 1.865E-16 | *2.278E+11 |
| Pu-241  | 3.820E+03 | 1030 | 8.425E-14 | 1.780E+14  | 1.685E-13 | 8.902E+13  |
| Pu-242  | 2.520E-01 | 1030 | 1.417E-14 | *3.925E+09 | 1.417E-14 | *3.925E+09 |
| Ra-226  | 3.850E+00 | 0    | 5.066E-05 | 2.961E+05  | 3.710E-05 | 4.043E+05  |
| Ra-228  | 4.190E+00 | 4.02 | 1.371E-04 | 1.094E+05  | 0.000E+00 | *2.726E+14 |
| Ru-106  | 7.770E-09 | 0    | 2.605E-07 | *3.348E+15 | 0.000E+00 | *3.348E+15 |
| Sb-125  | 5.400E-04 | 0    | 4.499E-07 | 3.334E+07  | 0.000E+00 | *1.033E+15 |
| Sm-151  | 2.110E-02 | 0    | 0.000E+00 | *2.632E+13 | 0.000E+00 | *2.632E+13 |
| Sn-121m | 5.020E-01 | 0    | 1.061E-16 | *5.376E+13 | 3.416E-22 | *5.376E+13 |
| Sn-126  | 1.220E-01 | 1030 | 4.192E-06 | 3.578E+06  | 4.192E-06 | 3.578E+06  |
| Sr-90   | 4.300E+02 | 0    | 2.944E-10 | 5.095E+10  | 8.244E-21 | *1.365E+14 |
| Th-228  | 8.930E-03 | 0    | 1.916E-04 | 7.830E+04  | 0.000E+00 | *8.195E+14 |
| Th-230  | 8.370E+01 | 1030 | 2.077E-05 | 7.223E+05  | 2.077E-05 | 7.223E+05  |
| Th-232  | 9.880E-03 | 1030 | 2.668E-04 | *1.097E+05 | 2.668E-04 | 5.623E+04  |
| U-233   | 2.790E+00 | 1030 | 9.637E-08 | 1.557E+08  | 9.637E-08 | 1.557E+08  |
| U-234   | 4.260E+01 | 1030 | 9.838E-08 | 1.525E+08  | 9.838E-08 | 1.525E+08  |
| U-235   | 2.180E+02 | 1030 | 3.317E-09 | 4.522E+09  | 3.317E-09 | *2.161E+06 |
| U-236   | 4.070E-01 | 1030 | 1.247E-11 | *6.468E+07 | 1.247E-11 | *6.468E+07 |
| U-238   | 5.350E+01 | 1030 | 8.240E-08 | 1.820E+08  | 8.240E-08 | *3.361E+05 |



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\*At specific activity limit

1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58 Page 92  
Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.ROF

| Individual Nuclide Dose Summed Over All Pathways |               |           |                    |           |           |           |           |           |           |
|--------------------------------------------------|---------------|-----------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Parent Nuclide and Thread Fraction Indicated     |               |           |                    |           |           |           |           |           |           |
| Nuclide<br>(j)                                   | Parent<br>(i) | THF(i)    | DOSE(j,t), mrem/yr |           |           |           |           |           |           |
|                                                  |               |           | t=                 | 0.000E+00 | 1.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 1.000E+02 |
| Ac-227                                           | Ac-227        | 1.000E+00 | 2.588E-07          | 2.507E-07 | 2.140E-07 | 1.770E-07 | 1.001E-07 | 1.091E-08 | 1.939E-11 |
| Ac-227                                           | Cf-251        | 1.000E+00 | 0.000E+00          | 1.201E-35 | 3.183E-35 | 1.669E-35 | 0.000E+00 | 1.162E-31 | 4.942E-29 |
| Ac-227                                           | Pu-239        | 1.000E+00 | 3.582E-20          | 4.481E-19 | 3.030E-17 | 2.046E-16 | 2.612E-15 | 6.224E-14 | 8.226E-13 |
| Ac-227                                           | U-235         | 1.000E+00 | 3.072E-12          | 1.928E-11 | 3.269E-10 | 1.136E-09 | 5.713E-09 | 3.686E-08 | 1.437E-07 |
| Ac-227                                           | %DOSE(j):     |           | 2.588E-07          | 2.508E-07 | 2.143E-07 | 1.781E-07 | 1.058E-07 | 4.777E-08 | 1.437E-07 |
| Al-26                                            | Al-26         | 1.000E+00 | 6.873E-02          | 6.874E-02 | 6.879E-02 | 6.884E-02 | 6.900E-02 | 6.961E-02 | 7.140E-02 |
| Am-241                                           | Am-241        | 1.000E+00 | 9.851E-19          | 9.841E-19 | 9.789E-19 | 9.727E-19 | 9.544E-19 | 8.863E-19 | 7.174E-19 |
| Am-241                                           | Cf-249        | 1.000E+00 | 7.377E-34          | 9.195E-33 | 6.087E-31 | 4.010E-30 | 4.787E-29 | 9.541E-28 | 9.785E-27 |
| Am-241                                           | Pu-241        | 1.000E+00 | 2.103E-21          | 6.182E-21 | 2.384E-20 | 4.005E-20 | 6.755E-20 | 8.198E-20 | 6.699E-20 |

|           |                  |           |           |           |           |           |           |           |
|-----------|------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Am-241    | %DOSE(j):        | 9.872E-19 | 9.902E-19 | 1.003E-18 | 1.013E-18 | 1.022E-18 | 9.683E-19 | 7.844E-19 |
| 3.743E-19 |                  |           |           |           |           |           |           |           |
| 0Np-237   | Am-241 1.000E+00 | 2.958E-12 | 8.869E-12 | 3.832E-11 | 7.341E-11 | 1.771E-10 | 5.594E-10 | 1.489E-09 |
| 3.510E-09 |                  |           |           |           |           |           |           |           |
| Np-237    | Cf-249 1.000E+00 | 1.002E-27 | 2.392E-26 | 6.083E-24 | 7.747E-23 | 2.325E-21 | 1.651E-19 | 5.418E-18 |
| 1.479E-16 |                  |           |           |           |           |           |           |           |
| Np-237    | Cf-249 2.450E-05 | 6.768E-29 | 8.436E-28 | 5.586E-26 | 3.681E-25 | 4.401E-24 | 8.849E-23 | 9.388E-22 |
| 8.763E-21 |                  |           |           |           |           |           |           |           |
| Np-237    | Np-237 1.000E+00 | 2.100E-11 | 2.100E-11 | 2.102E-11 | 2.104E-11 | 2.109E-11 | 2.132E-11 | 2.200E-11 |
| 2.452E-11 |                  |           |           |           |           |           |           |           |
| Np-237    | Pu-241 1.000E+00 | 4.766E-15 | 2.977E-14 | 4.909E-13 | 1.653E-12 | 7.658E-12 | 4.065E-11 | 1.270E-10 |
| 3.143E-10 |                  |           |           |           |           |           |           |           |
| Np-237    | Pu-241 2.450E-05 | 1.929E-16 | 5.675E-16 | 2.194E-15 | 3.697E-15 | 6.314E-15 | 8.232E-15 | 8.560E-15 |
| 9.542E-15 |                  |           |           |           |           |           |           |           |
| Np-237    | %DOSE(j):        | 2.396E-11 | 2.990E-11 | 5.982E-11 | 9.610E-11 | 2.059E-10 | 6.214E-10 | 1.638E-09 |
| 3.849E-09 |                  |           |           |           |           |           |           |           |
| 0U-233    | Am-241 1.000E+00 | 3.383E-22 | 2.141E-21 | 3.809E-20 | 1.402E-19 | 8.288E-19 | 8.780E-18 | 7.343E-17 |
| 6.678E-16 |                  |           |           |           |           |           |           |           |
| U-233     | Cf-249 1.000E+00 | 7.854E-37 | 2.479E-36 | 2.465E-33 | 6.040E-32 | 4.526E-30 | 1.138E-27 | 1.233E-25 |
| 1.311E-23 |                  |           |           |           |           |           |           |           |
| U-233     | Cf-249 2.450E-05 | 4.677E-39 | 1.112E-37 | 2.834E-35 | 3.617E-34 | 1.092E-32 | 7.959E-31 | 2.821E-29 |
| 1.005E-27 |                  |           |           |           |           |           |           |           |
| U-233     | Np-237 1.000E+00 | 3.195E-21 | 9.586E-21 | 4.157E-20 | 8.000E-20 | 1.957E-19 | 6.514E-19 | 2.004E-18 |
| 7.378E-18 |                  |           |           |           |           |           |           |           |
| U-233     | Pu-241 1.000E+00 | 4.050E-25 | 5.048E-24 | 3.345E-22 | 2.206E-21 | 2.643E-20 | 5.362E-19 | 5.834E-18 |
| 5.840E-17 |                  |           |           |           |           |           |           |           |
| U-233     | Pu-241 2.450E-05 | 2.216E-26 | 1.385E-25 | 2.290E-24 | 7.740E-24 | 3.623E-23 | 2.016E-22 | 7.266E-22 |
| 2.814E-21 |                  |           |           |           |           |           |           |           |
| U-233     | U-233 1.000E+00  | 2.516E-12 | 2.516E-12 | 2.518E-12 | 2.519E-12 | 2.523E-12 | 2.540E-12 | 2.588E-12 |
| 2.764E-12 |                  |           |           |           |           |           |           |           |
| U-233     | %DOSE(j):        | 2.516E-12 | 2.516E-12 | 2.518E-12 | 2.519E-12 | 2.523E-12 | 2.540E-12 | 2.588E-12 |
| 2.765E-12 |                  |           |           |           |           |           |           |           |
| 0Th-229   | Am-241 1.000E+00 | 9.559E-21 | 1.203E-19 | 8.431E-18 | 5.942E-17 | 8.560E-16 | 2.992E-14 | 7.510E-13 |

|           |           |           |           |           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 2.277E-11 |           |           |           |           |           |           |           |           |           |
| Th-229    | Cf-249    | 1.000E+00 | 5.408E-29 | 3.150E-31 | 1.299E-29 | 4.225E-29 | 2.392E-27 | 2.086E-24 | 7.129E-22 |
| 2.610E-19 |           |           |           |           |           |           |           |           |           |
| Th-229    | Cf-249    | 2.450E-05 | 1.248E-33 | 7.268E-36 | 3.549E-33 | 9.394E-32 | 7.049E-30 | 1.795E-27 | 2.019E-25 |
| 2.442E-23 |           |           |           |           |           |           |           |           |           |
| Th-229    | Np-237    | 1.000E+00 | 1.218E-19 | 7.711E-19 | 1.374E-17 | 5.072E-17 | 3.020E-16 | 3.289E-15 | 2.967E-14 |
| 3.395E-13 |           |           |           |           |           |           |           |           |           |
| Th-229    | Pu-241    | 1.000E+00 | 9.185E-24 | 2.219E-22 | 5.653E-20 | 7.213E-19 | 2.177E-17 | 1.585E-15 | 5.596E-14 |
| 1.948E-12 |           |           |           |           |           |           |           |           |           |
| Th-229    | Pu-241    | 2.450E-05 | 6.279E-25 | 7.829E-24 | 5.194E-22 | 3.431E-21 | 4.134E-20 | 8.594E-19 | 1.007E-17 |
| 1.268E-16 |           |           |           |           |           |           |           |           |           |
| Th-229    | U-233     | 1.000E+00 | 1.277E-10 | 3.830E-10 | 1.660E-09 | 3.192E-09 | 7.792E-09 | 2.571E-08 | 7.721E-08 |
| 2.610E-07 |           |           |           |           |           |           |           |           |           |
| Th-229    | %DOSE(j): |           | 1.277E-10 | 3.830E-10 | 1.660E-09 | 3.192E-09 | 7.792E-09 | 2.571E-08 | 7.721E-08 |
| 2.610E-07 |           |           |           |           |           |           |           |           |           |
| 0Cf-249   | Cf-249    | 5.200E-09 | 2.113E-18 | 2.109E-18 | 2.090E-18 | 2.068E-18 | 2.002E-18 | 1.765E-18 | 1.233E-18 |
| 3.510E-19 |           |           |           |           |           |           |           |           |           |
| Cf-249    | Cf-249    | 1.000E+00 | 4.063E-10 | 4.055E-10 | 4.019E-10 | 3.976E-10 | 3.850E-10 | 3.395E-10 | 2.371E-10 |
| 6.751E-11 |           |           |           |           |           |           |           |           |           |
| Cf-249    | %DOSE(j): |           | 4.063E-10 | 4.055E-10 | 4.019E-10 | 3.976E-10 | 3.850E-10 | 3.395E-10 | 2.371E-10 |
| 6.751E-11 |           |           |           |           |           |           |           |           |           |

1RESRAD-OFFSITE, Version 2.6                      T' Limit = 30 days                      09/19/2012 14:58    Page 93  
Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.ROF

| Individual Nuclide Dose Summed Over All Pathways |        |        |                    |           |           |           |           |           |           |
|--------------------------------------------------|--------|--------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|
| Parent Nuclide and Thread Fraction Indicated     |        |        |                    |           |           |           |           |           |           |
| 0Nuclide                                         | Parent | THF(i) | DOSE(j,t), mrem/yr |           |           |           |           |           |           |
| (j)                                              | (i)    |        | t=                 | 0.000E+00 | 1.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 1.000E+02 |
| +03                                              |        |        |                    |           |           |           |           |           |           |
| ffffff                                           | ffffff | ffffff |                    | ffffff    | ffffff    | ffffff    | ffffff    | ffffff    | ffffff    |
| ffffff                                           |        |        |                    |           |           |           |           |           |           |

|           |           |           |           |           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Cm-245    | Cf-249    | 1.000E+00 | 7.881E-19 | 2.363E-18 | 1.020E-17 | 1.953E-17 | 4.703E-17 | 1.473E-16 | 3.838E-16 |
| 8.644E-16 |           |           |           |           |           |           |           |           |           |
| Cm-245    | %DOSE(j): |           | 7.881E-19 | 2.363E-18 | 1.020E-17 | 1.953E-17 | 4.703E-17 | 1.473E-16 | 3.838E-16 |
| 8.644E-16 |           |           |           |           |           |           |           |           |           |
| 0Pu-241   | Cf-249    | 1.000E+00 | 5.237E-26 | 3.271E-25 | 5.394E-24 | 1.816E-23 | 8.403E-23 | 4.436E-22 | 1.363E-21 |
| 3.263E-21 |           |           |           |           |           |           |           |           |           |
| Pu-241    | Cf-249    | 2.450E-05 | 4.959E-24 | 3.098E-23 | 5.106E-22 | 1.719E-21 | 7.946E-21 | 4.181E-20 | 1.272E-19 |
| 2.947E-19 |           |           |           |           |           |           |           |           |           |
| Pu-241    | Pu-241    | 1.000E+00 | 8.289E-14 | 7.902E-14 | 6.221E-14 | 4.669E-14 | 1.974E-14 | 6.940E-16 | 4.865E-20 |
| 1.403E-34 |           |           |           |           |           |           |           |           |           |
| Pu-241    | %DOSE(j): |           | 8.289E-14 | 7.902E-14 | 6.221E-14 | 4.669E-14 | 1.974E-14 | 6.941E-16 | 1.772E-19 |
| 2.980E-19 |           |           |           |           |           |           |           |           |           |
| 0Cf-249   | Cf-249    | 2.450E-05 | 9.953E-15 | 9.936E-15 | 9.847E-15 | 9.741E-15 | 9.432E-15 | 8.318E-15 | 5.809E-15 |
| 1.654E-15 |           |           |           |           |           |           |           |           |           |
| 0Cm-245   | Cf-249    | 2.450E-05 | 1.931E-23 | 5.789E-23 | 2.499E-22 | 4.785E-22 | 1.152E-21 | 3.608E-21 | 9.404E-21 |
| 2.118E-20 |           |           |           |           |           |           |           |           |           |
| 0Cf-251   | Cf-251    | 1.000E+00 | 3.552E-12 | 3.550E-12 | 3.540E-12 | 3.529E-12 | 3.496E-12 | 3.369E-12 | 3.031E-12 |
| 2.094E-12 |           |           |           |           |           |           |           |           |           |
| 0Cm-247   | Cf-251    | 1.000E+00 | 4.141E-17 | 1.242E-16 | 5.377E-16 | 1.033E-15 | 2.511E-15 | 8.155E-15 | 2.344E-14 |
| 6.898E-14 |           |           |           |           |           |           |           |           |           |
| 0Am-243   | Cf-251    | 1.000E+00 | 5.312E-24 | 3.363E-23 | 5.992E-22 | 2.210E-21 | 1.314E-20 | 1.421E-19 | 1.260E-18 |
| 1.367E-17 |           |           |           |           |           |           |           |           |           |
| 0Pu-239   | Cf-251    | 1.000E+00 | 2.532E-32 | 3.186E-31 | 2.236E-29 | 1.579E-28 | 2.289E-27 | 8.190E-26 | 2.195E-24 |
| 8.227E-23 |           |           |           |           |           |           |           |           |           |
| Pu-239    | Pu-239    | 1.000E+00 | 2.777E-09 | 2.778E-09 | 2.781E-09 | 2.784E-09 | 2.795E-09 | 2.835E-09 | 2.955E-09 |
| 3.414E-09 |           |           |           |           |           |           |           |           |           |
| Pu-239    | %DOSE(j): |           | 2.777E-09 | 2.778E-09 | 2.781E-09 | 2.784E-09 | 2.795E-09 | 2.835E-09 | 2.955E-09 |
| 3.414E-09 |           |           |           |           |           |           |           |           |           |
| 0U-235    | Cf-251    | 1.000E+00 | 1.595E-37 | 1.610E-37 | 6.786E-35 | 9.126E-34 | 3.221E-32 | 3.802E-30 | 3.059E-28 |
| 3.865E-26 |           |           |           |           |           |           |           |           |           |
| U-235     | Pu-239    | 1.000E+00 | 2.560E-15 | 7.681E-15 | 3.331E-14 | 6.412E-14 | 1.569E-13 | 5.225E-13 | 1.611E-12 |
| 5.980E-12 |           |           |           |           |           |           |           |           |           |
| U-235     | U-235     | 1.000E+00 | 1.225E-07 | 1.225E-07 | 1.226E-07 | 1.227E-07 | 1.229E-07 | 1.237E-07 | 1.261E-07 |

1.349E-07  
 U-235 %DOSE(j): 1.225E-07 1.225E-07 1.226E-07 1.227E-07 1.229E-07 1.237E-07 1.261E-07  
 1.350E-07  
 0Pa-231 Cf-251 1.000E+00 0.000E+00 4.913E-37 1.770E-36 3.026E-36 2.091E-35 9.265E-33 2.225E-30  
 9.300E-28  
 Pa-231 Pu-239 1.000E+00 1.167E-19 7.387E-19 1.317E-17 4.864E-17 2.901E-16 3.180E-15 2.922E-14  
 3.568E-13  
 Pa-231 U-235 1.000E+00 7.430E-12 2.229E-11 9.666E-11 1.860E-10 4.549E-10 1.511E-09 4.629E-09  
 1.677E-08  
 Pa-231 %DOSE(j): 7.430E-12 2.229E-11 9.666E-11 1.860E-10 4.549E-10 1.511E-09 4.629E-09  
 1.677E-08  
 0Cf-252 Cf-252 3.092E-02 4.464E-25 3.434E-25 9.250E-26 1.917E-26 1.704E-28 1.789E-36 0.000E+00 0.000E+00  
 +00  
 Cf-252 Cf-252 8.005E-02 1.156E-24 8.891E-25 2.395E-25 4.962E-26 4.410E-28 4.632E-36 0.000E+00 0.000E+00  
 +00  
 Cf-252 %DOSE(j): 1.602E-24 1.232E-24 3.320E-25 6.878E-26 6.114E-28 6.421E-36 0.000E+00 0.000E+00  
 +00  
 0Cm-248 Cf-252 8.005E-02 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00  
 +00  
 Cm-248 Cf-252 4.395E-08 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00  
 +00  
 Cm-248 Cf-252 8.879E-01 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00  
 +00  
 Cm-248 %DOSE(j): 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00  
 +00  
 0Cf-252 Cf-252 1.111E-03 1.605E-26 1.234E-26 3.325E-27 6.888E-28 6.123E-30 6.431E-38 0.000E+00 0.000E+00  
 +00  
 Cf-252 Cf-252 4.395E-08 6.346E-31 4.882E-31 1.315E-31 2.724E-32 2.422E-34 2.543E-42 0.000E+00 0.000E+00  
 +00  
 Cf-252 %DOSE(j): 1.605E-26 1.234E-26 3.325E-27 6.888E-28 6.123E-30 6.431E-38 0.000E+00 0.000E+00  
 +00  
 1RESRAD-OFFSITE, Version 2.6 T' Limit = 30 days 09/19/2012 14:58 Page 94  
 Parent Dose Report

Title : Industrial No Cap Hydro  
 File : INDUSTRIAL NO CAP HYDRO.ROF

|          |           | Individual Nuclide Dose Summed Over All Pathways<br>Parent Nuclide and Thread Fraction Indicated |                    |           |           |           |           |           |           |           |           |
|----------|-----------|--------------------------------------------------------------------------------------------------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0Nuclide | Parent    | THF(i)                                                                                           | DOSE(j,t), mrem/yr |           |           |           |           |           |           |           |           |
| (j)      | (i)       |                                                                                                  | t=                 | 0.000E+00 | 1.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
| 0Cm-248  | Cf-252    | 1.111E-03                                                                                        | 0.000E+00          | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| 0Pu-244  | Cf-252    | 1.111E-03                                                                                        | 0.000E+00          | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| 0Pu-244  | Cf-252    | 4.395E-08                                                                                        | 2.563E-35          | 1.516E-34 | 1.891E-33 | 4.937E-33 | 1.496E-32 | 5.475E-32 | 1.732E-31 |           |           |
| 0Pu-244  | %DOSE(j): | 6.471E-31                                                                                        | 2.563E-35          | 1.516E-34 | 1.891E-33 | 4.937E-33 | 1.496E-32 | 5.475E-32 | 1.732E-31 |           |           |
| 0Pu-240  | Cf-252    | 4.395E-08                                                                                        | 0.000E+00          | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 1.401E-45 |           |
| 0Pu-240  | Pu-240    | 4.950E-08                                                                                        | 5.883E-23          | 5.885E-23 | 5.893E-23 | 5.903E-23 | 5.932E-23 | 6.047E-23 | 6.388E-23 |           |           |
| 0Pu-240  | %DOSE(j): | 7.740E-23                                                                                        | 5.883E-23          | 5.885E-23 | 5.893E-23 | 5.903E-23 | 5.932E-23 | 6.047E-23 | 6.388E-23 |           |           |
| 0Cf-252  | Cf-252    | 8.879E-01                                                                                        | 1.282E-23          | 9.862E-24 | 2.656E-24 | 5.504E-25 | 4.892E-27 | 5.138E-35 | 0.000E+00 | 0.000E+00 |           |
| 0Pu-244  | Cf-252    | 8.879E-01                                                                                        | 5.177E-28          | 3.062E-27 | 3.820E-26 | 9.975E-26 | 3.021E-25 | 1.106E-24 | 3.499E-24 |           |           |
| 0Pu-240  | Cf-252    | 8.879E-01                                                                                        | 5.605E-45          | 7.287E-44 | 3.859E-42 | 2.075E-41 | 1.703E-40 | 2.247E-39 | 2.262E-38 |           |           |
| 0U-236   | Cf-252    | 8.879E-01                                                                                        | 0.000E+00          | 0.000E+00 | 0.000E+00 | 0.000E+00 | 2.803E-45 | 1.023E-43 | 3.116E-42 |           |           |
| U-236    | Pu-240    | 1.000E+00                                                                                        | 8.429E-22          | 2.529E-21 | 1.097E-20 | 2.113E-20 | 5.176E-20 | 1.732E-19 | 5.412E-19 |           |           |

|           |           |           |           |           |           |           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 2.103E-18 |           |           |           |           |           |           |           |           |           |           |           |
| U-236     | U-236     | 1.000E+00 | 9.738E-18 | 9.740E-18 | 9.750E-18 | 9.762E-18 | 9.797E-18 | 9.936E-18 | 1.034E-17 |           |           |
| 1.191E-17 |           |           |           |           |           |           |           |           |           |           |           |
| U-236     | %DOSE(j): |           | 9.739E-18 | 9.743E-18 | 9.761E-18 | 9.783E-18 | 9.849E-18 | 1.011E-17 | 1.089E-17 |           |           |
| 1.401E-17 |           |           |           |           |           |           |           |           |           |           |           |
| 0Th-232   | Cf-252    | 8.879E-01 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| +00       |           |           |           |           |           |           |           |           |           |           |           |
| Th-232    | Pu-240    | 1.000E+00 | 1.285E-32 | 8.137E-32 | 1.452E-30 | 5.367E-30 | 3.209E-29 | 3.552E-28 | 3.358E-27 |           |           |
| 4.530E-26 |           |           |           |           |           |           |           |           |           |           |           |
| Th-232    | Th-232    | 1.000E+00 | 1.944E-19 | 1.945E-19 | 1.948E-19 | 1.953E-19 | 1.965E-19 | 2.016E-19 | 2.168E-19 |           |           |
| 2.796E-19 |           |           |           |           |           |           |           |           |           |           |           |
| Th-232    | U-236     | 1.000E+00 | 1.976E-28 | 5.928E-28 | 2.573E-27 | 4.956E-27 | 1.216E-26 | 4.088E-26 | 1.296E-25 |           |           |
| 5.293E-25 |           |           |           |           |           |           |           |           |           |           |           |
| Th-232    | %DOSE(j): |           | 1.944E-19 | 1.945E-19 | 1.948E-19 | 1.953E-19 | 1.965E-19 | 2.016E-19 | 2.168E-19 |           |           |
| 2.796E-19 |           |           |           |           |           |           |           |           |           |           |           |
| 0Ra-228   | Cf-252    | 8.879E-01 | 4.204E-45 | 5.605E-45 | 2.803E-45 | 1.401E-44 | 1.331E-43 | 3.697E-41 | 4.058E-39 |           |           |
| 5.944E-37 |           |           |           |           |           |           |           |           |           |           |           |
| Ra-228    | Pu-240    | 1.000E+00 | 2.142E-22 | 2.632E-21 | 1.614E-19 | 9.795E-19 | 9.762E-18 | 1.505E-16 | 1.519E-15 |           |           |
| 1.828E-14 |           |           |           |           |           |           |           |           |           |           |           |
| Ra-228    | Ra-228    | 1.000E+00 | 3.962E-05 | 3.513E-05 | 1.924E-05 | 9.345E-06 | 1.070E-06 | 2.339E-10 | 8.149E-21 | 0.000E+00 |           |
| +00       |           |           |           |           |           |           |           |           |           |           |           |
| Ra-228    | Th-232    | 1.000E+00 | 5.714E-09 | 1.633E-08 | 5.386E-08 | 7.728E-08 | 9.705E-08 | 1.006E-07 | 1.036E-07 |           |           |
| 1.146E-07 |           |           |           |           |           |           |           |           |           |           |           |
| Ra-228    | U-236     | 1.000E+00 | 4.414E-18 | 2.706E-17 | 4.027E-16 | 1.219E-15 | 4.528E-15 | 1.872E-14 | 6.021E-14 |           |           |
| 2.153E-13 |           |           |           |           |           |           |           |           |           |           |           |
| Ra-228    | %DOSE(j): |           | 3.963E-05 | 3.515E-05 | 1.930E-05 | 9.422E-06 | 1.167E-06 | 1.008E-07 | 1.036E-07 |           |           |
| 1.146E-07 |           |           |           |           |           |           |           |           |           |           |           |
| 0Th-228   | Cf-252    | 8.879E-01 | 6.586E-44 | 6.866E-44 | 0.000E+00 | 1.962E-44 | 1.620E-42 | 7.429E-40 | 8.777E-38 |           |           |
| 1.289E-35 |           |           |           |           |           |           |           |           |           |           |           |
| Th-228    | Pu-240    | 1.000E+00 | 3.734E-22 | 8.327E-21 | 1.483E-18 | 1.307E-17 | 1.781E-16 | 3.208E-15 | 3.348E-14 |           |           |
| 3.985E-13 |           |           |           |           |           |           |           |           |           |           |           |
| Th-228    | Ra-228    | 1.000E+00 | 1.447E-04 | 3.571E-04 | 5.172E-04 | 3.021E-04 | 3.633E-05 | 7.927E-09 | 2.743E-19 | 0.000E+00 |           |
| +00       |           |           |           |           |           |           |           |           |           |           |           |

|        |           |           |           |           |           |           |           |           |           |           |
|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Th-228 | Th-228    | 1.000E+00 | 1.711E-06 | 1.191E-06 | 1.949E-07 | 2.220E-08 | 3.279E-11 | 3.190E-22 | 0.000E+00 | 0.000E+00 |
| Th-228 | Th-232    | 1.000E+00 | 1.618E-08 | 9.029E-08 | 8.162E-07 | 1.516E-06 | 2.172E-06 | 2.275E-06 | 2.326E-06 | 2.512E-06 |
| Th-228 | U-236     | 1.000E+00 | 9.391E-18 | 1.076E-16 | 4.561E-15 | 1.916E-14 | 9.051E-14 | 4.109E-13 | 1.340E-12 | 4.707E-12 |
| Th-228 | %DOSE(j): |           | 1.464E-04 | 3.584E-04 | 5.182E-04 | 3.036E-04 | 3.850E-05 | 2.283E-06 | 2.326E-06 | 2.512E-06 |
| 0Cl-36 | Cl-36     | 1.000E+00 | 9.940E-13 | 9.870E-13 | 9.529E-13 | 9.135E-13 | 8.049E-13 | 4.918E-13 | 1.204E-13 | 8.746E-16 |

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

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

| 0Nuclide | Parent | THF(i)    | DOSE(j,t), mrem/yr |           |           |           |           |           |           |           |           |
|----------|--------|-----------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| (j)      | (i)    |           | t=                 | 0.000E+00 | 1.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
| Co-60    | Co-60  | 1.000E+00 | 2.535E-04          | 2.222E-04 | 1.148E-04 | 5.195E-05 | 4.817E-06 | 4.634E-10 | 1.547E-21 | 0.000E+00 | 0.000E+00 |
| 0Cs-134  | Cs-134 | 1.000E+00 | 8.909E-12          | 6.367E-12 | 1.188E-12 | 1.583E-13 | 3.744E-16 | 2.279E-26 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| 0Cs-137  | Cs-137 | 1.000E+00 | 3.281E-03          | 3.207E-03 | 2.859E-03 | 2.491E-03 | 1.648E-03 | 3.302E-04 | 3.343E-06 | 3.490E-13 | 8.741E-42 |
| 0Eu-154  | Eu-154 | 1.000E+00 | 1.230E-07          | 1.137E-07 | 7.672E-08 | 4.787E-08 | 1.163E-08 | 4.732E-11 | 7.005E-18 | 8.741E-42 | 8.741E-42 |
| 0Eu-155  | Eu-155 | 1.000E+00 | 6.400E-16          | 5.567E-16 | 2.773E-16 | 1.201E-16 | 9.771E-18 | 5.641E-22 | 4.380E-34 | 0.000E+00 | 0.000E+00 |
| 0H-3     | H-3    | 1.000E+00 | 0.000E+00          | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |



+00

0Ho-166m Ho-166m 1.000E+00 2.159E-06 2.158E-06 2.153E-06 2.148E-06 2.132E-06 2.071E-06 1.905E-06  
1.423E-06

0Na-22 Na-22 1.000E+00 1.314E-08 1.007E-08 2.661E-09 5.389E-10 4.470E-12 3.589E-20 2.676E-43 0.000E  
+00

0Pb-210 Pb-210 1.000E+00 1.478E-11 1.433E-11 1.228E-11 1.020E-11 5.853E-12 6.746E-13 1.406E-15  
5.817E-25

Pb-210 Pu-238 1.000E+00 3.121E-25 7.463E-24 1.919E-21 2.476E-20 7.674E-19 5.795E-17 1.841E-15  
4.185E-14

Pb-210 Pu-242 9.999E-01 1.387E-36 1.042E-35 9.180E-36 1.611E-34 1.345E-32 3.937E-30 5.433E-28  
9.185E-26

Pb-210 Ra-226 1.000E+00 3.114E-13 9.221E-13 3.707E-12 6.524E-12 1.240E-11 1.921E-11 1.934E-11  
1.680E-11

Pb-210 Th-230 1.000E+00 1.105E-15 6.938E-15 1.177E-13 4.096E-13 2.065E-12 1.338E-11 5.172E-11  
1.894E-10

Pb-210 U-234 1.000E+00 1.413E-21 1.767E-20 1.196E-18 8.083E-18 1.033E-16 2.471E-15 3.244E-14  
4.293E-13

Pb-210 U-238 9.999E-01 9.955E-28 2.535E-26 7.056E-24 9.189E-23 2.930E-21 2.475E-19 1.062E-17  
4.999E-16

Pb-210 %DOSE(j): 1.509E-11 1.526E-11 1.610E-11 1.714E-11 2.032E-11 3.327E-11 7.110E-11  
2.067E-10

0Po-210 Pb-210 1.000E+00 4.806E-11 8.520E-11 7.960E-11 6.611E-11 3.788E-11 4.343E-12 8.919E-15  
3.500E-24

Po-210 Pu-238 1.000E+00 5.292E-25 1.959E-23 9.049E-21 1.340E-19 4.567E-18 3.600E-16 1.142E-14  
2.472E-13

Po-210 Pu-242 9.999E-01 1.608E-35 9.862E-35 8.014E-35 8.626E-34 7.867E-32 2.430E-29 3.361E-27  
5.420E-25

Po-210 Ra-226 1.000E+00 8.824E-13 3.925E-12 2.180E-11 4.005E-11 7.806E-11 1.215E-10 1.206E-10  
9.938E-11

Po-210 Th-230 1.000E+00 2.504E-15 2.403E-14 6.380E-13 2.403E-12 1.274E-11 8.408E-11 3.218E-10  
1.120E-09

Po-210 U-234 1.000E+00 2.736E-21 5.251E-20 6.024E-18 4.547E-17 6.256E-16 1.543E-14 2.015E-13  
2.537E-12

Po-210 U-238 9.999E-01 0.000E+00 5.400E-26 3.324E-23 4.969E-22 1.742E-20 1.536E-18 6.583E-17  
 2.952E-15  
 Po-210 %DOSE(j): 4.895E-11 8.915E-11 1.020E-10 1.086E-10 1.287E-10 2.099E-10 4.426E-10  
 1.222E-09  
 0Pm-147 Pm-147 1.000E+00 1.879E-26 1.444E-26 3.861E-27 7.932E-28 6.872E-30 6.535E-38 0.000E+00 0.000E  
 +00  
 0Sm-147 Pm-147 1.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E+00 0.000E  
 +00  
 0Pu-238 Pu-238 1.840E-09 3.009E-22 2.986E-22 2.876E-22 2.748E-22 2.399E-22 1.413E-22 3.117E-23  
 1.570E-25  
 Pu-238 Pu-238 1.000E+00 1.635E-13 1.623E-13 1.563E-13 1.494E-13 1.304E-13 7.680E-14 1.694E-14  
 8.535E-17  
 Pu-238 %DOSE(j): 1.635E-13 1.623E-13 1.563E-13 1.494E-13 1.304E-13 7.680E-14 1.694E-14  
 8.535E-17

1RESRAD-OFFSITE, Version 2.6

T' Limit = 30 days

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

## Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Thread Fraction Indicated

| 0Nuclide | Parent | THF(i)    | DOSE(j,t), mrem/yr |           |           |           |           |           |           |           |           |
|----------|--------|-----------|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| (j)      | (i)    |           | t=                 | 0.000E+00 | 1.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
| U-234    | Pu-238 | 1.000E+00 | 1.984E-18          | 5.935E-18 | 2.526E-17 | 4.752E-17 | 1.087E-16 | 2.832E-16 | 4.908E-16 |           |           |
| U-234    | Pu-242 | 9.999E-01 | 1.989E-33          | 1.259E-32 | 2.247E-31 | 8.302E-31 | 4.960E-30 | 5.476E-29 | 5.137E-28 |           |           |
| U-234    | U-234  | 1.000E+00 | 4.069E-15          | 4.069E-15 | 4.073E-15 | 4.078E-15 | 4.092E-15 | 4.147E-15 | 4.309E-15 |           |           |
| U-234    | U-238  | 9.999E-01 | 7.243E-21          | 2.173E-20 | 9.426E-20 | 1.815E-19 | 4.444E-19 | 1.484E-18 | 4.612E-18 |           |           |

1.758E-17  
 U-234 %DOSE(j): 4.071E-15 4.075E-15 4.099E-15 4.126E-15 4.201E-15 4.432E-15 4.805E-15  
 5.567E-15  
 0Th-230 Pu-238 1.000E+00 6.430E-23 4.063E-22 7.158E-21 2.604E-20 1.487E-19 1.389E-18 8.732E-18  
 4.909E-17  
 Th-230 Pu-242 9.999E-01 4.764E-38 6.023E-37 4.223E-35 2.987E-34 4.348E-33 1.582E-31 4.448E-30  
 1.958E-28  
 Th-230 Th-230 1.000E+00 7.652E-14 7.655E-14 7.667E-14 7.682E-14 7.726E-14 7.899E-14 8.417E-14  
 1.051E-13  
 Th-230 U-234 1.000E+00 1.753E-19 5.260E-19 2.282E-18 4.395E-18 1.077E-17 3.612E-17 1.135E-16  
 4.501E-16  
 Th-230 U-238 9.999E-01 2.345E-25 1.485E-24 2.649E-23 9.787E-23 5.846E-22 6.448E-21 6.032E-20  
 7.839E-19  
 Th-230 %DOSE(j): 7.652E-14 7.655E-14 7.667E-14 7.682E-14 7.727E-14 7.903E-14 8.430E-14  
 1.056E-13  
 0Ra-226 Pu-238 1.000E+00 4.301E-16 5.406E-15 3.758E-13 2.623E-12 3.670E-11 1.153E-09 2.236E-08  
 3.891E-07  
 Ra-226 Pu-242 9.999E-01 1.404E-29 1.094E-28 1.697E-27 2.234E-26 7.901E-25 9.294E-23 7.405E-21  
 9.013E-19  
 Ra-226 Ra-226 1.000E+00 1.950E-04 1.950E-04 1.947E-04 1.943E-04 1.933E-04 1.892E-04 1.781E-04  
 1.441E-04  
 Ra-226 Th-230 1.000E+00 9.186E-07 2.756E-06 1.194E-05 2.294E-05 5.588E-05 1.830E-04 5.377E-04  
 1.692E-03  
 Ra-226 U-234 1.000E+00 1.581E-12 1.001E-11 1.783E-10 6.578E-10 3.908E-09 4.223E-08 3.728E-07  
 3.961E-06  
 Ra-226 U-238 9.999E-01 1.566E-18 1.972E-17 1.385E-15 9.778E-15 1.416E-13 5.044E-12 1.334E-10  
 4.757E-09  
 Ra-226 %DOSE(j): 1.960E-04 1.977E-04 2.066E-04 2.173E-04 2.492E-04 3.723E-04 7.162E-04  
 1.841E-03  
 0Pu-240 Pu-240 1.000E+00 1.189E-15 1.189E-15 1.190E-15 1.192E-15 1.198E-15 1.222E-15 1.290E-15  
 1.564E-15  
 0Pu-241 Pu-241 2.450E-05 7.849E-12 7.483E-12 5.890E-12 4.419E-12 1.867E-12 6.541E-14 4.542E-18  
 1.267E-32

|           |           |           |           |           |           |           |           |           |           |           |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0Pu-242   | Pu-242    | 5.500E-06 | 1.787E-24 | 1.788E-24 | 1.791E-24 | 1.795E-24 | 1.807E-24 | 1.854E-24 | 1.995E-24 |           |
| 2.578E-24 |           |           |           |           |           |           |           |           |           |           |
| Pu-242    | Pu-242    | 5.400E-05 | 1.755E-23 | 1.755E-23 | 1.759E-23 | 1.763E-23 | 1.774E-23 | 1.820E-23 | 1.959E-23 |           |
| 2.531E-23 |           |           |           |           |           |           |           |           |           |           |
| Pu-242    | %DOSE(j): |           | 1.934E-23 | 1.934E-23 | 1.938E-23 | 1.942E-23 | 1.955E-23 | 2.006E-23 | 2.158E-23 |           |
| 2.789E-23 |           |           |           |           |           |           |           |           |           |           |
| 0U-238    | Pu-242    | 5.400E-05 | 0.000E+00 | 0.000E+00 | 1.401E-45 | 1.401E-45 | 4.204E-45 | 1.401E-44 | 4.624E-44 |           |
| 2.508E-43 |           |           |           |           |           |           |           |           |           |           |
| U-238     | Pu-242    | 9.999E-01 | 1.588E-18 | 4.765E-18 | 2.066E-17 | 3.975E-17 | 9.713E-17 | 3.219E-16 | 9.788E-16 |           |
| 3.458E-15 |           |           |           |           |           |           |           |           |           |           |
| U-238     | U-238     | 5.400E-05 | 1.741E-34 | 1.742E-34 | 1.747E-34 | 1.754E-34 | 1.773E-34 | 1.850E-34 | 2.089E-34 |           |
| 3.194E-34 |           |           |           |           |           |           |           |           |           |           |
| U-238     | %DOSE(j): |           | 1.588E-18 | 4.765E-18 | 2.066E-17 | 3.975E-17 | 9.713E-17 | 3.219E-16 | 9.788E-16 |           |
| 3.458E-15 |           |           |           |           |           |           |           |           |           |           |
| 0Pu-242   | Pu-242    | 9.999E-01 | 3.250E-19 | 3.251E-19 | 3.257E-19 | 3.264E-19 | 3.285E-19 | 3.371E-19 | 3.627E-19 |           |
| 4.687E-19 |           |           |           |           |           |           |           |           |           |           |
| 0Ru-106   | Ru-106    | 1.000E+00 | 2.024E-15 | 1.011E-15 | 3.147E-17 | 4.889E-19 | 1.825E-24 | 1.401E-45 | 0.000E+00 | 0.000E+00 |
| +00       |           |           |           |           |           |           |           |           |           |           |
| 0Sb-125   | Sb-125    | 7.720E-01 | 1.876E-10 | 1.450E-10 | 4.008E-11 | 8.561E-12 | 8.343E-14 | 1.253E-21 | 5.465E-44 | 0.000E+00 |
| +00       |           |           |           |           |           |           |           |           |           |           |
| Sb-125    | Sb-125    | 2.280E-01 | 5.540E-11 | 4.283E-11 | 1.184E-11 | 2.529E-12 | 2.464E-14 | 3.702E-22 | 1.541E-44 | 0.000E+00 |
| +00       |           |           |           |           |           |           |           |           |           |           |
| Sb-125    | %DOSE(j): |           | 2.430E-10 | 1.879E-10 | 5.191E-11 | 1.109E-11 | 1.081E-13 | 1.623E-21 | 7.006E-44 | 0.000E+00 |
| +00       |           |           |           |           |           |           |           |           |           |           |
| 0Te-125m  | Sb-125    | 2.280E-01 | 1.662E-30 | 1.970E-30 | 5.490E-31 | 1.176E-31 | 1.156E-33 | 1.795E-41 | 0.000E+00 | 0.000E+00 |
| +00       |           |           |           |           |           |           |           |           |           |           |
| 0Sm-151   | Sm-151    | 1.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 | 0.000E+00 |
| +00       |           |           |           |           |           |           |           |           |           |           |

1RESRAD-OFFSITE, Version 2.6

T' Limit = 30 days

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

## Individual Nuclide Dose Summed Over All Pathways

Parent Nuclide and Thread Fraction Indicated

| 0Nuclide Parent | THF(i)   | DOSE(j,t), mrem/yr |            |            |            |            |            |            |            |  |
|-----------------|----------|--------------------|------------|------------|------------|------------|------------|------------|------------|--|
| (j) (i)         | t=       | 0.000E+00          | 1.000E+00  | 6.000E+00  | 1.200E+01  | 3.000E+01  | 1.000E+02  | 3.000E+02  | 1.000E+03  |  |
| 0Sn-121m        | Sn-121m  | 1.000E+00          | 5.324E-17  | 5.259E-17  | 4.946E-17  | 4.594E-17  | 3.683E-17  | 1.559E-17  | 1.336E-18  |  |
| 2.463E-22       |          |                    |            |            |            |            |            |            |            |  |
| 0Sn-126         | Sn-126   | 1.000E+00          | 4.375E-07  | 4.375E-07  | 4.379E-07  | 4.383E-07  | 4.395E-07  | 4.441E-07  | 4.578E-07  |  |
| 5.091E-07       |          |                    |            |            |            |            |            |            |            |  |
| 0Sr-90          | Sr-90    | 1.000E+00          | 1.266E-07  | 1.236E-07  | 1.099E-07  | 9.537E-08  | 6.236E-08  | 1.195E-08  | 1.065E-10  |  |
| 7.112E-18       |          |                    |            |            |            |            |            |            |            |  |
| 0U-238          | U-238    | 9.999E-01          | 4.347E-06  | 4.347E-06  | 4.347E-06  | 4.348E-06  | 4.349E-06  | 4.352E-06  | 4.363E-06  |  |
| 4.401E-06       |          |                    |            |            |            |            |            |            |            |  |
| 00000000        | 00000000 | 0000000000         | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 | 0000000000 |  |
| 0000000000      |          |                    |            |            |            |            |            |            |            |  |

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

1RESRAD-OFFSITE, Version 2.6

T' Limit = 30 days

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

## Individual Nuclide Soil Concentration

Parent Nuclide and Thread Fraction Indicated

| 0Nuclide Parent | THF(i) | S(j,t), pCi/g |           |           |           |           |           |           |           |           |
|-----------------|--------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| (j)             | (i)    | t=            | 0.000E+00 | 1.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
| Ac-227          | Ac-227 | 1.000E+00     | 2.340E+00 | 2.267E+00 | 1.933E+00 | 1.597E+00 | 9.004E-01 | 9.694E-02 | 1.664E-04 | 3.484E-14 |
| Ac-227          | Cf-251 | 1.000E+00     | 0.000E+00 | 0.000E+00 | 4.925E-29 | 0.000E+00 | 0.000E+00 | 9.892E-25 | 4.137E-22 |           |

2.033E-19

Ac-227 Pu-239 1.000E+00 0.000E+00 1.022E-12 2.110E-10 1.611E-09 2.207E-08 5.376E-07 6.922E-06

8.500E-05

Ac-227 U-235 1.000E+00 0.000E+00 7.285E-05 2.483E-03 9.341E-03 4.915E-02 3.202E-01 1.211E+00 4.125E+00

Ac-227 %S(j): 2.340E+00 2.267E+00 1.936E+00 1.606E+00 9.495E-01 4.172E-01 1.211E+00 4.125E+00

Al-26 Al-26 1.000E+00 7.640E+02 7.640E+02 7.640E+02 7.640E+02 7.639E+02 7.637E+02 7.631E+02 7.610E+02

Am-241 Am-241 1.000E+00 1.410E+03 1.408E+03 1.396E+03 1.383E+03 1.344E+03 1.201E+03 8.715E+02 2.836E+02

Am-241 Cf-249 1.000E+00 0.000E+00 3.380E-12 6.812E-10 5.060E-09 6.441E-08 1.277E-06 1.184E-05 6.663E-05

Am-241 Pu-241 1.000E+00 0.000E+00 5.976E+00 3.176E+01 5.525E+01 9.440E+01 1.111E+02 8.137E+01 2.648E+01

Am-241 %S(j): 1.410E+03 1.414E+03 1.428E+03 1.438E+03 1.438E+03 1.312E+03 9.528E+02 3.100E+02

Np-237 Am-241 1.000E+00 0.000E+00 4.563E-04 2.727E-03 5.426E-03 1.337E-02 4.209E-02 1.079E-01 2.203E-01

Np-237 Cf-249 1.000E+00 0.000E+00 2.758E-19 3.364E-16 5.067E-15 1.675E-13 1.227E-11 3.910E-10 9.276E-09

Np-237 Cf-249 2.450E-05 0.000E+00 1.673E-20 3.379E-18 2.516E-17 3.227E-16 6.612E-15 6.787E-14 5.497E-13

Np-237 Np-237 1.000E+00 1.620E-03 1.620E-03 1.620E-03 1.619E-03 1.618E-03 1.612E-03 1.595E-03 1.539E-03

Np-237 Pu-241 1.000E+00 0.000E+00 9.786E-07 3.242E-05 1.181E-04 5.718E-04 3.055E-03 9.198E-03 1.973E-02

Np-237 Pu-241 2.450E-05 0.000E+00 2.959E-08 1.579E-07 2.762E-07 4.807E-07 6.221E-07 6.208E-07 5.990E-07

Np-237 %S(j): 1.620E-03 2.077E-03 4.379E-03 7.164E-03 1.556E-02 4.675E-02 1.187E-01 2.416E-01

U-233 Am-241 1.000E+00 0.000E+00 1.001E-09 3.584E-08 1.428E-07 8.828E-07 9.409E-06 7.546E-05 5.804E-04

|           |        |           |           |           |           |           |           |           |           |
|-----------|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| U-233     | Cf-249 | 1.000E+00 | 0.000E+00 | 1.915E-24 | 1.782E-21 | 5.426E-20 | 4.598E-18 | 1.204E-15 | 1.263E-13 |
| 1.139E-11 |        |           |           |           |           |           |           |           |           |
| U-233     | Cf-249 | 2.450E-05 | 0.000E+00 | 1.847E-26 | 2.251E-23 | 3.397E-22 | 1.129E-20 | 8.468E-19 | 2.893E-17 |
| 8.728E-16 |        |           |           |           |           |           |           |           |           |
| U-233     | Np-237 | 1.000E+00 | 0.000E+00 | 7.084E-09 | 4.248E-08 | 8.491E-08 | 2.119E-07 | 7.014E-07 | 2.063E-06 |
| 6.413E-06 |        |           |           |           |           |           |           |           |           |
| U-233     | Pu-241 | 1.000E+00 | 0.000E+00 | 1.439E-12 | 2.906E-10 | 2.165E-09 | 2.782E-08 | 5.736E-07 | 5.994E-06 |
| 5.075E-05 |        |           |           |           |           |           |           |           |           |
| U-233     | Pu-241 | 2.450E-05 | 0.000E+00 | 6.541E-14 | 2.172E-12 | 7.939E-12 | 3.882E-11 | 2.168E-10 | 7.477E-10 |
| 2.446E-09 |        |           |           |           |           |           |           |           |           |
| U-233     | U-233  | 1.000E+00 | 2.790E+00 | 2.790E+00 | 2.788E+00 | 2.785E+00 | 2.778E+00 | 2.749E+00 | 2.668E+00 |
| +00       |        |           |           |           |           |           |           |           | 2.404E    |
| U-233     | %S(j): |           | 2.790E+00 | 2.790E+00 | 2.788E+00 | 2.785E+00 | 2.778E+00 | 2.749E+00 | 2.668E+00 |
| +00       |        |           |           |           |           |           |           |           | 2.405E    |
| 0Th-229   | Am-241 | 1.000E+00 | 0.000E+00 | 3.165E-14 | 6.780E-12 | 5.404E-11 | 8.369E-10 | 2.999E-08 | 7.389E-07 |
| 2.034E-05 |        |           |           |           |           |           |           |           |           |
| Th-229    | Cf-249 | 1.000E+00 | 0.000E+00 | 1.293E-24 | 0.000E+00 | 5.588E-23 | 2.180E-21 | 2.064E-18 | 6.988E-16 |
| 2.329E-13 |        |           |           |           |           |           |           |           |           |
| Th-229    | Cf-249 | 2.450E-05 | 0.000E+00 | 2.982E-29 | 5.387E-28 | 7.957E-26 | 6.683E-24 | 1.785E-21 | 1.983E-19 |
| 2.180E-17 |        |           |           |           |           |           |           |           |           |
| Th-229    | Np-237 | 1.000E+00 | 0.000E+00 | 3.355E-13 | 1.204E-11 | 4.812E-11 | 3.002E-10 | 3.312E-09 | 2.923E-08 |
| 3.033E-07 |        |           |           |           |           |           |           |           |           |
| Th-229    | Pu-241 | 1.000E+00 | 0.000E+00 | 3.434E-17 | 4.182E-14 | 6.313E-13 | 2.101E-11 | 1.585E-09 | 5.504E-08 |
| 1.740E-06 |        |           |           |           |           |           |           |           |           |
| Th-229    | Pu-241 | 2.450E-05 | 0.000E+00 | 2.076E-18 | 4.203E-16 | 3.138E-15 | 4.061E-14 | 8.640E-13 | 9.917E-12 |
| 1.133E-10 |        |           |           |           |           |           |           |           |           |
| Th-229    | U-233  | 1.000E+00 | 0.000E+00 | 2.634E-04 | 1.580E-03 | 3.157E-03 | 7.875E-03 | 2.603E-02 | 7.621E-02 |
| 2.333E-01 |        |           |           |           |           |           |           |           |           |
| Th-229    | %S(j): |           | 0.000E+00 | 2.634E-04 | 1.580E-03 | 3.157E-03 | 7.875E-03 | 2.603E-02 | 7.621E-02 |
| 2.333E-01 |        |           |           |           |           |           |           |           |           |
| 0Cf-249   | Cf-249 | 5.200E-09 | 1.685E-11 | 1.681E-11 | 1.665E-11 | 1.645E-11 | 1.588E-11 | 1.382E-11 | 9.302E-12 |
| 2.326E-12 |        |           |           |           |           |           |           |           |           |
| Cf-249    | Cf-249 | 1.000E+00 | 3.240E-03 | 3.234E-03 | 3.202E-03 | 3.164E-03 | 3.053E-03 | 2.658E-03 | 1.789E-03 |

4.473E-04

Cf-249 %S(j): 3.240E-03 3.234E-03 3.202E-03 3.164E-03 3.053E-03 2.658E-03 1.789E-03

4.473E-04

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

Individual Nuclide Soil Concentration  
Parent Nuclide and Thread Fraction Indicated

| 0Nuclide  | Parent | THF(i)    | S(j,t), pCi/g |           |           |           |           |           |           |           |           |
|-----------|--------|-----------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| (j)       | (i)    |           | t=            | 0.000E+00 | 1.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
| Cm-245    | Cf-249 | 1.000E+00 | 0.000E+00     | 2.639E-07 | 1.575E-06 | 3.131E-06 | 7.685E-06 | 2.386E-05 | 5.889E-05 |           |           |
| 1.085E-04 |        |           |               |           |           |           |           |           |           |           |           |
| Cm-245    | %S(j): |           | 0.000E+00     | 2.639E-07 | 1.575E-06 | 3.131E-06 | 7.685E-06 | 2.386E-05 | 5.889E-05 |           |           |
| 1.085E-04 |        |           |               |           |           |           |           |           |           |           |           |
| 0Pu-241   | Cf-249 | 1.000E+00 | 0.000E+00     | 6.271E-09 | 2.076E-07 | 7.557E-07 | 3.648E-06 | 1.925E-05 | 5.584E-05 |           |           |
| 1.079E-04 |        |           |               |           |           |           |           |           |           |           |           |
| Pu-241    | Cf-249 | 2.450E-05 | 0.000E+00     | 1.537E-13 | 5.086E-12 | 1.851E-11 | 8.939E-11 | 4.715E-10 | 1.368E-09 |           |           |
| 2.644E-09 |        |           |               |           |           |           |           |           |           |           |           |
| Pu-241    | Pu-241 | 1.000E+00 | 3.820E+03     | 3.640E+03 | 2.862E+03 | 2.144E+03 | 9.014E+02 | 3.101E+01 | 2.044E-03 |           |           |
| 4.753E-18 |        |           |               |           |           |           |           |           |           |           |           |
| Pu-241    | %S(j): |           | 3.820E+03     | 3.640E+03 | 2.862E+03 | 2.144E+03 | 9.014E+02 | 3.101E+01 | 2.100E-03 |           |           |
| 1.079E-04 |        |           |               |           |           |           |           |           |           |           |           |
| 0Cf-249   | Cf-249 | 2.450E-05 | 7.938E-08     | 7.922E-08 | 7.844E-08 | 7.752E-08 | 7.480E-08 | 6.512E-08 | 4.383E-08 |           |           |
| 1.096E-08 |        |           |               |           |           |           |           |           |           |           |           |
| 0Cm-245   | Cf-249 | 2.450E-05 | 0.000E+00     | 6.466E-12 | 3.860E-11 | 7.672E-11 | 1.883E-10 | 5.846E-10 | 1.443E-09 |           |           |
| 2.659E-09 |        |           |               |           |           |           |           |           |           |           |           |
| 0Cf-251   | Cf-251 | 1.000E+00 | 1.340E-02     | 1.339E-02 | 1.334E-02 | 1.328E-02 | 1.309E-02 | 1.240E-02 | 1.062E-02 |           |           |
| 6.175E-03 |        |           |               |           |           |           |           |           |           |           |           |



|           |        |           |           |           |           |           |           |           |           |
|-----------|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 0Cm-247   | Cf-251 | 1.000E+00 | 0.000E+00 | 5.952E-10 | 3.564E-09 | 7.111E-09 | 1.765E-08 | 5.727E-08 | 1.592E-07 |
| 4.126E-07 |        |           |           |           |           |           |           |           |           |
| 0Am-243   | Cf-251 | 1.000E+00 | 0.000E+00 | 2.803E-14 | 1.005E-12 | 4.013E-12 | 2.495E-11 | 2.716E-10 | 2.308E-09 |
| 2.118E-08 |        |           |           |           |           |           |           |           |           |
| 0Pu-239   | Cf-251 | 1.000E+00 | 0.000E+00 | 2.704E-19 | 5.798E-17 | 4.629E-16 | 7.200E-15 | 2.625E-13 | 6.778E-12 |
| 2.161E-10 |        |           |           |           |           |           |           |           |           |
| Pu-239    | Pu-239 | 1.000E+00 | 9.250E+03 | 9.250E+03 | 9.248E+03 | 9.247E+03 | 9.242E+03 | 9.223E+03 | 9.169E+03 |
| +03       |        |           |           |           |           |           |           |           | 8.983E    |
| Pu-239    | %S(j): |           | 9.250E+03 | 9.250E+03 | 9.248E+03 | 9.247E+03 | 9.242E+03 | 9.223E+03 | 9.169E+03 |
| +03       |        |           |           |           |           |           |           |           | 8.983E    |
| 0U-235    | Cf-251 | 1.000E+00 | 0.000E+00 | 3.241E-28 | 8.671E-26 | 1.368E-24 | 5.322E-23 | 6.473E-21 | 5.030E-19 |
| 5.393E-17 |        |           |           |           |           |           |           |           |           |
| U-235     | Pu-239 | 1.000E+00 | 0.000E+00 | 9.109E-06 | 5.463E-05 | 1.092E-04 | 2.726E-04 | 9.031E-04 | 2.663E-03 |
| 8.356E-03 |        |           |           |           |           |           |           |           |           |
| U-235     | U-235  | 1.000E+00 | 2.180E+02 | 2.180E+02 | 2.178E+02 | 2.176E+02 | 2.171E+02 | 2.149E+02 | 2.088E+02 |
| +02       |        |           |           |           |           |           |           |           | 1.887E    |
| U-235     | %S(j): |           | 2.180E+02 | 2.180E+02 | 2.178E+02 | 2.176E+02 | 2.171E+02 | 2.149E+02 | 2.088E+02 |
| +02       |        |           |           |           |           |           |           |           | 1.887E    |
| 0Pa-231   | Cf-251 | 1.000E+00 | 0.000E+00 | 0.000E+00 | 8.360E-29 | 6.852E-28 | 4.853E-27 | 2.750E-24 | 6.445E-22 |
| 2.351E-19 |        |           |           |           |           |           |           |           |           |
| Pa-231    | Pu-239 | 1.000E+00 | 0.000E+00 | 9.665E-11 | 3.470E-09 | 1.387E-08 | 8.658E-08 | 9.575E-07 | 8.507E-06 |
| 9.035E-05 |        |           |           |           |           |           |           |           |           |
| Pa-231    | U-235  | 1.000E+00 | 0.000E+00 | 4.612E-03 | 2.766E-02 | 5.530E-02 | 1.380E-01 | 4.574E-01 | 1.350E+00 |
| +00       |        |           |           |           |           |           |           |           | 4.248E    |
| Pa-231    | %S(j): |           | 0.000E+00 | 4.612E-03 | 2.766E-02 | 5.530E-02 | 1.380E-01 | 4.575E-01 | 1.350E+00 |
| +00       |        |           |           |           |           |           |           |           | 4.249E    |
| 0Cf-252   | Cf-252 | 3.092E-02 | 4.669E-09 | 3.590E-09 | 9.656E-10 | 1.997E-10 | 1.765E-12 | 1.813E-20 | 2.733E-43 |
| +00       |        |           |           |           |           |           |           |           | 0.000E    |
| Cf-252    | Cf-252 | 8.005E-02 | 1.209E-08 | 9.295E-09 | 2.500E-09 | 5.169E-10 | 4.568E-12 | 4.693E-20 | 7.063E-43 |
| +00       |        |           |           |           |           |           |           |           | 0.000E    |
| Cf-252    | %S(j): |           | 1.676E-08 | 1.289E-08 | 3.465E-09 | 7.166E-10 | 6.333E-12 | 6.506E-20 | 9.795E-43 |
| +00       |        |           |           |           |           |           |           |           | 0.000E    |
| 0Cm-248   | Cf-252 | 8.005E-02 | 0.000E+00 | 2.173E-14 | 7.460E-14 | 9.003E-14 | 9.400E-14 | 9.397E-14 | 9.379E-14 |

9.315E-14  
 Cm-248 Cf-252 4.395E-08 0.000E+00 1.193E-20 4.096E-20 4.943E-20 5.161E-20 5.160E-20 5.150E-20  
 5.115E-20  
 Cm-248 Cf-252 8.879E-01 0.000E+00 2.410E-13 8.275E-13 9.986E-13 1.043E-12 1.042E-12 1.040E-12  
 1.033E-12  
 Cm-248 %S(j): 0.000E+00 2.627E-13 9.021E-13 1.089E-12 1.137E-12 1.136E-12 1.134E-12  
 1.126E-12  
 0Cf-252 Cf-252 1.111E-03 1.678E-10 1.290E-10 3.470E-11 7.176E-12 6.342E-14 6.515E-22 9.809E-45 0.000E  
 +00  
 Cf-252 Cf-252 4.395E-08 6.637E-15 5.104E-15 1.373E-15 2.838E-16 2.508E-18 2.577E-26 0.000E+00 0.000E  
 +00  
 Cf-252 %S(j): 1.678E-10 1.290E-10 3.471E-11 7.177E-12 6.343E-14 6.515E-22 9.809E-45 0.000E  
 +00

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

Individual Nuclide Soil Concentration  
 Parent Nuclide and Thread Fraction Indicated

| 0Nuclide<br>(j) | Parent<br>(i) | THF(i)    | S(j,t), pCi/g |           |           |           |           |           |           |           |           |
|-----------------|---------------|-----------|---------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|                 |               |           | t=            | 0.000E+00 | 1.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 1.000E+02 | 3.000E+02 | 1.000E+03 |
| 0Cm-248         | Cf-252        | 1.111E-03 | 0.000E+00     | 3.016E-16 | 1.036E-15 | 1.250E-15 | 1.305E-15 | 1.305E-15 | 1.302E-15 | 1.302E-15 | 1.302E-15 |
| 0Pu-244         | Cf-252        | 1.111E-03 | 0.000E+00     | 1.325E-24 | 3.267E-23 | 9.157E-23 | 2.870E-22 | 1.054E-21 | 3.241E-21 | 3.241E-21 | 3.241E-21 |
| 0Pu-244         | Cf-252        | 4.395E-08 | 0.000E+00     | 5.239E-29 | 1.292E-27 | 3.622E-27 | 1.135E-26 | 4.167E-26 | 1.282E-25 | 1.282E-25 | 1.282E-25 |
| Pu-244          | %S(j):        |           | 0.000E+00     | 5.239E-29 | 1.292E-27 | 3.622E-27 | 1.135E-26 | 4.167E-26 | 1.282E-25 | 1.282E-25 | 1.282E-25 |

|           |        |           |           |           |           |           |           |           |           |        |
|-----------|--------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--------|
| 0Pu-240   | Cf-252 | 4.395E-08 | 0.000E+00 | 1.900E-33 | 3.061E-31 | 1.847E-30 | 1.608E-29 | 2.121E-28 | 1.993E-27 |        |
| 2.194E-26 |        |           |           |           |           |           |           |           |           |        |
| Pu-240    | Pu-240 | 4.950E-08 | 1.178E-04 | 1.178E-04 | 1.177E-04 | 1.177E-04 | 1.174E-04 | 1.166E-04 | 1.141E-04 |        |
| 1.059E-04 |        |           |           |           |           |           |           |           |           |        |
| Pu-240    | %S(j): |           | 1.178E-04 | 1.178E-04 | 1.177E-04 | 1.177E-04 | 1.174E-04 | 1.166E-04 | 1.141E-04 |        |
| 1.059E-04 |        |           |           |           |           |           |           |           |           |        |
| 0Cf-252   | Cf-252 | 8.879E-01 | 1.341E-07 | 1.031E-07 | 2.773E-08 | 5.734E-09 | 5.068E-11 | 5.206E-19 | 7.835E-42 | 0.000E |
| +00       |        |           |           |           |           |           |           |           |           |        |
| 0Pu-244   | Cf-252 | 8.879E-01 | 0.000E+00 | 1.058E-21 | 2.610E-20 | 7.316E-20 | 2.293E-19 | 8.418E-19 | 2.589E-18 |        |
| 8.678E-18 |        |           |           |           |           |           |           |           |           |        |
| 0Pu-240   | Cf-252 | 8.879E-01 | 0.000E+00 | 3.838E-26 | 6.184E-24 | 3.731E-23 | 3.249E-22 | 4.286E-21 | 4.026E-20 |        |
| 4.433E-19 |        |           |           |           |           |           |           |           |           |        |
| 0U-236    | Cf-252 | 8.879E-01 | 0.000E+00 | 2.922E-34 | 2.938E-31 | 3.712E-30 | 8.689E-29 | 4.070E-27 | 1.168E-25 |        |
| 4.245E-24 |        |           |           |           |           |           |           |           |           |        |
| U-236     | Pu-240 | 1.000E+00 | 0.000E+00 | 7.045E-05 | 4.224E-04 | 8.442E-04 | 2.106E-03 | 6.958E-03 | 2.036E-02 |        |
| 6.215E-02 |        |           |           |           |           |           |           |           |           |        |
| U-236     | U-236  | 1.000E+00 | 4.070E-01 | 4.069E-01 | 4.066E-01 | 4.063E-01 | 4.052E-01 | 4.012E-01 | 3.897E-01 |        |
| 3.522E-01 |        |           |           |           |           |           |           |           |           |        |
| U-236     | %S(j): |           | 4.070E-01 | 4.070E-01 | 4.071E-01 | 4.071E-01 | 4.073E-01 | 4.081E-01 | 4.101E-01 |        |
| 4.144E-01 |        |           |           |           |           |           |           |           |           |        |
| 0Th-232   | Cf-252 | 8.879E-01 | 0.000E+00 | 1.696E-39 | 3.745E-40 | 1.228E-39 | 2.892E-38 | 4.857E-36 | 4.285E-34 |        |
| 5.283E-32 |        |           |           |           |           |           |           |           |           |        |
| Th-232    | Pu-240 | 1.000E+00 | 0.000E+00 | 1.743E-15 | 6.256E-14 | 2.501E-13 | 1.560E-12 | 1.723E-11 | 1.525E-10 |        |
| 1.599E-09 |        |           |           |           |           |           |           |           |           |        |
| Th-232    | Th-232 | 1.000E+00 | 9.880E-03 | 9.880E-03 | 9.880E-03 | 9.880E-03 | 9.880E-03 | 9.880E-03 | 9.880E-03 |        |
| 9.880E-03 |        |           |           |           |           |           |           |           |           |        |
| Th-232    | U-236  | 1.000E+00 | 0.000E+00 | 2.008E-11 | 1.204E-10 | 2.407E-10 | 6.011E-10 | 1.993E-09 | 5.895E-09 |        |
| 1.870E-08 |        |           |           |           |           |           |           |           |           |        |
| Th-232    | %S(j): |           | 9.880E-03 | 9.880E-03 | 9.880E-03 | 9.880E-03 | 9.880E-03 | 9.880E-03 | 9.880E-03 |        |
| 9.880E-03 |        |           |           |           |           |           |           |           |           |        |
| 0Ra-228   | Cf-252 | 8.879E-01 | 0.000E+00 | 1.708E-39 | 4.127E-40 | 9.329E-40 | 1.194E-38 | 3.553E-36 | 3.845E-34 |        |
| 5.114E-32 |        |           |           |           |           |           |           |           |           |        |
| Ra-228    | Pu-240 | 1.000E+00 | 0.000E+00 | 6.826E-17 | 1.272E-14 | 8.712E-14 | 9.300E-13 | 1.462E-11 | 1.444E-10 |        |

1.574E-09  
 Ra-228 Ra-228 1.000E+00 4.190E+00 3.714E+00 2.033E+00 9.864E-01 1.127E-01 2.438E-05 8.250E-16 0.000E+00  
 Ra-228 Th-232 1.000E+00 0.000E+00 1.122E-03 5.086E-03 7.554E-03 9.614E-03 9.880E-03 9.880E-03  
 Ra-228 U-236 1.000E+00 0.000E+00 1.166E-12 3.472E-11 1.135E-10 4.395E-10 1.829E-09 5.735E-09  
 1.855E-08  
 Ra-228 %S(j): 4.190E+00 3.715E+00 2.038E+00 9.940E-01 1.223E-01 9.904E-03 9.880E-03  
 9.880E-03  
 Th-228 Cf-252 8.879E-01 0.000E+00 1.166E-39 0.000E+00 0.000E+00 6.088E-39 3.155E-36 3.703E-34  
 5.058E-32  
 Th-228 Pu-240 1.000E+00 0.000E+00 5.821E-18 4.856E-15 5.018E-14 7.456E-13 1.378E-11 1.418E-10  
 1.565E-09  
 Th-228 Ra-228 1.000E+00 0.000E+00 1.195E+00 2.332E+00 1.397E+00 1.687E-01 3.653E-05 1.236E-15 0.000E+00  
 Th-228 Th-228 1.000E+00 8.930E-03 6.217E-03 1.017E-03 1.158E-04 1.706E-07 1.647E-18 0.000E+00 0.000E+00  
 Th-228 Th-232 1.000E+00 0.000E+00 1.846E-04 3.257E-03 6.458E-03 9.482E-03 9.880E-03 9.880E-03  
 Th-228 U-236 1.000E+00 0.000E+00 1.307E-13 1.646E-11 7.733E-11 3.865E-10 1.774E-09 5.682E-09  
 1.850E-08  
 Th-228 %S(j): 8.930E-03 1.201E+00 2.336E+00 1.403E+00 1.782E-01 9.916E-03 9.880E-03  
 9.880E-03  
 Cl-36 Cl-36 1.000E+00 2.790E-01 2.770E-01 2.671E-01 2.557E-01 2.243E-01 1.349E-01 3.153E-02  
 1.946E-04

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T' Limit = 30 days

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

Individual Nuclide Soil Concentration  
 Parent Nuclide and Thread Fraction Indicated  
 S(j,t), pCi/g

Nuclide Parent THF(i)

| (j)        | (i)        | t=         | 0.000E+00  | 1.000E+00  | 6.000E+00  | 1.200E+01  | 3.000E+01  | 1.000E+02  | 3.000E+02  | 1.000E+03  |
|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff | ffffffffff |
| Co-60      | Co-60      | 1.000E+00  | 4.860E+00  | 4.258E+00  | 2.198E+00  | 9.942E-01  | 9.196E-02  | 8.762E-06  | 2.847E-17  | 0.000E+00  |
| 0Cs-134    | Cs-134     | 1.000E+00  | 2.620E-06  | 1.872E-06  | 3.489E-07  | 4.646E-08  | 1.096E-10  | 6.594E-21  | 0.000E+00  | 0.000E+00  |
| 0Cs-137    | Cs-137     | 1.000E+00  | 3.050E+03  | 2.980E+03  | 2.655E+03  | 2.311E+03  | 1.524E+03  | 3.018E+02  | 2.956E+00  | 2.747E-07  |
| 0Eu-154    | Eu-154     | 1.000E+00  | 9.920E-03  | 9.169E-03  | 6.184E-03  | 3.855E-03  | 9.338E-04  | 3.762E-06  | 5.410E-13  | 6.100E-37  |
| 0Eu-155    | Eu-155     | 1.000E+00  | 8.720E-03  | 7.583E-03  | 3.771E-03  | 1.630E-03  | 1.318E-04  | 7.433E-09  | 5.399E-21  | 0.000E+00  |
| 0H-3       | H-3        | 1.000E+00  | 3.780E+04  | 3.548E+04  | 2.584E+04  | 1.767E+04  | 5.645E+03  | 6.675E+01  | 2.082E-04  | 1.115E-23  |
| 0Ho-166m   | Ho-166m    | 1.000E+00  | 5.020E-01  | 5.017E-01  | 5.003E-01  | 4.985E-01  | 4.934E-01  | 4.738E-01  | 4.219E-01  | 2.813E-01  |
| 0Na-22     | Na-22      | 1.000E+00  | 1.120E-03  | 8.581E-04  | 2.266E-04  | 4.584E-05  | 3.792E-07  | 3.013E-15  | 2.176E-38  | 0.000E+00  |
| 0Pb-210    | Pb-210     | 1.000E+00  | 2.850E+00  | 2.763E+00  | 2.365E+00  | 1.962E+00  | 1.121E+00  | 1.271E-01  | 2.530E-04  | 8.894E-14  |
| Pb-210     | Pu-238     | 1.000E+00  | 0.000E+00  | 2.114E-13  | 2.609E-10  | 3.980E-09  | 1.359E-07  | 1.057E-05  | 3.246E-04  | 6.293E-03  |
| Pb-210     | Pu-242     | 9.999E-01  | 0.000E+00  | 1.060E-24  | 2.301E-24  | 2.413E-23  | 2.339E-21  | 7.138E-19  | 9.555E-17  | 1.380E-14  |
| Pb-210     | Ra-226     | 1.000E+00  | 0.000E+00  | 1.178E-01  | 6.541E-01  | 1.195E+00  | 2.317E+00  | 3.563E+00  | 3.426E+00  | 2.530E+00  |
| Pb-210     | Th-230     | 1.000E+00  | 0.000E+00  | 5.593E-04  | 1.907E-02  | 7.181E-02  | 3.785E-01  | 2.467E+00  | 9.146E+00  | 2.851E+01  |
| Pb-210     | U-234      | 1.000E+00  | 0.000E+00  | 8.601E-10  | 1.776E-07  | 1.357E-06  | 1.861E-05  | 4.528E-04  | 5.726E-03  | 6.457E-02  |
| Pb-210     | U-238      | 9.999E-01  | 0.000E+00  | 4.542E-16  | 9.581E-13  | 1.476E-11  | 5.184E-10  | 4.511E-08  | 1.871E-06  |            |

7.515E-05

Pb-210 %S(j): 2.850E+00 2.881E+00 3.038E+00 3.229E+00 3.817E+00 6.157E+00 1.258E+01 3.111E+01

0Po-210 Pb-210 1.000E+00 0.000E+00 2.342E+00 2.406E+00 1.996E+00 1.141E+00 1.293E-01 2.574E-04  
9.048E-14

Po-210 Pu-238 1.000E+00 0.000E+00 5.910E-14 1.881E-10 3.358E-09 1.270E-07 1.038E-05 3.229E-04  
6.285E-03

Po-210 Pu-242 9.999E-01 0.000E+00 1.928E-24 3.065E-24 2.020E-23 2.146E-21 6.961E-19 9.480E-17  
1.377E-14

Po-210 Ra-226 1.000E+00 0.000E+00 6.406E-02 5.990E-01 1.150E+00 2.291E+00 3.561E+00 3.427E+00 2.530E+00

Po-210 Th-230 1.000E+00 0.000E+00 2.295E-04 1.599E-02 6.589E-02 3.667E-01 2.449E+00 9.128E+00 2.849E+01

Po-210 U-234 1.000E+00 0.000E+00 2.854E-10 1.376E-07 1.192E-06 1.769E-05 4.467E-04 5.704E-03  
6.451E-02

Po-210 U-238 9.999E-01 0.000E+00 0.000E+00 6.901E-13 1.244E-11 4.840E-10 4.424E-08 1.860E-06  
7.503E-05

Po-210 %S(j): 0.000E+00 2.406E+00 3.021E+00 3.212E+00 3.798E+00 6.139E+00 1.256E+01 3.110E+01

0Pm-147 Pm-147 1.000E+00 1.370E-08 1.052E-08 2.808E-09 5.757E-10 4.955E-12 4.593E-20 5.157E-43 0.000E+00

0Sm-147 Pm-147 1.000E+00 0.000E+00 7.870E-20 2.695E-19 3.248E-19 3.389E-19 3.388E-19 3.383E-19  
3.365E-19

0Pu-238 Pu-238 1.840E-09 2.705E-05 2.684E-05 2.580E-05 2.460E-05 2.134E-05 1.227E-05 2.528E-06  
1.002E-08

Pu-238 Pu-238 1.000E+00 1.470E+04 1.458E+04 1.402E+04 1.337E+04 1.160E+04 6.671E+03 1.374E+03 5.447E+00

Pu-238 %S(j): 1.470E+04 1.458E+04 1.402E+04 1.337E+04 1.160E+04 6.671E+03 1.374E+03 5.447E+00

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T' Limit = 30 days

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Parent Dose Report

Title : Industrial No Cap Hydro

File : INDUSTRIAL NO CAP HYDRO.ROF

| Individual Nuclide Soil Concentration        |               |           |               |           |           |           |           |           |                               |
|----------------------------------------------|---------------|-----------|---------------|-----------|-----------|-----------|-----------|-----------|-------------------------------|
| Parent Nuclide and Thread Fraction Indicated |               |           |               |           |           |           |           |           |                               |
| 0Nuclide<br>(j)                              | Parent<br>(i) | THF(i)    | S(j,t), pCi/g |           |           |           |           |           |                               |
|                                              |               |           | t=            | 0.000E+00 | 1.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 1.000E+02 3.000E+02 1.000E+03 |
| U-234                                        | Pu-238        | 1.000E+00 | 0.000E+00     | 4.151E-02 | 2.441E-01 | 4.767E-01 | 1.111E+00 | 2.857E+00 | 4.640E+00 4.637E+00           |
| U-234                                        | Pu-242        | 9.999E-01 | 0.000E+00     | 5.557E-17 | 1.995E-15 | 7.972E-15 | 4.973E-14 | 5.487E-13 | 4.843E-12                     |
| U-234                                        | U-234         | 1.000E+00 | 4.260E+01     | 4.259E+01 | 4.256E+01 | 4.252E+01 | 4.241E+01 | 4.198E+01 | 4.076E+01 3.677E+01           |
| U-234                                        | U-238         | 9.999E-01 | 0.000E+00     | 1.516E-04 | 9.092E-04 | 1.817E-03 | 4.530E-03 | 1.495E-02 | 4.355E-02                     |
| U-234                                        | %S(j):        |           | 4.260E+01     | 4.264E+01 | 4.281E+01 | 4.300E+01 | 4.353E+01 | 4.485E+01 | 4.544E+01 4.153E+01           |
| Th-230                                       | Pu-238        | 1.000E+00 | 0.000E+00     | 1.876E-07 | 6.648E-06 | 2.617E-05 | 1.560E-04 | 1.458E-03 | 8.639E-03                     |
| Th-230                                       | Pu-242        | 9.999E-01 | 0.000E+00     | 1.680E-22 | 3.595E-20 | 2.872E-19 | 4.480E-18 | 1.650E-16 | 4.389E-15                     |
| Th-230                                       | Th-230        | 1.000E+00 | 8.370E+01     | 8.370E+01 | 8.370E+01 | 8.369E+01 | 8.368E+01 | 8.362E+01 | 8.347E+01 8.295E+01           |
| Th-230                                       | U-234         | 1.000E+00 | 0.000E+00     | 3.835E-04 | 2.300E-03 | 4.597E-03 | 1.148E-02 | 3.805E-02 | 1.124E-01                     |
| Th-230                                       | U-238         | 9.999E-01 | 0.000E+00     | 6.845E-10 | 2.457E-08 | 9.820E-08 | 6.126E-07 | 6.758E-06 | 5.962E-05                     |
| Th-230                                       | %S(j):        |           | 8.370E+01     | 8.370E+01 | 8.370E+01 | 8.370E+01 | 8.369E+01 | 8.366E+01 | 8.359E+01 8.334E+01           |
| Ra-226                                       | Pu-238        | 1.000E+00 | 0.000E+00     | 2.723E-11 | 5.785E-09 | 4.566E-08 | 6.870E-07 | 2.214E-05 | 4.225E-04                     |
| Ra-226                                       | Pu-242        | 9.999E-01 | 0.000E+00     | 1.115E-24 | 2.507E-23 | 3.716E-22 | 1.453E-20 | 1.775E-18 | 1.396E-16                     |

|                |           |           |           |           |           |           |           |           |           |  |  |
|----------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|--|
| 1.557E-14      |           |           |           |           |           |           |           |           |           |  |  |
| Ra-226 Ra-226  | 1.000E+00 | 3.850E+00 | 3.848E+00 | 3.840E+00 | 3.830E+00 | 3.800E+00 | 3.687E+00 | 3.380E+00 | 2.495E+00 |  |  |
| Ra-226 Th-230  | 1.000E+00 | 0.000E+00 | 3.625E-02 | 2.173E-01 | 4.340E-01 | 1.081E+00 | 3.547E+00 | 1.019E+01 | 2.928E+01 |  |  |
| Ra-226 U-234   | 1.000E+00 | 0.000E+00 | 8.329E-08 | 2.988E-06 | 1.194E-05 | 7.432E-05 | 8.145E-04 | 7.050E-03 |           |  |  |
| 6.850E-02      |           |           |           |           |           |           |           |           |           |  |  |
| Ra-226 U-238   | 9.999E-01 | 0.000E+00 | 9.895E-14 | 2.130E-11 | 1.701E-10 | 2.647E-09 | 9.678E-08 | 2.519E-06 |           |  |  |
| 8.224E-05      |           |           |           |           |           |           |           |           |           |  |  |
| Ra-226 %S(j):  |           | 3.850E+00 | 3.885E+00 | 4.057E+00 | 4.264E+00 | 4.881E+00 | 7.234E+00 | 1.357E+01 | 3.185E+01 |  |  |
| 0Pu-240 Pu-240 | 1.000E+00 | 2.380E+03 | 2.380E+03 | 2.378E+03 | 2.377E+03 | 2.372E+03 | 2.355E+03 | 2.305E+03 | 2.139E+03 |  |  |
| 0Pu-241 Pu-241 | 2.450E-05 | 9.359E-02 | 8.919E-02 | 7.011E-02 | 5.253E-02 | 2.209E-02 | 7.599E-04 | 5.009E-08 |           |  |  |
| 1.165E-22      |           |           |           |           |           |           |           |           |           |  |  |
| 0Pu-242 Pu-242 | 5.500E-06 | 1.386E-06 | 1.386E-06 | 1.386E-06 | 1.386E-06 | 1.386E-06 | 1.386E-06 | 1.385E-06 |           |  |  |
| 1.383E-06      |           |           |           |           |           |           |           |           |           |  |  |
| Pu-242 Pu-242  | 5.400E-05 | 1.361E-05 | 1.361E-05 | 1.361E-05 | 1.361E-05 | 1.361E-05 | 1.360E-05 | 1.360E-05 |           |  |  |
| 1.358E-05      |           |           |           |           |           |           |           |           |           |  |  |
| Pu-242 %S(j):  |           | 1.499E-05 | 1.499E-05 | 1.499E-05 | 1.499E-05 | 1.499E-05 | 1.499E-05 | 1.498E-05 |           |  |  |
| 1.496E-05      |           |           |           |           |           |           |           |           |           |  |  |
| 0U-238 Pu-242  | 5.400E-05 | 0.000E+00 | 2.111E-15 | 1.266E-14 | 2.531E-14 | 6.319E-14 | 2.096E-13 | 6.196E-13 |           |  |  |
| 1.963E-12      |           |           |           |           |           |           |           |           |           |  |  |
| U-238 Pu-242   | 9.999E-01 | 0.000E+00 | 3.909E-11 | 2.344E-10 | 4.687E-10 | 1.170E-09 | 3.881E-09 | 1.147E-08 |           |  |  |
| 3.636E-08      |           |           |           |           |           |           |           |           |           |  |  |
| U-238 U-238    | 5.400E-05 | 2.889E-03 | 2.889E-03 | 2.886E-03 | 2.884E-03 | 2.877E-03 | 2.848E-03 | 2.766E-03 |           |  |  |
| 2.500E-03      |           |           |           |           |           |           |           |           |           |  |  |
| U-238 %S(j):   |           | 2.889E-03 | 2.889E-03 | 2.886E-03 | 2.884E-03 | 2.877E-03 | 2.848E-03 | 2.766E-03 |           |  |  |
| 2.500E-03      |           |           |           |           |           |           |           |           |           |  |  |
| 0Pu-242 Pu-242 | 9.999E-01 | 2.520E-01 | 2.520E-01 | 2.520E-01 | 2.520E-01 | 2.520E-01 | 2.519E-01 | 2.518E-01 |           |  |  |
| 2.514E-01      |           |           |           |           |           |           |           |           |           |  |  |
| 0Ru-106 Ru-106 | 1.000E+00 | 7.770E-09 | 3.881E-09 | 1.207E-10 | 1.873E-12 | 6.974E-18 | 5.213E-39 | 0.000E+00 | 0.000E+00 |  |  |
| +00            |           |           |           |           |           |           |           |           |           |  |  |



0Sb-125 Sb-125 7.720E-01 4.169E-04 3.223E-04 8.898E-05 1.899E-05 1.845E-07 2.738E-15 1.180E-37 0.000E+00  
Sb-125 Sb-125 2.280E-01 1.231E-04 9.518E-05 2.628E-05 5.608E-06 5.448E-08 8.087E-16 3.484E-38 0.000E+00  
Sb-125 %S(j): 5.400E-04 4.175E-04 1.153E-04 2.460E-05 2.390E-07 3.547E-15 1.528E-37 0.000E+00  
0Te-125m Sb-125 2.280E-01 0.000E+00 9.921E-05 2.788E-05 5.949E-06 5.779E-08 8.579E-16 3.696E-38 0.000E+00  
0Sm-151 Sm-151 1.000E+00 2.110E-02 2.094E-02 2.015E-02 1.924E-02 1.674E-02 9.761E-03 2.089E-03 9.466E-06  
1RESRAD-OFFSITE, Version 2.6 T' Limit = 30 days 09/19/2012 14:58 Page 103  
Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.ROF

| Individual Nuclide Soil Concentration        |          |           |               |           |           |           |           |           |                               |
|----------------------------------------------|----------|-----------|---------------|-----------|-----------|-----------|-----------|-----------|-------------------------------|
| Parent Nuclide and Thread Fraction Indicated |          |           |               |           |           |           |           |           |                               |
| 0Nuclide                                     | Parent   | THF(i)    | S(j,t), pCi/g |           |           |           |           |           |                               |
| (j)                                          | (i)      |           | t=            | 0.000E+00 | 1.000E+00 | 6.000E+00 | 1.200E+01 | 3.000E+01 | 1.000E+02 3.000E+02 1.000E+03 |
| 0Sn-121m                                     | Sn-121m  | 1.000E+00 | 5.020E-01     | 4.957E-01 | 4.654E-01 | 4.315E-01 | 3.439E-01 | 1.422E-01 | 1.142E-02                     |
| 0Sn-126                                      | Sn-126   | 1.000E+00 | 1.220E-01     | 1.220E-01 | 1.220E-01 | 1.220E-01 | 1.219E-01 | 1.218E-01 | 1.215E-01                     |
| 0Sr-90                                       | Sr-90    | 1.000E+00 | 4.300E+02     | 4.199E+02 | 3.728E+02 | 3.231E+02 | 2.105E+02 | 3.976E+01 | 3.400E-01                     |
| 0U-238                                       | U-238    | 9.999E-01 | 5.350E+01     | 5.349E+01 | 5.345E+01 | 5.340E+01 | 5.327E+01 | 5.273E+01 | 5.123E+01 4.630E+01           |
| 00000000                                     | 00000000 | 000000000 | 000000000     | 000000000 | 000000000 | 000000000 | 000000000 | 000000000 | 000000000                     |

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

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Parent Dose Report  
Title : Industrial No Cap Hydro  
File : INDUSTRIAL NO CAP HYDRO.ROF

Run Time Information

Res0Calc.EXE execution began at 14:58 on 09/19/2012

Res0Calc.EXE execution ended at 14:59 on 09/19/2012

Res0Calc.EXE execution time 32.234 seconds