

MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last revised 1/8/04, K. McFadden  
P1: ATMOS USER INPUT (UNIT 24) = V.ATM  
P2: EARLY USER INPUT (UNIT 25) = V.ERL  
P3: CHRONC USER INPUT (UNIT 26) = V.CHR  
P4: METEOROLOGY DATA (UNIT 28) = V.MET  
P5: SITE DATA INPUT (UNIT 29) = V.SIT  
P6: LIST OUTPUT (UNIT 06) = V.OUT

USER INPUT IS READ FROM UNIT 24  
RECORD IDENTIFIER FIELDS 11 CHARACTERS LONG ARE EXPECTED.  
THE FIRST 100 COLUMNS OF EACH INPUT RECORD ARE PROCESSED.  
THE MAXIMUM NUMBER OF IDENTIFIER RECORDS THAT MAY BE SAVED AS THE BASE CASE IS 1000.

RECORD  
NUMBER RECORD

\*\*\*\*\*

\* FILE NAME: VATMOS.INP

\*

\* GENERAL DESCRIPTIVE TITLE DESCRIBING THIS "ATMOS" INPUT

\*

1 RIATNAM1001 'ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000'

\*

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\* GEOMETRY DATA BLOCK, LOADED BY INPGEO, STORED IN /GEOM/

\*

\* NUMBER OF RADIAL SPATIAL ELEMENTS

\*

2 GENUMRAD001 10

\*

\* SPATIAL ENDPOINT DISTANCES IN MILES [SEE SIT FILE]

\*

*	END001	1	2	3	4	5
*	END002	10	20	30	40	50

\*

\* SPATIAL ENDPOINT DISTANCES IN KILOMETERS

\*

3 GESPAEND001 1.6093 3.2187 4.8280 6.4374 8.0467

4 GESPAEND002 16.0935 32.1869 48.2804 64.3739 80.4674

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\* NUCLIDE DATA BLOCK, LOADED BY INPISO, STORED IN /ISOGRP/, /ISONAM/

\*

\* Number of pseudo-stable nuclides (used to truncate the decay chains)

\*

[1:page 5-7]

5 ISNUMSTB001 27

\*

\* List of pseudo-stable nuclides

\*

[1:page 5-7]

6 ISNAMSTB001 I-129 (daughter of Te-129 and Te-129m)

7 ISNAMSTB002 Xe-131m (daughter of I-131)

8 ISNAMSTB003 Xe-133m (daughter of I-133)

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 9 ISNAMSTB004      Xe-135m (daughter of I-135)
10 ISNAMSTB005      Cs-135  (daughter of Xe-135 and Xe-135m)
11 ISNAMSTB006      Sm-147  (daughter of Pm-147)
12 ISNAMSTB007      U-234   (daughter of Pu-238)
13 ISNAMSTB008      U-235   (daughter of Pu-239)
14 ISNAMSTB009      U-236   (daughter of Pu-240)
15 ISNAMSTB010      U-237   (daughter of Pu-241)
16 ISNAMSTB011      Np-237   (daughter of Am-241)
17 ISNAMSTB012      Rb-87   (daughter of Kr-87)
18 ISNAMSTB013      Ba-137m (daughter of Cs-137)
19 ISNAMSTB014      Rb-88   (daughter of Kr-88)
20 ISNAMSTB015      Y-91m   (daughter of Sr-91)
21 ISNAMSTB016      Zr-93   (daughter of Y-93)
22 ISNAMSTB017      Nb-93m   (daughter of Zr-93)
23 ISNAMSTB018      Nb-95m   (daughter of Zr-95)
24 ISNAMSTB019      Nb-97   (daughter of Zr-97 and Nb-97m)
25 ISNAMSTB020      Nb-97m   (daughter of Zr-97)
26 ISNAMSTB021      Tc-99   (daughter of Mo-99)
27 ISNAMSTB022      Rh-103m (daughter of Ru-103)
28 ISNAMSTB023      Rh-106   (daughter of Ru-106)
29 ISNAMSTB024      Te-131   (daughter of Te-131m)
30 ISNAMSTB025      Pr-144   (daughter of Ce-144 and Pr-144m)
31 ISNAMSTB026      Pr-144m  (daughter of Ce-144)
32 ISNAMSTB027      Pm-147   (daughter of Nd-147)
  *
  * Number of radioactive nuclides to be considered
  *
33 ISNUMISO001 60
  *
  * NUMBER OF NUCLIDE GROUPS
  *
34 ISMAXGRP001 9
  *
  * WET AND DRY DEPOSITION FLAGS FOR EACH NUCLIDE GROUP
  *
  *          WETDEP      DRYDEP
  *
35 ISDEPFLA001      .FALSE.  .FALSE.
36 ISDEPFLA002      .TRUE.   .TRUE.
37 ISDEPFLA003      .TRUE.   .TRUE.
38 ISDEPFLA004      .TRUE.   .TRUE.
39 ISDEPFLA005      .TRUE.   .TRUE.
40 ISDEPFLA006      .TRUE.   .TRUE.
41 ISDEPFLA007      .TRUE.   .TRUE.
42 ISDEPFLA008      .TRUE.   .TRUE.
43 ISDEPFLA009      .TRUE.   .TRUE.
  *
  * NUCLIDE GROUP DATA FOR 9 NUCLIDE GROUPS
  * (SAME AS 1150 EXCEPT LOWER CASE NUCNAM, NO PARENT OR HALFLIFE [1:page
5-7]
  *          NUCNAM      IGROUP
  *
44 ISOTPGRP001      Co-58      6
45 ISOTPGRP002      Co-60      6
46 ISOTPGRP003      Kr-85      1
47 ISOTPGRP004      Kr-85m     1
48 ISOTPGRP005      Kr-87      1

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49	ISOTPGRP006	Kr-88	1
50	ISOTPGRP007	Rb-86	3
51	ISOTPGRP008	Sr-89	5
52	ISOTPGRP009	Sr-90	5
53	ISOTPGRP010	Sr-91	5
54	ISOTPGRP011	Sr-92	5
55	ISOTPGRP012	Y-90	7
56	ISOTPGRP013	Y-91	7
57	ISOTPGRP014	Y-92	7
58	ISOTPGRP015	Y-93	7
59	ISOTPGRP016	Zr-95	7
60	ISOTPGRP017	Zr-97	7
61	ISOTPGRP018	Nb-95	7
62	ISOTPGRP019	Mo-99	6
63	ISOTPGRP020	Tc-99m	6
64	ISOTPGRP021	Ru-103	6
65	ISOTPGRP022	Ru-105	6
66	ISOTPGRP023	Ru-106	6
67	ISOTPGRP024	Rh-105	6
68	ISOTPGRP025	Sb-127	4
69	ISOTPGRP026	Sb-129	4
70	ISOTPGRP027	Te-127	4
71	ISOTPGRP028	Te-127m	4
72	ISOTPGRP029	Te-129	4
73	ISOTPGRP030	Te-129m	4
74	ISOTPGRP031	Te-131m	4
75	ISOTPGRP032	Te-132	4
76	ISOTPGRP033	I-131	2
77	ISOTPGRP034	I-132	2
78	ISOTPGRP035	I-133	2
79	ISOTPGRP036	I-134	2
80	ISOTPGRP037	I-135	2
81	ISOTPGRP038	Xe-133	1
82	ISOTPGRP039	Xe-135	1
83	ISOTPGRP040	Cs-134	3
84	ISOTPGRP041	Cs-136	3
85	ISOTPGRP042	Cs-137	3
86	ISOTPGRP043	Ba-139	9
87	ISOTPGRP044	Ba-140	9
88	ISOTPGRP045	La-140	7
89	ISOTPGRP046	La-141	7
90	ISOTPGRP047	La-142	7
91	ISOTPGRP048	Ce-141	8
92	ISOTPGRP049	Ce-143	8
93	ISOTPGRP050	Ce-144	8
94	ISOTPGRP051	Pr-143	7
95	ISOTPGRP052	Nd-147	7
96	ISOTPGRP053	Np-239	8
97	ISOTPGRP054	Pu-238	8
98	ISOTPGRP055	Pu-239	8
99	ISOTPGRP056	Pu-240	8
100	ISOTPGRP057	Pu-241	8
101	ISOTPGRP058	Am-241	7
102	ISOTPGRP059	Cm-242	7
103	ISOTPGRP060	Cm-244	7

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* WET DEPOSITION DATA BLOCK, LOADED BY INPWET, STORED IN /WETCON/
*
* WASHOUT COEFFICIENT NUMBER ONE, LINEAR FACTOR
*
104 WDCWASH1001  9.5E-5   (JON HELTON AFTER JONES, 1986)
*
* WASHOUT COEFFICIENT NUMBER TWO, EXPONENTIAL FACTOR
*
105 WDCWASH2001  0.8      (JON HELTON AFTER JONES, 1986)

*****
* DRY DEPOSITION DATA BLOCK, LOADED BY INPDY, STORED IN /DRYCON/
*
* NUMBER OF PARTICLE SIZE GROUPS
*
106 DDNPSGRP001  3
*
* DEPOSITION VELOCITY OF EACH PARTICLE SIZE GROUP (M/S)
*
107 DDVDEPOS001  0.0      0.01      0.001      (values from URD)
* First value is for volatile iodine (5% of total; see PSDIST002)
* Second value is for particulate iodine (95% ; see PSDIST002)
* Third value is for all other particulates except iodine (see PSDIST 3-
9)

*****
* DISPERSION PARAMETER DATA BLOCK, LOADED BY INPDIS, STORED IN /DISPY/,
/DISPZ/
*
* # of distances in plume-size tables--which can be used as an
alternative to the power-law model:
* (to utilize the power-law model, set NUM_DIST to zero or delete the
following data card)
*
108 NUM_DIST001  0
*
* SIGMA = A * X ** B
*
* Taken from URD
* P-G CLASS:      A      B      C      D
E      F
109 DPCYSIGA001    0.3658    0.2751    0.2089    0.1474
0.1046    0.0722
110 DPCYSIGB001    0.9031    0.9031    0.9031    0.9031
0.9031    0.9031
111 DPCZSIGA001    2.47E-4    0.078     0.144     0.368
0.2517    0.184
112 DPCZSIGB001    2.118     1.085     0.911     0.6764
0.6720    0.6546
*
* LINEAR SCALING FACTOR FOR SIGMA-Y FUNCTION, NORMALLY 1
*
113 DPYSCALE001   1.
*
* LINEAR SCALING FACTOR FOR SIGMA-Z FUNCTION,
* NORMALLY USED FOR SURFACE ROUGHNESS LENGTH CORRECTION.
* (Z1 / Z0) ** 0.2, FROM CRAC2 WE HAVE (10 CM / 3 CM) ** 0.2 = 1.27

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*
114 DPZSCALE001      1.27

*****
* EXPANSION FACTOR DATA BLOCK, LOADED BY INPEXP, STORED IN /EXPAND/
*
* TIME BASE FOR EXPANSION FACTOR (SECONDS)
*
115 PMTIMBAS001      180.    (from Westinghouse ATMOS file)
*
* BREAK POINT FOR FORMULA CHANGE (SECONDS)
*
116 PMBRKPNT001      3600.    (1 HOUR)
*
* EXPONENTIAL EXPANSION FACTOR NUMBER 1
*
117 PMXPFAC1001        0.2
*
* EXPONENTIAL EXPANSION FACTOR NUMBER 2
*
118 PMXPFAC2001        0.25

*****
* PLUME RISE DATA BLOCK, LOADED BY INPLRS, STORED IN /PLUMRS/
*
* SCALING FACTOR FOR THE CRITICAL WIND SPEED FOR ENTRAINMENT OF A BOUYANT
PLUME
* (USED BY FUNCTION CAUGHT)
*
119 PRSCLCRW001      1.
*
* SCALING FACTOR FOR THE A-D STABILITY PLUME RISE FORMULA
* (USED BY FUNCTION PLMRIS)
*
120 PRSCLADP001      1.
*
* SCALING FACTOR FOR THE E-F STABILITY PLUME RISE FORMULA
* (USED BY FUNCTION PLMRIS)
*
121 PRSCLEFP001      1.

*****
* RELEASE DATA BLOCK, LOADED BY INPREL, STORED IN /ATNAM2/, /MULREL/
***** RELEASE DATA BLOCK *****
*
*   Vogtle ESP CONTAINMENT VESSEL (DCD REV16 P.3.8-1)
*   height 215'4" (65.63 meters) X width 130' (39.62 meters)
*
* Initial value of sigma-y for each plume
*
122 SIGYINIT001      9.21    9.21    9.21    9.21    *(initial sigma-y = W/4.3)
*
* Initial value of sigma-z for each plume
*
123 SIGZINIT001      30.53    30.53    30.53    30.53    *(initial sigma-z = H/2.15)
*
* Building height (meters)

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*
124 WEBUILDH001 65.63 65.63 65.63 65.63 *(Height of Vogtle ESP
containment)
*
* PARTICLE SIZE DISTRIBUTION OF EACH NUCLIDE GROUP
* YOU MUST SPECIFY A COLUMN OF DATA FOR EACH OF THE PARTICLE SIZE GROUPS
*
125 RDPSDIST001      0.0      0.0      1.0
126 RDPSDIST002      0.05     0.95     0.0
127 RDPSDIST003      0.0      0.0      1.0
128 RDPSDIST004      0.0      0.0      1.0
129 RDPSDIST005      0.0      0.0      1.0
130 RDPSDIST006      0.0      0.0      1.0
131 RDPSDIST007      0.0      0.0      1.0
132 RDPSDIST008      0.0      0.0      1.0
133 RDPSDIST009      0.0      0.0      1.0
*
* AP1000 CORE INVENTORY, END-OF-CYCLE from AP1000 DCD, Rev 12 (in Rev 14)
*
*
*
*          NUCNAM          CORINV (Bq)
*
134 RDCORINV001      Co-58          0.0
135 RDCORINV002      Co-60          0.0
136 RDCORINV003      Kr-85          3.92E+16
137 RDCORINV004      Kr-85m         9.73E+17
138 RDCORINV005      Kr-87          1.88E+18
139 RDCORINV006      Kr-88          2.64E+18
140 RDCORINV007      Rb-86          8.47E+15
141 RDCORINV008      Sr-89          3.57E+18
142 RDCORINV009      Sr-90          3.07E+17
143 RDCORINV010      Sr-91          4.44E+18
144 RDCORINV011      Sr-92          4.77E+18
145 RDCORINV012      Y-90           3.20E+17
146 RDCORINV013      Y-91           4.59E+18
147 RDCORINV014      Y-92           4.81E+18
148 RDCORINV015      Y-93           5.51E+18
149 RDCORINV016      Zr-95          6.14E+18
150 RDCORINV017      Zr-97          6.07E+18
151 RDCORINV018      Nb-95          6.18E+18
152 RDCORINV019      Mo-99          6.81E+18
153 RDCORINV020      Tc-99m         5.96E+18
154 RDCORINV021      Ru-103         5.37E+18
155 RDCORINV022      Ru-105         3.64E+18
156 RDCORINV023      Ru-106         1.76E+18
157 RDCORINV024      Rh-105         3.33E+18
158 RDCORINV025      Sb-127         3.81E+17
159 RDCORINV026      Sb-129         1.15E+18
160 RDCORINV027      Te-127         3.77E+17
161 RDCORINV028      Te-127m        4.88E+16
162 RDCORINV029      Te-129         1.12E+18
163 RDCORINV030      Te-129m        1.67E+17
164 RDCORINV031      Te-131m        5.18E+17
165 RDCORINV032      Te-132         5.11E+18
166 RDCORINV033      I-131          3.56E+18
167 RDCORINV034      I-132          5.18E+18
168 RDCORINV035      I-133          7.36E+18

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169	RDCORINV036	I-134	8.07E+18
170	RDCORINV037	I-135	6.88E+18
171	RDCORINV038	Xe-133	7.03E+18
172	RDCORINV039	Xe-135	1.79E+18
173	RDCORINV040	Cs-134	7.18E+17
174	RDCORINV041	Cs-136	2.05E+17
175	RDCORINV042	Cs-137	4.18E+17
176	RDCORINV043	Ba-139	6.59E+18
177	RDCORINV044	Ba-140	6.33E+18
178	RDCORINV045	La-140	6.73E+18
179	RDCORINV046	La-141	5.99E+18
180	RDCORINV047	La-142	5.81E+18
181	RDCORINV048	Ce-141	6.03E+18
182	RDCORINV049	Ce-143	5.62E+18
183	RDCORINV050	Ce-144	4.55E+18
184	RDCORINV051	Pr-143	5.40E+18
185	RDCORINV052	Nd-147	2.40E+18
186	RDCORINV053	Np-239	7.14E+19
187	RDCORINV054	Pu-238	1.42E+16
188	RDCORINV055	Pu-239	1.25E+15
189	RDCORINV056	Pu-240	1.83E+15
190	RDCORINV057	Pu-241	4.11E+17
191	RDCORINV058	Am-241	4.63E+14
192	RDCORINV059	Cm-242	1.09E+17
193	RDCORINV060	Cm-244	1.346E+16

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\*

194 RDCORSCA001 1.000

\*

195 RDAPLFRC001 PARENT (apply rel fracs the same as prior versions)

\*

\*\*\*\*\*

\* OUTPUT CONTROL DATA BLOCK, LOADED BY INPOPT, STORED IN /STOPME/,  
/ATMOPT/

\*

\* FLAG TO INDICATE THAT THIS IS THE LAST PROGRAM IN THE SERIES TO BE RUN

\*

196 OCENDAT1001 .FALSE. (SET THIS VALUE TO .TRUE. TO SKIP EARLY AND CHRONC)

\*

197 OCIDEBUG001 0

\*

\* NAME OF THE NUCLIDE TO BE LISTED ON THE DISPERSION LISTINGS

\*

\*OCNUCOUT001 Cs-137

\*

\* NUM0 NO TABLES OUTPUT=0

198 TYPE0NUMBER 0

\*

\* INDREL INDRAD

\*TYPE0OUT001 1 4

\*TYPE0OUT002 1 10 XCCDF

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\* METEOROLOGICAL SAMPLING DATA BLOCK

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* METEOROLOGICAL SAMPLING OPTION CODE:
*
* METCOD = 1, USER SPECIFIED DAY AND HOUR IN THE YEAR (FROM MET FILE),
*          2, WEATHER CATEGORY BIN SAMPLING,
*          3, 120 HOURS OF WEATHER SPECIFIED ON THE ATMOS USER INPUT
FILE,
*          4, CONSTANT MET (BOUNDARY WEATHER USED FROM THE START),
*          5, STRATIFIED RANDOM SAMPLES FOR EACH DAY OF THE YEAR.
*
199 M1METCOD001  2
*
* LAST SPATIAL INTERVAL FOR MEASURED WEATHER
*
200 M2LIMSPA001  10                      (ADJUSTED FOR RADIAL INTVL)
*
* BOUNDARY WEATHER MIXING LAYER HEIGHT
*
201 M2BNDMXH001  1500. (METERS; used by Westinghouse)
*
* BOUNDARY WEATHER STABILITY CLASS INDEX
*
202 M2IBDSTB001  4      (D-STABILITY; Westinghouse used 6 for F class)
*
* BOUNDARY WEATHER RAIN RATE
*
203 M2BNDRAN001  0.      (MM/HR)
*
* BOUNDARY WEATHER WIND SPEED
*
204 M2BNDWND001  2.0      (M/S; used by Westinghouse)
*
* NUMBER OF RAIN DISTANCE INTERVALS FOR BINNING
*
205 M4NRNINT001    5
*
*                                     nureg 4551 [4:page a-9]
* ENDPOINTS OF THE RAIN DISTANCE INTERVALS (KILOMETERS)
*
* NOTE:  THESE MUST BE CHOSEN TO MATCH THE SPATIAL ENDPOINT DISTANCES
* SPECIFIED FOR ARRAY SPAEND (10 % ERROR IS ALLOWED).
*
206 M4RNDSTS001  3.22  8.05  16.09  48.28  80.47  KM
*
* NUMBER OF RAIN INTENSITIY BREAKPOINTS
*
207 M4NRINTN001    3
*
* RAIN INTENSITY BREAKPOINTS FOR WEATHER BINNING (MILLIMETERS PER HOUR)
*
208 M4RNRATE001    2.  4.  6.
*
* NUMBER OF SAMPLES PER BIN
*
209 M4NSMPLS001  4  (THIS NUMBER SHOULD BE SET TO AT LEAST 4 WHEN METCOD=2)
*
* INITIAL SEED FOR RANDOM NUMBER GENERATOR
*
210 M4IRSEED001    79

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***** RELEASE DATA BLOCK *****
* SOURCE TERM NUMBER 1 OF 6
*
211  RDATNAM2001  'CFI'
212  RDOALARM001  2924. * value provided by Westinghouse for all source terms
213  RDNUMREL001  4 *four plume segments
214  RDMAXRIS001  1 *first plume segment carries greatest risk
215  RDREFTIM001  0.5 0.5 0.5 0.5
216  RDPLHEAT001  0.0 0.0 0.0 0.0 *neglects buoyant plume rise
217  RDPLHITE001  0. 0. 0. 0. *Release height of each plume (meters above
grade)
218  RDPLUDUR001  29666. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to
10 hrs
219  RDPDELAY001  2924. 32590. 86420. 172800. *start at Table 49-2 values
* XE/KR I CS TE(SB) SR RU(MO) LA CE BA
220  RDRELFRC001  5.40E-1 3.19E-3 3.18E-3 4.18E-4 2.11E-2 9.11E-3 3.53E-3
2.64E-5 1.62E-2
221  RDRELFRC002  2.58E-1 1.35E-4 1.35E-4 1.67E-5 6.50E-4 1.68E-4 4.53E-3
1.68E-5 3.40E-4
222  RDRELFRC003  8.40E-2 0.00E0 0.00E0 4.47E-6 0.00E0 0.00E0 6.00E-3 2.17E-5
0.00E0
223  RDRELFRC004  3.83E-2 0.00E0 0.00E0 1.57E-6 0.00E0 0.00E0 5.22E-3 1.89E-5
0.00E0
.
***** TERMINATOR RECORD ENCOUNTERED -- END OF BASE CASE USER INPUT *****

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#### USER INPUT PROCESSING SUMMARY - BASE CASE

```

NUMBER OF RECORDS READ                = 430
NUMBER OF BLANK OR COMMENT RECORDS READ = 206
NUMBER OF TERMINATOR RECORDS          = 1
NUMBER OF RECORDS PROCESSED           = 223
    NUMBER OF PROCESSED RECORDS DUPLICATED = 0
    NUMBER OF PROCESSED RECORDS SORTED    = 223
*****
*****

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Decay Chain # Ba-139

Decay Chain # Ba-140 La-140  
 Fraction of Ba-140 going to La-140 in this chain = 1.000000

Decay Chain # Ce-143 Pr-143  
 Fraction of Ce-143 going to Pr-143 in this chain = 1.000000

Decay Chain # Ce-144

Decay Chain # Cm-242 Pu-238  
 Fraction of Cm-242 going to Pu-238 in this chain = 1.000000

Decay Chain # Cm-244 Pu-240  
 Fraction of Cm-244 going to Pu-240 in this chain = 1.000000

Decay Chain # Co-58

Decay Chain # Co-60

Decay Chain # Cs-134

Decay Chain # Cs-136

Decay Chain # Cs-137

Decay Chain # I-133 Xe-133

Fraction of I-133 going to Xe-133 in this chain = 0.971000

Decay Chain # I-134

Decay Chain # I-135 Xe-135

Fraction of I-135 going to Xe-135 in this chain = 0.846000

Decay Chain # Kr-85m Kr-85

Fraction of Kr-85m going to Kr-85 in this chain = 0.211000

Decay Chain # Kr-87

Decay Chain # Kr-88

Decay Chain # La-141 Ce-141

Fraction of La-141 going to Ce-141 in this chain = 1.000000

Decay Chain # La-142

Decay Chain # Mo-99 Tc-99m

Fraction of Mo-99 going to Tc-99m in this chain = 0.876000

Decay Chain # Nd-147

Decay Chain # Np-239 Pu-239

Fraction of Np-239 going to Pu-239 in this chain = 1.000000

Decay Chain # Pu-241 Am-241

Fraction of Pu-241 going to Am-241 in this chain = 1.000000

Decay Chain # Rb-86

Decay Chain # Ru-103

Decay Chain # Ru-105 Rh-105

Fraction of Ru-105 going to Rh-105 in this chain = 1.000000

Decay Chain # Ru-106

Decay Chain # Sb-127 Te-127

Fraction of Sb-127 going to Te-127 in this chain = 0.824000

Decay Chain # Sb-127 Te-127m Te-127

Fraction of Sb-127 going to Te-127m in this chain = 0.176000

Fraction of Sb-127 going to Te-127 in this chain = 0.171776

Fraction of Te-127m going to Te-127 in this chain = 0.976000

Decay Chain # Sb-129 Te-129  
 Fraction of Sb-129 going to Te-129 in this chain = 0.775000

Decay Chain # Sb-129 Te-129m Te-129  
 Fraction of Sb-129 going to Te-129m in this chain = 0.225000  
 Fraction of Sb-129 going to Te-129 in this chain = 0.146250  
 Fraction of Te-129m going to Te-129 in this chain = 0.650000

Decay Chain # Sr-89

Decay Chain # Sr-90 Y-90  
 Fraction of Sr-90 going to Y-90 in this chain = 1.000000

Decay Chain # Sr-91 Y-91  
 Fraction of Sr-91 going to Y-91 in this chain = 0.422000

Decay Chain # Sr-92 Y-92  
 Fraction of Sr-92 going to Y-92 in this chain = 1.000000

Decay Chain # Te-131m I-131  
 Fraction of Te-131m going to I-131 in this chain = 0.778000

Decay Chain # Te-132 I-132  
 Fraction of Te-132 going to I-132 in this chain = 1.000000

Decay Chain # Y-93

Decay Chain # Zr-95 Nb-95  
 Fraction of Zr-95 going to Nb-95 in this chain = 0.993000

Decay Chain # Zr-97

#### RELEASED INVENTORY OF ALL PLUMES

Kr-85	2.12E+16	1.01E+16	3.29E+15	1.50E+15
Kr-85m	2.45E+17	2.85E+16	9.19E+14	1.02E+13
Kr-87	6.90E+16	2.29E+14	2.15E+10	2.05E+04
Kr-88	4.28E+17	2.21E+16	1.87E+14	2.44E+11
Rb-86	2.67E+13	1.12E+12	0.00E+00	0.00E+00
Sr-89	7.51E+16	2.30E+15	0.00E+00	0.00E+00
Sr-90	6.48E+15	2.00E+14	0.00E+00	0.00E+00
Sr-91	6.54E+16	1.04E+15	0.00E+00	0.00E+00
Sr-92	2.85E+16	8.52E+13	0.00E+00	0.00E+00
Y-90	1.41E+15	1.27E+15	1.40E+15	9.41E+14
Y-91	1.62E+16	2.07E+16	2.71E+16	2.33E+16
Y-92	3.85E+16	1.76E+15	9.86E+13	7.81E+11
Y-93	1.39E+16	9.51E+15	4.52E+15	7.57E+14
Zr-95	2.16E+16	2.76E+16	3.64E+16	3.13E+16
Zr-97	1.75E+16	1.55E+16	1.11E+16	3.60E+15
Nb-95	2.18E+16	2.80E+16	3.71E+16	3.22E+16
Mo-99	5.89E+16	9.87E+14	0.00E+00	0.00E+00
Tc-99m	5.37E+16	9.31E+14	0.00E+00	0.00E+00
Ru-103	4.87E+16	8.93E+14	0.00E+00	0.00E+00
Ru-105	1.54E+16	6.82E+13	0.00E+00	0.00E+00
Ru-106	1.60E+16	2.95E+14	0.00E+00	0.00E+00
Rh-105	2.97E+16	4.82E+14	0.00E+00	0.00E+00
Sb-127	1.53E+14	5.73E+12	1.37E+12	4.02E+11

Sb-129	2.18E+14	2.01E+12	4.90E+10	3.66E+08
Te-127	1.55E+14	5.93E+12	1.46E+12	4.43E+11
Te-127m	2.04E+13	8.16E+11	2.19E+11	7.68E+10
Te-129	2.72E+14	3.94E+12	5.30E+11	1.65E+11
Te-129m	6.98E+13	2.78E+12	7.34E+11	2.53E+11
Te-131m	1.93E+14	6.25E+12	1.18E+12	2.39E+11
Te-132	2.04E+15	7.53E+13	1.77E+13	5.02E+12
I-131	1.12E+16	4.57E+14	1.29E+11	6.21E+10
I-132	5.35E+15	8.65E+13	1.82E+13	5.17E+12
I-133	1.99E+16	6.22E+14	0.00E+00	0.00E+00
I-134	5.21E+14	1.63E+10	0.00E+00	0.00E+00
I-135	1.31E+16	2.13E+14	0.00E+00	0.00E+00
Xe-133	3.70E+18	1.68E+18	5.03E+17	2.01E+17
Xe-135	6.68E+17	1.58E+17	1.65E+16	1.20E+15
Cs-134	2.28E+15	9.69E+13	0.00E+00	0.00E+00
Cs-136	6.45E+14	2.68E+13	0.00E+00	0.00E+00
Cs-137	1.33E+15	5.64E+13	0.00E+00	0.00E+00
Ba-139	8.94E+15	1.91E+12	0.00E+00	0.00E+00
Ba-140	1.01E+17	2.08E+15	0.00E+00	0.00E+00
La-140	3.01E+16	2.44E+16	2.45E+16	1.41E+16
La-141	8.86E+15	2.28E+15	2.16E+14	2.73E+12
La-142	2.23E+15	4.75E+13	7.56E+10	1.36E+06
Ce-141	2.20E+14	2.24E+14	3.04E+14	2.60E+14
Ce-143	1.34E+14	7.03E+13	6.63E+13	3.49E+13
Ce-144	1.20E+14	7.63E+13	9.84E+13	8.55E+13
Pr-143	1.89E+16	2.37E+16	3.05E+16	2.52E+16
Nd-147	8.36E+15	1.05E+16	1.33E+16	1.09E+16
Np-239	1.77E+15	1.01E+15	1.09E+15	7.04E+14
Pu-238	3.77E+11	2.45E+11	3.25E+11	2.95E+11
Pu-239	3.30E+10	2.11E+10	2.72E+10	2.38E+10
Pu-240	4.83E+10	3.08E+10	3.97E+10	3.46E+10
Pu-241	1.09E+13	6.90E+12	8.92E+12	7.77E+12
Am-241	1.63E+12	2.10E+12	2.78E+12	2.42E+12
Cm-242	3.84E+14	4.93E+14	6.51E+14	5.64E+14
Cm-244	4.75E+13	6.10E+13	8.07E+13	7.02E+13

READING FROM A WEATHER FILE WITH THE FOLLOWING HEADER:

DAY HR DR SPS RN (Julian Date, Hour, Direction, Speed, Stability, Precipitation  
BLANK LINE

METEOROLOGICAL DATA FILE CONTAINS 463 HOURS OF OBSERVED RAIN DATA.

ACCUMULATED RAIN MEASUREMENTS TOTALED 32.74 INCHES FOR THE YEAR.

CONSTANT LID HEIGHTS (M) FOR 4 SEASONS = 1500 1500 1500

1500

NON-ZERO WINDSPEEDS LESS THAN 0.5 M/S ARE SET TO 0.5 M/S

NUMTRI= 139

\* \* \* \* METEOROLOGICAL BIN SUMMARY \* \* \* \*

BIN PRIORITIES

RI XX - RAIN INTENSITY I WITHIN THE INTERVAL ENDING AT XX

INTERVAL ENDPOINTS ARE IN KILOMETERS FROM THE ACCIDENT SITE, THE 5  
INTERVAL ENDPOINTS ARE 3 8 16 48 80

RAIN INTENSITIES ARE IN MILLIMETERS OF RAIN PER HOUR, THE 3  
INTENSITY BREAKPOINTS ARE 2.0 4.0 6.0

S V - INITIAL WEATHER CONDITIONS WITH STABILITY CLASS S AND WIND SPEED  
INTERVAL V

STABILITY CLASSES ARE B = A/B, D = C/D, E = E, AND F = F

WIND SPEED INTERVALS ARE IN METERS PER SECOND, 1 (0-1), 2 (1-2), 3 (2-3), 4 (3-5), 5 (5-7), 6 (GT 7)

METBIN		WIND DIRECTION										
13	14	15	16	TOTAL	PER CENT	7	8	9	10	11	12	
1 B	3	0.060	0.069	0.091	0.077	0.077	0.044	0.019	0.042	0.044	0.054	0.054
0.104	0.094	0.083	0.044	0.046	481	5.4909						
2 B	4	0.022	0.053	0.068	0.122	0.112	0.070	0.048	0.073	0.070	0.036	0.057
0.082	0.091	0.031	0.043	0.022	645	7.3630						
3 D	1	0.022	0.065	0.043	0.087	0.087	0.065	0.065	0.000	0.022	0.065	0.130
0.043	0.043	0.065	0.087	0.109	46	0.5251						
4 D	2	0.046	0.052	0.058	0.074	0.058	0.066	0.062	0.064	0.104	0.072	0.060
0.088	0.068	0.044	0.038	0.042	498	5.6849						
5 D	3	0.048	0.055	0.076	0.076	0.069	0.056	0.066	0.069	0.121	0.089	0.073
0.056	0.057	0.027	0.026	0.036	768	8.7671						
6 D	4	0.025	0.062	0.089	0.082	0.088	0.046	0.042	0.083	0.094	0.058	0.097
0.078	0.046	0.029	0.051	0.031	650	7.4201						
7 D	5	0.013	0.079	0.118	0.053	0.132	0.145	0.066	0.039	0.105	0.118	0.026
0.039	0.000	0.000	0.039	0.026	76	0.8676						
8 D	6	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000	0.000
0.250	0.000	0.000	0.250	0.000	4	0.0457						
9 E	1	0.124	0.046	0.046	0.065	0.092	0.046	0.046	0.033	0.072	0.052	0.026
0.065	0.065	0.059	0.052	0.111	153	1.7466						
10 E	2	0.081	0.072	0.091	0.078	0.074	0.038	0.044	0.029	0.047	0.050	0.072
0.055	0.062	0.065	0.056	0.084	678	7.7397						
11 E	3	0.067	0.060	0.092	0.069	0.081	0.050	0.031	0.048	0.041	0.069	0.063
0.062	0.050	0.053	0.085	0.079	682	7.7854						
12 E	4	0.019	0.047	0.099	0.030	0.068	0.068	0.058	0.088	0.079	0.118	0.082
0.047	0.025	0.019	0.123	0.030	365	4.1667						
13 F	1	0.056	0.056	0.074	0.074	0.071	0.063	0.051	0.036	0.061	0.036	0.081
0.068	0.086	0.077	0.048	0.063	607	6.9292						
14 F	2	0.057	0.093	0.121	0.127	0.085	0.060	0.031	0.041	0.044	0.028	0.039
0.064	0.062	0.058	0.039	0.051	1351	15.4224						
15 F	3	0.068	0.093	0.084	0.037	0.031	0.031	0.031	0.068	0.080	0.046	0.121
0.105	0.068	0.043	0.040	0.053	323	3.6872						
16 F	4	0.000	0.097	0.065	0.065	0.032	0.000	0.032	0.161	0.065	0.097	0.194
0.000	0.032	0.000	0.000	0.161	31	0.3539						
17 R1	3	0.080	0.111	0.057	0.043	0.037	0.006	0.034	0.034	0.088	0.063	0.071
0.114	0.051	0.068	0.097	0.048	352	4.0183						
18 R1	8	0.102	0.119	0.017	0.051	0.051	0.017	0.051	0.085	0.017	0.017	0.034
0.051	0.153	0.119	0.068	0.051	59	0.6735						
19 R1	16	0.092	0.101	0.025	0.034	0.034	0.017	0.084	0.034	0.067	0.084	0.059
0.076	0.067	0.067	0.067	0.092	119	1.3584						
20 R1	48	0.097	0.073	0.063	0.031	0.010	0.014	0.024	0.045	0.094	0.087	0.087
0.076	0.101	0.056	0.069	0.073	288	3.2877						
21 R1	80	0.063	0.095	0.100	0.036	0.023	0.018	0.000	0.009	0.050	0.072	0.113
0.109	0.086	0.086	0.068	0.072	221	2.5228						
22 R2	3	0.045	0.000	0.045	0.061	0.015	0.030	0.045	0.061	0.152	0.045	0.091
0.121	0.061	0.045	0.076	0.106	66	0.7534						
23 R2	8	0.333	0.333	0.000	0.000	0.333	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	3	0.0342						
24 R2	16	0.105	0.158	0.000	0.000	0.105	0.105	0.000	0.000	0.105	0.053	0.053
0.211	0.000	0.000	0.053	0.053	19	0.2169						
25 R2	48	0.091	0.073	0.127	0.109	0.109	0.055	0.073	0.000	0.109	0.018	0.018
0.073	0.036	0.073	0.018	0.018	55	0.6279						

26	R2	80	0.059	0.118	0.176	0.078	0.078	0.039	0.039	0.020	0.078	0.059	0.000
			0.039	0.059	0.039	0.059	0.059	51		0.5822			
27	R3	3	0.000	0.000	0.000	0.063	0.063	0.000	0.000	0.125	0.188	0.063	0.063
			0.125	0.125	0.000	0.188	0.000	16		0.1826			
29	R3	16	0.000	0.200	0.000	0.200	0.000	0.000	0.000	0.000	0.000	0.200	0.000
			0.000	0.200	0.000	0.000	0.200	5		0.0571			
30	R3	48	0.000	0.000	0.222	0.333	0.111	0.000	0.000	0.000	0.000	0.000	0.000
			0.111	0.111	0.000	0.000	0.111	9		0.1027			
31	R3	80	0.111	0.000	0.444	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.222
			0.111	0.000	0.000	0.000	0.111	9		0.1027			
32	R4	3	0.100	0.075	0.025	0.025	0.025	0.050	0.000	0.150	0.100	0.075	0.125
			0.075	0.000	0.025	0.100	0.050	40		0.4566			
33	R4	8	0.000	0.200	0.000	0.000	0.000	0.200	0.200	0.000	0.000	0.200	0.000
			0.200	0.000	0.000	0.000	0.000	5		0.0571			
34	R4	16	0.000	0.111	0.000	0.000	0.111	0.000	0.000	0.111	0.000	0.000	0.111
			0.000	0.222	0.000	0.111	0.222	9		0.1027			
35	R4	48	0.135	0.081	0.054	0.108	0.054	0.000	0.027	0.054	0.000	0.000	0.054
			0.108	0.108	0.027	0.054	0.135	37		0.4224			
36	R4	80	0.103	0.128	0.000	0.077	0.077	0.000	0.026	0.051	0.051	0.026	0.000
			0.000	0.077	0.077	0.128	0.179	39		0.4452			
37	ALL		0.057	0.071	0.085	0.079	0.072	0.049	0.042	0.052	0.070	0.057	0.068
			0.073	0.065	0.051	0.055	0.055	8760					

## BIN PRIORITIES

INTERVAL	ENDPOINTS	ARE	IN	KILOMETERS	FROM	THE	ACCIDENT	SITE,	THE	5
INTERVAL	ENDPOINTS	ARE	3	8	16	48	80			

S V - INITIAL WEATHER CONDITIONS WITH STABILITY CLASS S AND WIND SPEED  
INTERVAL V

WIND SPEED INTERVALS ARE IN METERS PER SECOND (M/S), 1 (0-1), 2 (1-2), 3 (2-3), 4 (3-5), 5 (5-7), 6 (GT 7)

										WIND DIRECTION							
METBIN			1	2	3	4	5	6	7	8	9	10	11	12	13	14	
15	16	TOTAL	PER CENT														
1	B	3	29	33	44	37	37	21	9	20	21	26	26	50	45	40	
21	22	481	5.4909														
2	B	4	14	34	44	79	72	45	31	47	45	23	37	53	59	20	
28	14	645	7.3630														
3	D	1	1	3	2	4	4	3	3	0	1	3	6	2	2	3	
4	5	46	0.5251														
4	D	2	23	26	29	37	29	33	31	32	52	36	30	44	34	22	
19	21	498	5.6849														
5	D	3	37	42	58	58	53	43	51	53	93	68	56	43	44	21	
20	28	768	8.7671														
6	D	4	16	40	58	53	57	30	27	54	61	38	63	51	30	19	
33	20	650	7.4201														
7	D	5	1	6	9	4	10	11	5	3	8	9	2	3	0	0	
3	2	76	0.8676														
8	D	6	0	0	1	0	1	0	0	0	0	0	0	1	0	0	
1	0	4	0.0457														
9	E	1	19	7	7	10	14	7	7	5	11	8	4	10	10	9	
8	17	153	1.7466														
10	E	2	55	49	62	53	50	26	30	20	32	34	49	37	42	44	
38	57	678	7.7397														
11	E	3	46	41	63	47	55	34	21	33	28	47	43	42	34	36	
58	54	682	7.7854														
12	E	4	7	17	36	11	25	25	21	32	29	43	30	17	9	7	
45	11	365	4.1667														
13	F	1	34	34	45	45	43	38	31	22	37	22	49	41	52	47	
29	38	607	6.9292														
14	F	2	77	125	164	172	115	81	42	55	59	38	53	86	84	78	
53	69	1351	15.4224														
15	F	3	22	30	27	12	10	10	10	22	26	15	39	34	22	14	
13	17	323	3.6872														
16	F	4	0	3	2	2	1	0	1	5	2	3	6	0	1	0	
0	5	31	0.3539														
17	R1	3	28	39	20	15	13	2	12	12	31	22	25	40	18	24	
34	17	352	4.0183														
18	R1	8	6	7	1	3	3	1	3	5	1	1	2	3	9	7	
4	3	59	0.6735														
19	R1	16	11	12	3	4	4	2	10	4	8	10	7	9	8	8	
8	11	119	1.3584														

[illegible]

\* \* \* \* SUMMARIES \* \* \* \*

[illegible]



[illegible]

\* \* \* \* \* BIN WINDROSE SUMMARY \* \* \* \* \*

BIN TOTAL	DIRECTION									
	1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16					
1	0.060	0.069	0.091	0.077	0.077	0.044	0.019	0.042	0.044	0.054
0.054	0.104	0.094	0.083	0.044	0.046	1.000000				
2	0.022	0.053	0.068	0.122	0.112	0.070	0.048	0.073	0.070	0.036
0.057	0.082	0.091	0.031	0.043	0.022	1.000000				
3	0.022	0.065	0.043	0.087	0.087	0.065	0.065	0.000	0.022	0.065
0.130	0.043	0.043	0.065	0.087	0.109	1.000000				
4	0.046	0.052	0.058	0.074	0.058	0.066	0.062	0.064	0.104	0.072
0.060	0.088	0.068	0.044	0.038	0.042	1.000000				
5	0.048	0.055	0.076	0.076	0.069	0.056	0.066	0.069	0.121	0.089
0.073	0.056	0.057	0.027	0.026	0.036	1.000000				
6	0.025	0.062	0.089	0.082	0.088	0.046	0.042	0.083	0.094	0.058
0.097	0.078	0.046	0.029	0.051	0.031	1.000000				
7	0.013	0.079	0.118	0.053	0.132	0.145	0.066	0.039	0.105	0.118
0.026	0.039	0.000	0.000	0.039	0.026	1.000000				
8	0.000	0.000	0.250	0.000	0.250	0.000	0.000	0.000	0.000	0.000
0.000	0.250	0.000	0.000	0.250	0.000	1.000000				
9	0.124	0.046	0.046	0.065	0.092	0.046	0.046	0.033	0.072	0.052
0.026	0.065	0.065	0.059	0.052	0.111	1.000000				
10	0.081	0.072	0.091	0.078	0.074	0.038	0.044	0.029	0.047	0.050
0.072	0.055	0.062	0.065	0.056	0.084	1.000000				
11	0.067	0.060	0.092	0.069	0.081	0.050	0.031	0.048	0.041	0.069
0.063	0.062	0.050	0.053	0.085	0.079	1.000000				
12	0.019	0.047	0.099	0.030	0.068	0.068	0.058	0.088	0.079	0.118
0.082	0.047	0.025	0.019	0.123	0.030	1.000000				
13	0.056	0.056	0.074	0.074	0.071	0.063	0.051	0.036	0.061	0.036
0.081	0.068	0.086	0.077	0.048	0.063	1.000000				
14	0.057	0.093	0.121	0.127	0.085	0.060	0.031	0.041	0.044	0.028
0.039	0.064	0.062	0.058	0.039	0.051	1.000000				
15	0.068	0.093	0.084	0.037	0.031	0.031	0.031	0.068	0.080	0.046
0.121	0.105	0.068	0.043	0.040	0.053	1.000000				
16	0.000	0.097	0.065	0.065	0.032	0.000	0.032	0.161	0.065	0.097
0.194	0.000	0.032	0.000	0.000	0.161	1.000000				
17	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
18	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
19	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
20	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
21	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
22	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
23	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
24	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
25	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				

26	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
27	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
28	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
29	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
30	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
31	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
32	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
33	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
34	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
35	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
36	0.082	0.091	0.066	0.047	0.036	0.018	0.031	0.039	0.078	0.063
0.073	0.091	0.075	0.063	0.076	0.071	1.000000				
37	0.057	0.071	0.085	0.079	0.072	0.049	0.042	0.052	0.070	0.057
0.068	0.073	0.065	0.051	0.055	0.055	1.000000				

\*\*\*\*\* BEGINNING OF CHANGE CASE 1 USER INPUT \*\*\*\*\*

\*\*\*\*\* RELEASE DATA BLOCK \*\*\*\*\*

\* SOURCE TERM NUMBER 2 OF 6

\*

224 RDATNAM2001 'CFE'

\*\*\*\*\* RECORD NUMBER 224 REPLACES RECORD NUMBER 211 \*\*\*\*\*

225 RDOALARM001 3004.

\*\*\*\*\* RECORD NUMBER 225 REPLACES RECORD NUMBER 212 \*\*\*\*\*

226 RDNUMREL001 4 \*four plume segments

\*\*\*\*\* RECORD NUMBER 226 REPLACES RECORD NUMBER 213 \*\*\*\*\*

227 RDMAXRIS001 1 \*first plume segment carries greatest risk

\*\*\*\*\* RECORD NUMBER 227 REPLACES RECORD NUMBER 214 \*\*\*\*\*

\*RDREFTIM001 \*defined in source term 1

\*RDPLHEAT001 \*defined in source term 1

\*RDPLHITE001 \*defined in source term 1

228 RDPLUDUR001 16806. 36000. 36000. 36000. \*Pl dur=Tbl49-2 values But lim to 10 hrs

\*\*\*\*\* RECORD NUMBER 228 REPLACES RECORD NUMBER 218 \*\*\*\*\*

229 RDPDELAY001 3004. 19810. 89970. 176300. \*start at Table 49-2 seconds after scram

\*\*\*\*\* RECORD NUMBER 229 REPLACES RECORD NUMBER 219 \*\*\*\*\*

\* XE/KR I CS TE(SB) SR RU(MO) LA CE BA

230 RDRELFRC001 4.16E-1 5.53E-2 5.37E-2 1.23E-3 3.14E-3 1.16E-2 5.57E-5 9.54E-7 4.63E-3

\*\*\*\*\* RECORD NUMBER 230 REPLACES RECORD NUMBER 220 \*\*\*\*\*

231 RDRELFRC002 4.05E-1 1.26E-3 1.21E-3 1.61E-4 3.43E-4 2.58E-3 9.66E-6 4.56E-8 6.45E-4

\*\*\*\*\* RECORD NUMBER 231 REPLACES RECORD NUMBER 221 \*\*\*\*\*

232 RDRELFRC003 1.08E-1 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0

\*\*\*\*\* RECORD NUMBER 232 REPLACES RECORD NUMBER 222 \*\*\*\*\*

233 RDRELFRC004 3.43E-2 0.00E0 0.00E0 6.04E-7 0.00E0 0.00E0 0.00E0 0.00E0  
0.00E0

\*\*\*\*\* RECORD NUMBER 233 REPLACES RECORD NUMBER 223 \*\*\*\*\*

\*\*\*\*\*  
\*\*\*\*\* TERMINATOR RECORD ENCOUNTERED -- END OF CHANGE CASE 1 USER INPUT  
\*\*\*\*\*

USER INPUT PROCESSING SUMMARY - CHANGE CASE 1

NUMBER OF RECORDS CHANGED = 10

NUMBER OF RECORDS ADDED = 0

\*\*\*\*\*  
\*\*\*\*\*

RELEASED INVENTORY OF ALL PLUMES

Kr-85	1.63E+16	1.59E+16	4.23E+15	1.34E+15
Kr-85m	2.48E+17	7.76E+16	1.01E+15	7.88E+12
Kr-87	1.39E+17	2.49E+15	1.61E+10	1.08E+04
Kr-88	5.07E+17	8.24E+16	1.89E+14	1.72E+11
Rb-86	4.53E+14	1.01E+13	0.00E+00	0.00E+00
Sr-89	1.12E+16	1.22E+15	0.00E+00	0.00E+00
Sr-90	9.64E+14	1.05E+14	0.00E+00	0.00E+00
Sr-91	1.11E+16	7.08E+14	0.00E+00	0.00E+00
Sr-92	6.66E+15	1.11E+14	0.00E+00	0.00E+00
Y-90	4.97E+13	1.41E+13	0.00E+00	0.00E+00
Y-91	2.63E+14	4.64E+13	0.00E+00	0.00E+00
Y-92	4.69E+15	3.25E+14	0.00E+00	0.00E+00
Y-93	2.47E+14	2.59E+13	0.00E+00	0.00E+00
Zr-95	3.42E+14	5.90E+13	0.00E+00	0.00E+00
Zr-97	2.97E+14	3.81E+13	0.00E+00	0.00E+00
Nb-95	3.44E+14	5.97E+13	0.00E+00	0.00E+00
Mo-99	7.64E+16	1.57E+16	0.00E+00	0.00E+00
Tc-99m	6.88E+16	1.47E+16	0.00E+00	0.00E+00
Ru-103	6.21E+16	1.37E+16	0.00E+00	0.00E+00
Ru-105	2.57E+16	1.82E+15	0.00E+00	0.00E+00
Ru-106	2.04E+16	4.54E+15	0.00E+00	0.00E+00
Rh-105	3.83E+16	7.83E+15	0.00E+00	0.00E+00
Sb-127	4.58E+14	5.67E+13	0.00E+00	1.54E+11
Sb-129	8.51E+14	3.43E+13	0.00E+00	1.20E+08
Te-127	4.59E+14	5.82E+13	0.00E+00	1.69E+11
Te-127m	6.00E+13	7.86E+12	0.00E+00	2.95E+10
Te-129	9.97E+14	5.38E+13	0.00E+00	6.33E+10
Te-129m	2.06E+14	2.68E+13	0.00E+00	9.71E+10
Te-131m	5.92E+14	6.54E+13	0.00E+00	8.99E+10
Te-132	6.11E+15	7.50E+14	0.00E+00	1.91E+12
I-131	1.95E+17	4.32E+15	0.00E+00	2.40E+10
I-132	1.14E+17	1.01E+15	0.00E+00	1.97E+12
I-133	3.66E+17	6.54E+15	0.00E+00	0.00E+00
I-134	3.64E+16	2.52E+12	0.00E+00	0.00E+00
I-135	2.73E+17	2.88E+15	0.00E+00	0.00E+00
Xe-133	2.88E+18	2.69E+18	6.44E+17	1.79E+17
Xe-135	6.43E+17	3.28E+17	1.96E+16	1.00E+15
Cs-134	3.86E+16	8.68E+14	0.00E+00	0.00E+00
Cs-136	1.09E+16	2.42E+14	0.00E+00	0.00E+00
Cs-137	2.24E+16	5.06E+14	0.00E+00	0.00E+00

Ba-139	6.20E+15	2.16E+13	0.00E+00	0.00E+00
Ba-140	2.91E+16	3.99E+15	0.00E+00	0.00E+00
La-140	1.90E+15	7.21E+14	0.00E+00	0.00E+00
La-141	1.91E+14	9.08E+12	0.00E+00	0.00E+00
La-142	7.79E+13	4.99E+11	0.00E+00	0.00E+00
Ce-141	6.46E+12	5.17E+11	0.00E+00	0.00E+00
Ce-143	5.02E+12	2.06E+11	0.00E+00	0.00E+00
Ce-144	4.34E+12	2.07E+11	0.00E+00	0.00E+00
Pr-143	2.99E+14	5.10E+13	0.00E+00	0.00E+00
Nd-147	1.33E+14	2.26E+13	0.00E+00	0.00E+00
Np-239	6.55E+13	2.86E+12	0.00E+00	0.00E+00
Pu-238	1.36E+10	6.57E+08	0.00E+00	0.00E+00
Pu-239	1.19E+09	5.71E+07	0.00E+00	0.00E+00
Pu-240	1.75E+09	8.35E+07	0.00E+00	0.00E+00
Pu-241	3.92E+11	1.87E+10	0.00E+00	0.00E+00
Am-241	2.58E+10	4.47E+09	0.00E+00	0.00E+00
Cm-242	6.07E+12	1.05E+12	0.00E+00	0.00E+00
Cm-244	7.50E+11	1.30E+11	0.00E+00	0.00E+00

\*\*\*\*\* BEGINNING OF CHANGE CASE 2 USER INPUT \*\*\*\*\*

\*\*\*\*\* RELEASE DATA BLOCK \*\*\*\*\*

\* SOURCE TERM NUMBER 3 OF 6

\*

234 RDATNAM2001 'IC'

\*\*\*\*\* RECORD NUMBER 234 REPLACES RECORD NUMBER 211 \*\*\*\*\*

235 RDOALARM001 4378.

\*\*\*\*\* RECORD NUMBER 235 REPLACES RECORD NUMBER 212 \*\*\*\*\*

236 RDNUMREL001 4 \*four plume segments

\*\*\*\*\* RECORD NUMBER 236 REPLACES RECORD NUMBER 213 \*\*\*\*\*

237 RDMAXRIS001 1 \*first plume segment carries greatest risk

\*\*\*\*\* RECORD NUMBER 237 REPLACES RECORD NUMBER 214 \*\*\*\*\*

\*RDREFTIM001 \*defined in source term 1

\*RDPLHEAT001 \*defined in source term 1

\*RDPLHITE001 \*defined in source term 1

238 RDPLUDUR001 36000. 36000. 36000. 36000. \*Pl dur=Tbl49-2 values But lim to 10 hrs

\*\*\*\*\* RECORD NUMBER 238 REPLACES RECORD NUMBER 218 \*\*\*\*\*

239 RDPDELAY001 4378. 84810. 134400. 177600. \*start at Table 49-2 seconds after scram

\*\*\*\*\* RECORD NUMBER 239 REPLACES RECORD NUMBER 219 \*\*\*\*\*

\* XE/KR I CS TE(SB) SR RU(MO) LA CE BA

240 RDRELFRC001 9.83E-4 1.20E-5 1.15E-5 8.04E-7 1.07E-5 1.31E-5 1.35E-6 5.85E-9 1.20E-5

\*\*\*\*\* RECORD NUMBER 240 REPLACES RECORD NUMBER 220 \*\*\*\*\*

241 RDRELFRC002 4.93E-4 0.00E0 0.00E0 4.83E-9 0.00E0 0.00E0 6.00E-9 3.20E-11 0.00E0

\*\*\*\*\* RECORD NUMBER 241 REPLACES RECORD NUMBER 221 \*\*\*\*\*

242 RDRELFRC003 3.94E-4 0.00E0 0.00E0 1.21E-9 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0

\*\*\*\*\* RECORD NUMBER 242 REPLACES RECORD NUMBER 222 \*\*\*\*\*

243 RDRELFRC004 7.72E-4 0.00E0 0.00E0 6.04E-10 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0

\*\*\*\*\* RECORD NUMBER 243 REPLACES RECORD NUMBER 223 \*\*\*\*\*

.

\*\*\*\*\* TERMINATOR RECORD ENCOUNTERED -- END OF CHANGE CASE 2 USER INPUT

\*\*\*\*\*

USER INPUT PROCESSING SUMMARY - CHANGE CASE 2

NUMBER OF RECORDS CHANGED = 10

NUMBER OF RECORDS ADDED = 0

\*\*\*\*\*  
\*\*\*\*\*

RELEASED INVENTORY OF ALL PLUMES

Kr-85	3.85E+13	1.93E+13	1.54E+13	3.03E+13
Kr-85m	3.66E+14	5.78E+12	5.48E+11	1.68E+11
Kr-87	6.24E+13	1.61E+08	7.05E+04	2.00E+02
Kr-88	5.69E+14	1.22E+12	3.39E+10	3.55E+09
Rb-86	9.65E+10	0.00E+00	0.00E+00	0.00E+00
Sr-89	3.81E+13	0.00E+00	0.00E+00	0.00E+00
Sr-90	3.28E+12	0.00E+00	0.00E+00	0.00E+00
Sr-91	3.02E+13	0.00E+00	0.00E+00	0.00E+00
Sr-92	1.04E+13	0.00E+00	0.00E+00	0.00E+00
Y-90	6.18E+11	1.41E+09	0.00E+00	0.00E+00
Y-91	6.23E+12	2.72E+10	0.00E+00	0.00E+00
Y-92	1.73E+13	1.08E+08	0.00E+00	0.00E+00
Y-93	4.86E+12	4.66E+09	0.00E+00	0.00E+00
Zr-95	8.27E+12	3.64E+10	0.00E+00	0.00E+00
Zr-97	6.35E+12	1.13E+10	0.00E+00	0.00E+00
Nb-95	8.34E+12	3.71E+10	0.00E+00	0.00E+00
Mo-99	8.36E+13	0.00E+00	0.00E+00	0.00E+00
Tc-99m	7.67E+13	0.00E+00	0.00E+00	0.00E+00
Ru-103	7.00E+13	0.00E+00	0.00E+00	0.00E+00
Ru-105	1.81E+13	0.00E+00	0.00E+00	0.00E+00
Ru-106	2.30E+13	0.00E+00	0.00E+00	0.00E+00
Rh-105	4.21E+13	0.00E+00	0.00E+00	0.00E+00
Sb-127	2.92E+11	1.49E+09	3.36E+08	1.53E+08
Sb-129	3.41E+11	5.68E+07	1.56E+06	1.14E+05
Te-127	2.96E+11	1.58E+09	3.64E+08	1.69E+08
Te-127m	3.93E+10	2.36E+08	5.92E+07	2.95E+07
Te-129	4.45E+11	5.77E+08	1.30E+08	6.33E+07
Te-129m	1.34E+11	7.94E+08	1.96E+08	9.71E+07
Te-131m	3.61E+11	1.29E+09	2.36E+08	8.92E+07
Te-132	3.89E+12	1.92E+10	4.25E+09	1.91E+09
I-131	4.18E+13	1.38E+08	4.34E+07	2.41E+07
I-132	1.29E+13	1.97E+10	4.38E+09	1.96E+09
I-133	7.18E+13	0.00E+00	0.00E+00	0.00E+00
I-134	7.11E+11	0.00E+00	0.00E+00	0.00E+00
I-135	4.30E+13	0.00E+00	0.00E+00	0.00E+00
Xe-133	6.68E+15	2.96E+15	2.19E+15	4.02E+15
Xe-135	1.11E+15	1.00E+14	2.80E+13	2.19E+13
Cs-134	8.26E+12	0.00E+00	0.00E+00	0.00E+00
Cs-136	2.33E+12	0.00E+00	0.00E+00	0.00E+00
Cs-137	4.81E+12	0.00E+00	0.00E+00	0.00E+00
Ba-139	3.47E+12	0.00E+00	0.00E+00	0.00E+00
Ba-140	7.49E+13	0.00E+00	0.00E+00	0.00E+00
La-140	1.58E+13	2.47E+10	0.00E+00	0.00E+00
La-141	2.70E+12	2.33E+08	0.00E+00	0.00E+00
La-142	4.79E+11	9.25E+04	0.00E+00	0.00E+00
Ce-141	6.21E+10	3.64E+08	0.00E+00	0.00E+00

Ce-143	2.89E+10	9.87E+07	0.00E+00	0.00E+00
Ce-144	2.66E+10	1.45E+08	0.00E+00	0.00E+00
Pr-143	7.19E+12	3.05E+10	0.00E+00	0.00E+00
Nd-147	3.19E+12	1.34E+10	0.00E+00	0.00E+00
Np-239	3.87E+11	1.61E+09	0.00E+00	0.00E+00
Pu-238	8.39E+07	4.71E+05	0.00E+00	0.00E+00
Pu-239	7.32E+06	4.02E+04	0.00E+00	0.00E+00
Pu-240	1.07E+07	5.86E+04	0.00E+00	0.00E+00
Pu-241	2.40E+09	1.31E+07	0.00E+00	0.00E+00
Am-241	6.25E+08	2.78E+06	0.00E+00	0.00E+00
Cm-242	1.47E+11	6.51E+08	0.00E+00	0.00E+00
Cm-244	1.82E+10	8.07E+07	0.00E+00	0.00E+00

\*\*\*\*\* BEGINNING OF CHANGE CASE 3 USER INPUT \*\*\*\*\*

\*\*\*\*\* RELEASE DATA BLOCK \*\*\*\*\*

\* SOURCE TERM NUMBER 4 OF 6

\*

244 RDATNAM2001 'BP'

\*\*\*\*\* RECORD NUMBER 244 REPLACES RECORD NUMBER 211 \*\*\*\*\*

245 RDOALARM001 31890.

\*\*\*\*\* RECORD NUMBER 245 REPLACES RECORD NUMBER 212 \*\*\*\*\*

246 RDNUMREL001 4 \*four plume segments

\*\*\*\*\* RECORD NUMBER 246 REPLACES RECORD NUMBER 213 \*\*\*\*\*

247 RDMAXRIS001 1 \*first plume segment carries greatest risk

\*\*\*\*\* RECORD NUMBER 247 REPLACES RECORD NUMBER 214 \*\*\*\*\*

\*RDREFTIM001 \*defined in source term 1

\*RDPLHEAT001 \*defined in source term 1

\*RDPLHITE001 \*defined in source term 1

248 RDPLUDUR001 14550. 36000. 36000. 36000. \*Pl dur=Tbl49-2 values But lim to 10 hrs

\*\*\*\*\* RECORD NUMBER 248 REPLACES RECORD NUMBER 218 \*\*\*\*\*

249 RDPDELAY001 31890. 46440. 86490. 172800. \*start at Table 49-2 seconds after scram

\*\*\*\*\* RECORD NUMBER 249 REPLACES RECORD NUMBER 219 \*\*\*\*\*

\* XE/KR I CS TE(SB) SR RU(MO) LA CE BA

250 RDRELFRC001 1.00E0 1.69E-1 1.62E-1 6.27E-3 3.57E-3 4.48E-2 1.30E-4 3.19E-6 8.93E-3

\*\*\*\*\* RECORD NUMBER 250 REPLACES RECORD NUMBER 220 \*\*\*\*\*

251 RDRELFRC002 0.00E0 4.64E-2 3.38E-2 3.12E-3 0.00E0 0.00E0 0.00E0 0.00E0 2.00E-6

\*\*\*\*\* RECORD NUMBER 251 REPLACES RECORD NUMBER 221 \*\*\*\*\*

252 RDRELFRC003 0.00E0 2.31E-1 6.60E-2 5.32E-3 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0

\*\*\*\*\* RECORD NUMBER 252 REPLACES RECORD NUMBER 222 \*\*\*\*\*

253 RDRELFRC004 0.00E0 2.80E-3 9.96E-3 1.57E-3 0.00E0 0.00E0 0.00E0 1.00E-6 0.00E0

\*\*\*\*\* RECORD NUMBER 253 REPLACES RECORD NUMBER 223 \*\*\*\*\*

.

\*\*\*\*\* TERMINATOR RECORD ENCOUNTERED -- END OF CHANGE CASE 3 USER INPUT

\*\*\*\*\*

USER INPUT PROCESSING SUMMARY - CHANGE CASE 3

NUMBER OF RECORDS CHANGED = 10

NUMBER OF RECORDS ADDED = 0

\*\*\*\*\*

\*\*\*\*\*

## RELEASED INVENTORY OF ALL PLUMES

Kr-85	3.92E+16	0.00E+00	0.00E+00	0.00E+00
Kr-85m	1.81E+17	0.00E+00	0.00E+00	0.00E+00
Kr-87	5.00E+15	0.00E+00	0.00E+00	0.00E+00
Kr-88	1.86E+17	0.00E+00	0.00E+00	0.00E+00
Rb-86	1.35E+15	2.78E+14	5.34E+14	7.77E+13
Sr-89	1.27E+16	0.00E+00	0.00E+00	0.00E+00
Sr-90	1.10E+15	0.00E+00	0.00E+00	0.00E+00
Sr-91	7.17E+15	0.00E+00	0.00E+00	0.00E+00
Sr-92	1.05E+15	0.00E+00	0.00E+00	0.00E+00
Y-90	1.59E+14	0.00E+00	0.00E+00	0.00E+00
Y-91	6.18E+14	0.00E+00	0.00E+00	0.00E+00
Y-92	3.24E+15	0.00E+00	0.00E+00	0.00E+00
Y-93	3.40E+14	0.00E+00	0.00E+00	0.00E+00
Zr-95	7.94E+14	0.00E+00	0.00E+00	0.00E+00
Zr-97	5.05E+14	0.00E+00	0.00E+00	0.00E+00
Nb-95	8.03E+14	0.00E+00	0.00E+00	0.00E+00
Mo-99	2.72E+17	0.00E+00	0.00E+00	0.00E+00
Tc-99m	2.55E+17	0.00E+00	0.00E+00	0.00E+00
Ru-103	2.39E+17	0.00E+00	0.00E+00	0.00E+00
Ru-105	2.98E+16	0.00E+00	0.00E+00	0.00E+00
Ru-106	7.88E+16	0.00E+00	0.00E+00	0.00E+00
Rh-105	1.35E+17	0.00E+00	0.00E+00	0.00E+00
Sb-127	2.20E+15	1.04E+15	1.63E+15	4.02E+14
Sb-129	1.26E+15	2.03E+14	5.81E+13	3.66E+11
Te-127	2.26E+15	1.09E+15	1.74E+15	4.43E+14
Te-127m	3.06E+14	1.52E+14	2.60E+14	7.68E+13
Te-129	2.01E+15	5.52E+14	6.30E+14	1.65E+14
Te-129m	1.04E+15	5.17E+14	8.74E+14	2.53E+14
Te-131m	2.53E+15	1.07E+15	1.41E+15	2.39E+14
Te-132	2.91E+16	1.36E+16	2.10E+16	5.02E+15
I-131	5.79E+17	1.55E+17	7.41E+17	8.30E+15
I-132	6.17E+16	1.50E+16	2.18E+16	5.17E+15
I-133	8.66E+17	1.88E+17	6.46E+17	3.52E+15
I-134	2.51E+14	2.67E+11	2.01E+08	1.43E-02
I-135	3.72E+17	4.89E+16	7.57E+16	7.43E+13
Xe-133	6.68E+18	2.33E+16	1.54E+17	2.28E+15
Xe-135	1.09E+18	7.37E+16	2.21E+17	5.96E+14
Cs-134	1.16E+17	2.43E+16	4.73E+16	7.14E+15
Cs-136	3.24E+16	6.66E+15	1.27E+16	1.82E+15
Cs-137	6.77E+16	1.41E+16	2.76E+16	4.16E+15
Ba-139	2.48E+14	1.62E+09	0.00E+00	0.00E+00
Ba-140	5.51E+16	1.22E+13	0.00E+00	0.00E+00
La-140	1.03E+16	3.29E+12	0.00E+00	0.00E+00
La-141	1.14E+14	0.00E+00	0.00E+00	0.00E+00
La-142	5.67E+12	0.00E+00	0.00E+00	0.00E+00
Ce-141	2.24E+13	0.00E+00	0.00E+00	5.75E+12
Ce-143	1.43E+13	0.00E+00	0.00E+00	1.85E+12
Ce-144	1.45E+13	0.00E+00	0.00E+00	4.53E+12
Pr-143	6.86E+14	0.00E+00	0.00E+00	3.58E+11
Nd-147	3.03E+14	0.00E+00	0.00E+00	0.00E+00
Np-239	1.99E+14	0.00E+00	0.00E+00	3.73E+13
Pu-238	4.54E+10	0.00E+00	0.00E+00	1.42E+10



Pu-239	4.00E+09	0.00E+00	0.00E+00	1.26E+09
Pu-240	5.84E+09	0.00E+00	0.00E+00	1.83E+09
Pu-241	1.31E+12	0.00E+00	0.00E+00	4.11E+11
Am-241	6.02E+10	0.00E+00	0.00E+00	3.98E+06
Cm-242	1.41E+13	0.00E+00	0.00E+00	0.00E+00
Cm-244	1.75E+12	0.00E+00	0.00E+00	0.00E+00

\*\*\*\*\* BEGINNING OF CHANGE CASE 4 USER INPUT \*\*\*\*\*

\*\*\*\*\* RELEASE DATA BLOCK \*\*\*\*\*

\* SOURCE TERM NUMBER 5 OF 6

\*

254 RDATNAM2001 'CI'

\*\*\*\*\* RECORD NUMBER 254 REPLACES RECORD NUMBER 211 \*\*\*\*\*

255 RDOALARM001 101.

\*\*\*\*\* RECORD NUMBER 255 REPLACES RECORD NUMBER 212 \*\*\*\*\*

256 RDNUMREL001 4 \*four plume segments

\*\*\*\*\* RECORD NUMBER 256 REPLACES RECORD NUMBER 213 \*\*\*\*\*

257 RDMAXRIS001 1 \*first plume segment carries greatest risk

\*\*\*\*\* RECORD NUMBER 257 REPLACES RECORD NUMBER 214 \*\*\*\*\*

\*RDREFTIM001 \*defined in source term 1

\*RDPLHEAT001 \*defined in source term 1

\*RDPLHITE001 \*defined in source term 1

258 RDPLUDUR001 36000. 36000. 36000. 36000. \*Pl dur=Tbl49-2 values But lim to 10 hrs

\*\*\*\*\* RECORD NUMBER 258 REPLACES RECORD NUMBER 218 \*\*\*\*\*

259 RDPDELAY001 101. 50020. 136400. 211700. \*start at Table 49-2 seconds after scram

\*\*\*\*\* RECORD NUMBER 259 REPLACES RECORD NUMBER 219 \*\*\*\*\*

\* XE/KR I CS TE(SB) SR RU(MO) LA CE BA

260 RDRELFRC001 5.73E-1 4.56E-2 2.10E-2 1.64E-3 2.03E-2 4.04E-2 2.39E-4 2.97E-6 3.16E-2

\*\*\*\*\* RECORD NUMBER 260 REPLACES RECORD NUMBER 220 \*\*\*\*\*

261 RDRELFRC002 1.13E-1 0.00E0 0.00E0 1.15E-5 0.00E0 0.00E0 1.00E-7 0.00E0 0.00E0

\*\*\*\*\* RECORD NUMBER 261 REPLACES RECORD NUMBER 221 \*\*\*\*\*

262 RDRELFRC003 5.66E-2 0.0E0 0.00E0 8.10E-5 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0

\*\*\*\*\* RECORD NUMBER 262 REPLACES RECORD NUMBER 222 \*\*\*\*\*

263 RDRELFRC004 2.74E-2 0.0E0 0.00E0 1.27E-5 0.00E0 0.00E0 0.00E0 0.00E0 0.00E0

\*\*\*\*\* RECORD NUMBER 263 REPLACES RECORD NUMBER 223 \*\*\*\*\*

\*

\*\*\*\*\* TERMINATOR RECORD ENCOUNTERED -- END OF CHANGE CASE 4 USER INPUT

\*\*\*\*\*

USER INPUT PROCESSING SUMMARY - CHANGE CASE 4

NUMBER OF RECORDS CHANGED = 10

NUMBER OF RECORDS ADDED = 0

\*\*\*\*\*  
\*\*\*\*\*

RELEASED INVENTORY OF ALL PLUMES

Kr-85	2.25E+16	4.43E+15	2.22E+15	1.07E+15
-------	----------	----------	----------	----------

Kr-85m	2.56E+17	5.91E+15	7.23E+13	1.38E+12
Kr-87	6.95E+16	7.15E+12	7.49E+06	4.05E+01
Kr-88	4.43E+17	2.96E+15	4.25E+12	1.25E+10
Rb-86	1.76E+14	0.00E+00	0.00E+00	0.00E+00
Sr-89	7.23E+16	0.00E+00	0.00E+00	0.00E+00
Sr-90	6.23E+15	0.00E+00	0.00E+00	0.00E+00
Sr-91	6.25E+16	0.00E+00	0.00E+00	0.00E+00
Sr-92	2.68E+16	0.00E+00	0.00E+00	0.00E+00
Y-90	4.03E+14	2.61E+10	0.00E+00	0.00E+00
Y-91	1.17E+15	4.55E+11	0.00E+00	0.00E+00
Y-92	3.12E+16	1.19E+10	0.00E+00	0.00E+00
Y-93	9.33E+14	1.51E+11	0.00E+00	0.00E+00
Zr-95	1.46E+15	6.09E+11	0.00E+00	0.00E+00
Zr-97	1.18E+15	2.80E+11	0.00E+00	0.00E+00
Nb-95	1.48E+15	6.18E+11	0.00E+00	0.00E+00
Mo-99	2.61E+17	0.00E+00	0.00E+00	0.00E+00
Tc-99m	2.38E+17	0.00E+00	0.00E+00	0.00E+00
Ru-103	2.16E+17	0.00E+00	0.00E+00	0.00E+00
Ru-105	6.71E+16	0.00E+00	0.00E+00	0.00E+00
Ru-106	7.11E+16	0.00E+00	0.00E+00	0.00E+00
Rh-105	1.31E+17	0.00E+00	0.00E+00	0.00E+00
Sb-127	6.02E+14	3.80E+12	2.24E+13	3.00E+12
Sb-129	8.42E+14	6.38E+11	9.56E+10	5.23E+08
Te-127	6.07E+14	3.98E+12	2.43E+13	3.35E+12
Te-127m	8.01E+13	5.62E+11	3.96E+12	6.21E+11
Te-129	1.05E+15	1.92E+12	8.66E+12	1.32E+12
Te-129m	2.74E+14	1.90E+12	1.31E+13	2.02E+12
Te-131m	7.56E+14	3.85E+12	1.56E+13	1.51E+12
Te-132	8.02E+15	4.97E+13	2.83E+14	3.69E+13
I-131	1.59E+17	2.46E+11	2.92E+12	5.33E+11
I-132	5.83E+16	5.10E+13	2.92E+14	3.80E+13
I-133	2.84E+17	0.00E+00	0.00E+00	0.00E+00
I-134	6.91E+15	0.00E+00	0.00E+00	0.00E+00
I-135	1.85E+17	0.00E+00	0.00E+00	0.00E+00
Xe-133	3.93E+18	7.16E+17	3.14E+17	1.36E+17
Xe-135	7.64E+17	4.79E+16	3.85E+15	3.78E+14
Cs-134	1.51E+16	0.00E+00	0.00E+00	0.00E+00
Cs-136	4.26E+15	0.00E+00	0.00E+00	0.00E+00
Cs-137	8.78E+15	0.00E+00	0.00E+00	0.00E+00
Ba-139	1.66E+16	0.00E+00	0.00E+00	0.00E+00
Ba-140	1.98E+17	0.00E+00	0.00E+00	0.00E+00
La-140	1.80E+16	4.86E+11	0.00E+00	0.00E+00
La-141	5.90E+14	2.14E+10	0.00E+00	0.00E+00
La-142	1.45E+14	1.19E+08	0.00E+00	0.00E+00
Ce-141	2.21E+13	2.87E+09	0.00E+00	0.00E+00
Ce-143	1.50E+13	0.00E+00	0.00E+00	0.00E+00
Ce-144	1.35E+13	0.00E+00	0.00E+00	0.00E+00
Pr-143	1.28E+15	5.19E+11	0.00E+00	0.00E+00
Nd-147	5.66E+14	2.28E+11	0.00E+00	0.00E+00
Np-239	1.99E+14	0.00E+00	0.00E+00	0.00E+00
Pu-238	4.23E+10	1.85E+05	0.00E+00	0.00E+00
Pu-239	3.72E+09	0.00E+00	0.00E+00	0.00E+00
Pu-240	5.44E+09	3.08E+02	0.00E+00	0.00E+00
Pu-241	1.22E+12	0.00E+00	0.00E+00	0.00E+00
Am-241	1.11E+11	4.63E+07	0.00E+00	0.00E+00
Cm-242	2.60E+13	1.09E+10	0.00E+00	0.00E+00
Cm-244	3.22E+12	1.35E+09	0.00E+00	0.00E+00

```

***** BEGINNING OF CHANGE CASE    5 USER INPUT *****
***** RELEASE DATA BLOCK *****
* SOURCE TERM NUMBER 6 OF 6
*
264  RDATNAM2001 'CFL'
***** RECORD NUMBER    264 REPLACES RECORD NUMBER    211 *****
265  RDOALARM001 2922.
***** RECORD NUMBER    265 REPLACES RECORD NUMBER    212 *****
266  RDNUMREL001 4 *four plume segments
***** RECORD NUMBER    266 REPLACES RECORD NUMBER    213 *****
267  RDMAXRIS001 3 *third segment is largest noble gas/i/cs release
***** RECORD NUMBER    267 REPLACES RECORD NUMBER    214 *****
      *RDREFTIM001 *defined in source term 1
      *RDPLHEAT001 *defined in source term 1
      *RDPLHITE001 *defined in source term 1
268  RDPLUDUR001 23438. 36000. 36000. 36000. *Pl dur=Tbl49-2 values But lim to
10 hrs
***** RECORD NUMBER    268 REPLACES RECORD NUMBER    218 *****
269  RDPDELAY001 2922. 26360. 108000. 194400. *start at Table 49-2 seconds
after scram
***** RECORD NUMBER    269 REPLACES RECORD NUMBER    219 *****
      * XE/KR I CS TE(SB) SR RU(MO) LA CE BA
270  RDRELFRC001 3.36E-4 1.20E-5 1.15E-5 1.00E-6 1.57E-5 1.68E-5 9.96E-7
7.41E-9 1.61E-5
***** RECORD NUMBER    270 REPLACES RECORD NUMBER    220 *****
271  RDRELFRC002 1.19E-3 5.00E-8 3.23E-8 1.75E-8 1.04E-6 2.90E-7 1.07E-5
4.05E-8 6.60E-7
***** RECORD NUMBER    271 REPLACES RECORD NUMBER    221 *****
272  RDRELFRC003 9.79E-1 2.13E-5 1.16E-5 2.47E-5 2.39E-3 1.26E-3 9.75E-2
3.68E-4 2.25E-3
***** RECORD NUMBER    272 REPLACES RECORD NUMBER    222 *****
273  RDRELFRC004 0.00E0 0.00E0 2.56E-7 1.20E-5 4.42E-4 1.55E-4 4.39E-2 1.66E-4
3.46E-4
***** RECORD NUMBER    273 REPLACES RECORD NUMBER    223 *****
.
***** TERMINATOR RECORD ENCOUNTERED -- END OF CHANGE CASE    5 USER INPUT
*****

```

```

USER INPUT PROCESSING SUMMARY - CHANGE CASE    5
NUMBER OF RECORDS CHANGED                =    10
NUMBER OF RECORDS ADDED                   =     0
*****
*****

```

```

RELEASED INVENTORY OF ALL PLUMES
Kr-85      1.32E+13  4.67E+13  3.84E+16  0.00E+00
Kr-85m     1.74E+14  1.72E+14  4.24E+15  0.00E+00
Kr-87      6.88E+13  2.71E+12  9.54E+09  0.00E+00
Kr-88      3.29E+14  1.55E+14  5.04E+14  0.00E+00
Rb-86      9.68E+10  2.68E+08  9.31E+10  1.98E+09
Sr-89      5.59E+13  3.69E+12  8.36E+15  1.53E+15
Sr-90      4.82E+12  3.19E+11  7.34E+14  1.36E+14

```

Sr-91	5.18E+13	1.88E+12	8.26E+14	2.65E+13
Sr-92	2.65E+13	2.12E+11	1.48E+12	5.89E+08
Y-90	5.13E+11	3.04E+12	2.16E+16	7.48E+15
Y-91	4.61E+12	4.88E+13	4.40E+17	1.96E+17
Y-92	2.60E+13	5.37E+12	5.30E+14	2.09E+12
Y-93	4.15E+12	2.53E+13	4.86E+16	4.22E+15
Zr-95	6.10E+12	6.53E+13	5.89E+17	2.62E+17
Zr-97	5.12E+12	3.92E+13	1.41E+17	2.37E+16
Nb-95	6.15E+12	6.61E+13	6.02E+17	2.71E+17
Mo-99	1.10E+14	1.74E+12	5.94E+15	5.68E+14
Tc-99m	9.93E+13	1.63E+12	5.71E+15	5.47E+14
Ru-103	8.99E+13	1.54E+12	6.59E+15	7.97E+14
Ru-105	3.24E+13	1.54E+11	1.94E+13	5.64E+10
Ru-106	2.96E+13	5.10E+11	2.21E+15	2.72E+14
Rh-105	5.51E+13	8.55E+11	2.44E+15	1.88E+14
Sb-127	3.70E+11	6.08E+09	7.24E+12	2.94E+12
Sb-129	5.99E+11	2.79E+09	1.03E+11	1.07E+09
Te-127	3.72E+11	6.27E+09	7.78E+12	3.26E+12
Te-127m	4.88E+10	8.55E+08	1.21E+12	5.87E+11
Te-129	7.25E+11	4.85E+09	2.74E+12	1.25E+12
Te-129m	1.67E+11	2.91E+09	4.04E+12	1.92E+12
Te-131m	4.72E+11	6.82E+09	5.70E+12	1.59E+12
Te-132	4.93E+12	8.02E+10	9.26E+13	3.63E+13
I-131	4.21E+13	1.71E+11	6.77E+13	4.92E+11
I-132	2.18E+13	8.67E+10	9.54E+13	3.74E+13
I-133	7.71E+13	2.44E+11	4.88E+13	0.00E+00
I-134	3.89E+12	2.37E+07	1.65E+02	0.00E+00
I-135	5.39E+13	9.45E+10	3.73E+12	0.00E+00
Xe-133	2.31E+15	7.82E+15	5.68E+18	0.00E+00
Xe-135	4.56E+14	8.32E+14	1.22E+17	0.00E+00
Cs-134	8.26E+12	2.32E+10	8.32E+12	1.83E+11
Cs-136	2.34E+12	6.44E+09	2.20E+12	4.61E+10
Cs-137	4.81E+12	1.35E+10	4.85E+12	1.07E+11
Ba-139	1.37E+13	8.86E+09	3.37E+08	2.97E+02
Ba-140	1.01E+14	4.06E+12	1.32E+16	1.92E+15
La-140	1.31E+13	5.90E+13	3.65E+17	1.08E+17
La-141	2.91E+12	7.29E+12	1.22E+15	7.95E+12
La-142	9.30E+11	2.44E+11	8.30E+10	7.69E+05
Ce-141	5.99E+10	5.26E+11	5.01E+15	2.21E+15
Ce-143	3.82E+10	1.76E+11	9.92E+14	2.70E+14
Ce-144	3.37E+10	1.84E+11	1.67E+15	7.51E+14
Pr-143	5.33E+12	5.63E+13	4.89E+17	2.09E+17
Nd-147	2.36E+12	2.49E+13	2.13E+17	9.02E+16
Np-239	5.03E+11	2.49E+12	1.71E+16	5.75E+15
Pu-238	1.06E+08	5.88E+08	5.56E+12	2.61E+12
Pu-239	9.27E+06	5.07E+07	4.62E+11	2.09E+11
Pu-240	1.36E+07	7.41E+07	6.74E+11	3.04E+11
Pu-241	3.05E+09	1.66E+10	1.51E+14	6.82E+13
Am-241	4.61E+08	4.95E+09	4.51E+13	2.03E+13
Cm-242	1.08E+11	1.16E+12	1.06E+16	4.74E+15
Cm-244	1.34E+10	1.44E+11	1.31E+15	5.91E+14

USER INPUT IS READ FROM UNIT 25  
 RECORD IDENTIFIER FIELDS 11 CHARACTERS LONG ARE EXPECTED.  
 THE FIRST 100 COLUMNS OF EACH INPUT RECORD ARE PROCESSED.

THE MAXIMUM NUMBER OF IDENTIFIER RECORDS THAT MAY BE SAVED AS THE BASE CASE IS 1000.

RECORD  
NUMBER

RECORD

```
*****
* FILE NAME:  VEARLY.INP
*
* DESCRIPTIVE TITLE DESCRIBING THIS "EARLY" INPUT FILE
*
1  MIEANAM1001  'SNC AP1000 EARLY FILE - 95% Evacuation'
2  DCF_FILE001  'C:\MACCS2\DOSDATA.INP' (DCF file of MACCS 1.5.11.1)
*
*              ORGNAM              ORGFLG
*
3  MIORGDEF001  'A-SKIN'              .TRUE.
4  MIORGDEF002  'A-RED MARR'          .TRUE.
5  MIORGDEF003  'A-LUNGS'             .TRUE.
6  MIORGDEF004  'A-THYROIDH'          .TRUE.
7  MIORGDEF005  'A-STOMACH'           .TRUE.
8  MIORGDEF006  'A-LOWER LI'          .FALSE.  (does not contribute to early
fatalities)
9  MIORGDEF007  'L-EDEWBODY'          .TRUE.
10 MIORGDEF008  'L-RED MARR'          .TRUE.
11 MIORGDEF009  'L-BONE SUR'          .TRUE.
12 MIORGDEF010  'L-BREAST'            .TRUE.
13 MIORGDEF011  'L-LUNGS'             .TRUE.
14 MIORGDEF012  'L-THYROID'           .TRUE.
15 MIORGDEF013  'L-LOWER LI'          .TRUE.
16 MIORGDEF014  'L-BLAD WAL'          .TRUE.
17 MIORGDEF015  'L-LIVER'             .FALSE.
18 MIORGDEF016  'L-THYROIDH'          .TRUE.
*
* FLAG TO INDICATE THAT THIS IS THE LAST PROGRAM IN THE SERIES TO BE RUN
*
19 MIENDAT2001  .FALSE.  (SET THIS VALUE TO .TRUE. TO SKIP CHRONC)
*
* DISPERSION MODEL OPTION CODE:  1  *  STRAIGHT LINE
*                                2  *  WIND-SHIFT WITH ROTATION
*                                3  *  WIND-SHIFT WITHOUT ROTATION
*
20 MIIPLUME001  1 * URD used 1
*
* NUMBER OF FINE GRID SUBDIVISIONS USED BY THE MODEL
*
21 MINUMFIN001  7  (3, 5 OR 7 ALLOWED)
*
* LEVEL OF DEBUG OUTPUT REQUIRED, NORMAL RUNS SHOULD SPECIFY ZERO
*
22 MIIPRINT001  0
*
* LOGICAL FLAG SIGNIFYING THAT THE BREAKDOWN OF RISK BY WEATHER CATEGORY
* BIN ARE TO BE PRESENTED TO SHOW THEIR RELATIVE CONTRIBUTION TO THE MEAN
*
*              RISBIN
```

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*
23 MIRISCAT001 .FALSE.
*
* FLAG INDICATING IF WIND-ROSES FROM ATMOS ARE TO BE OVERRIDDEN
*
24 MIOVRRID001 .FALSE. (USE THE WIND ROSE CALCULATED FOR EACH WEATHER BIN)
*****
* POPULATION DISTRIBUTION DATA BLOCK, LOADED BY INPOPU, STORED IN
/POPDAT/
*
25 PDPOPFLG001 FILE
*
*****
* SHIELDING AND EXPOSURE FACTORS, LOADED BY INDFAC, STORED IN /EADFAC/
*
* THREE VALUES OF EACH PROTECTION FACTOR ARE SUPPLIED,
* ONE FOR EACH TYPE OF ACTIVITY:
*
* ACTIVITY TYPE:
*   1 - EVACUEES WHILE MOVING
*   2 - NORMAL ACTIVITY IN SHELTERING AND EVACUATION ZONE
*   3 - SHELTERED ACTIVITY
*
* CLOUD SHIELDING FACTOR
*
*   SITE      GG   PB   SEQ  SUR  ZION
*   SHELTERING 0.7  0.5  0.65 0.6  0.5
*
*           EVACUEES  NORMAL  SHELTER
*
26 SECSFACT001      0.75      0.75      0.75  * use URD values
*
* PROTECTION FACTOR FOR INHALATION
*
27 SEPROTIN001      0.4      0.4      0.4  * URD Values*
*
* BREATHING RATE (CUBIC METERS PER SECOND)
*
28 SEBRRATE001  3.3E-4  3.3E-4  3.3E-4 *URD values
*
* SKIN PROTECTION FACTOR
*
29 SESKPFAC001  1.0      0.41      0.33  * VALUES FOR NORMAL ACTIVITY AND
*                                     SHELTERING SELECTED BY NRC STAFF
*
* GROUND SHIELDING FACTOR
*
*   SITE      GG   PB   SEQ  SUR  ZION
*   SHELTERING 0.25 0.1  0.2  0.2  0.1
*
30 SEGSHFAC001      0.33      0.33      0.33  * URD values
*
* RESUSPENSION INHALATION MODEL CONCENTRATION COEFFICIENT (/METER)
*

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      * RESCON = 1.E-4 IS APPROPRIATE FOR MECHANICAL RESUSPENSION BY
VEHICLES.
      * RESHAF = 2.11 DAYS CAUSES 1.E-4 TO DECAY IN ONE WEEK TO 1.E-5, THE
VALUE
      * OF RESCON USED IN THE FIRST TERM OF THE LONG-TERM RESUSPENSION
EQUATION
      * USED IN CHRONC.
      *
31 SERESCON001 1.E-4 (RESUSPENSION IS TURNED ON)
      *
      * RESUSPENSION CONCENTRATION COEFFICIENT HALF-LIFE (SEC)
      *
32 SERESHAF001 1.82E5 (2.11 DAYS)

*****
      * EVACUATION ZONE DATA BLOCK, LOADED BY EVNETW, STORED IN /NETWOR/,
/EOPTIO/
      *
      * SPECIFIC DESCRIPTION OF THE EMERGENCY RESPONSE SCENARIO BEING USED
      *
33 EZEANAM2001 '95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION'
      *
      * THE TYPE OF WEIGHTING TO BE APPLIED TO THE EMERGENCY RESPONSE SCENARIOS
      * YOU MUST SUPPLY A VALUE OF 'TIME' OR 'PEOPLE'
      *
34 EZWTNAME001 'PEOPLE'
      *
      * WEIGHTING FRACTION APPLICABLE TO THIS SCENARIO
      *
35 EZWTFRAC001 0.95 *95% of people evacuated
      *
      * LAST RING IN THE MOVEMENT ZONE
      *
36 EZLASMOV001 6 (10 miles)
      *
      * Flag defining the time at which evacuees "enter" the destination
element
      *
37 TRAVELPOINT 'CENTERPOINT' (new option implemented at MACCS2 v. 1.11f)
*TRAVELPOINT 'BOUNDARY' (Westinghouse used BOUNDARY)
      *
      * RADIAL EVACUATION SPEED (M/S) = speed to exit EPZ, 30 min after alarm
      *
38 EZESPEED001 2.20 2.20 2.20 *(based on 125-42 min for all zones to clear
EPZ,
      *
      * in 2010, extrapolated for 2040
population)
39 EZEVATYP001 'RADIAL'
40 EZDURBEG001 86400.0
41 EZDURMID001 0.0
42 EZREFPNT001 'ALARM'
43 EZNUMEVA001 6
44 EZDLTSHL001 2520. 2520. 2520. 2520. 2520. 2520. (42 MINUTES DELAY, 95%
MOBILIZATION)
45 EZDLTEVA001 0. 0. 0. 0. 0. 0.

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* SHELTER AND RELOCATION ZONE DATA BLOCK, LOADED BY INPEMR,
*                               STORED IN /INPSRZ/, /RELOCA/
*
* DURATION OF THE EMERGENCY PHASE (SECONDS FROM PLUME ARRIVAL)
*
46  SRENDEMP001  604800.  (ONE WEEK)
*
* CRITICAL ORGAN FOR RELOCATION DECISIONS
*
47  SRCRIORG001  'L-EDEWBODY'
*
* HOT SPOT RELOCATION TIME (SECONDS FROM PLUME ARRIVAL)
*
48  SRTIMHOT001  43200.   (ONE HALF DAY)
*
* NORMAL RELOCATION TIME (SECONDS FROM PLUME ARRIVAL)
*
49  SRTIMNRM001  86400.   (ONE DAY)
*
* HOT SPOT RELOCATION DOSE CRITERION THRESHOLD (SIEVERTS)
*
50  SRDOSHOT001  0.5      (50 REM DOSE TO WHOLE BODY IN 1 WEEK TRIGGERS
RELOCATION)
*
* NORMAL RELOCATION DOSE CRITERION THRESHOLD (SIEVERTS)
*
51  SRDOSNRM001  0.25     (25 REM DOSE TO WHOLE BODY IN 1 WEEK TRIGGERS
RELOCATION)

*****
* EARLY FATALITY MODEL PARAMETERS, LOADED BY INEFAT, STORED IN /EFATAL/
*
* NUMBER OF EARLY FATALITY EFFECTS
*
52  EFNUMEFA001  2
*
*          ORGNAM          EFFACA  EFFACB  EFFTHR
*
53  EFATAGRP001  'A-RED MARR'      3.8      5.0      1.5
54  EFATAGRP002  'A-LUNGS'        10.0      7.0      5.0

*****
* EARLY INJURY MODEL PARAMETERS, LOADED BY INEINJ, STORED IN /EINJUR/
*
* NUMBER OF EARLY INJURY EFFECTS
*
55  EINUMEIN001  0
*
*          EINAME          ORGNAM  EISUSC EITHRE EIFACA EIFACB
*
*EINJUGRP001  'PRODROMAL VOMIT'  'A-STOMACH'  1.      .5      2.      3.
*EINJUGRP002  'DIARRHEA'         'A-STOMACH'  1.      1.      3.      2.5
*EINJUGRP003  'PNEUMONITIS'      'A-LUNGS'   1.      5.     10.      7.
*EINJUGRP004  'SKIN ERYTHEMA'     'A-SKIN'    1.      3.      6.      5.
*EINJUGRP005  'TRANSEPIDERMAL'    'A-SKIN'    1.     10.     20.      5.
*EINJUGRP006  'THYROIDITIS'       'A-THYROIDH' 1.     40.    240.      2.
*EINJUGRP007  'HYPOTHYROIDISM'    'A-THYROIDH' 1.      2.     60.     1.3

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*****
* ACUTE EXPOSURE CANCER PARAMETERS, LOADED BY INACAN STORED IN /ACANCR/.
*
* NUMBER OF ACUTE EXPOSURE CANCER EFFECTS
*
56 LCNUMACA001    1
*
* THRESHOLD DOSE FOR APPLYING THE DOSE DEPENDENT REDUCTION FACTOR
*
57 LCDDTHRE001    0.2  (LOWEST DOSE FOR WHICH DDREFA WILL BE APPLIED)
*
* DOSE THRESHOLD FOR LINEAR DOSE RESPONSE (Sv)
*
58 LCACTHRE001    0.0  (LINEAR-QUADRATIC MODEL IS NOT BEING USED)
*
*          ACNAME          ORGNAM  ACSUSC DOSEFA DOSEFB CFRISK  CIRISK
DDREFA
*
59 LCANCERS001 'OTHER'      'L-EDEWBODY'  1.0   1.0   0.0   0.12   0.16
2.0

*****
* RESULT 1 OPTIONS BLOCK, LOADED BY INOUT1, STORED IN /INOUT1/
* TOTAL NUMBER OF A GIVEN EFFECT (LATENT CANCER, EARLY DEATH, EARLY
INJURY)
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
60 TYPE1NUMBER    5
*
61 TYPE1OUT001     'CAN FAT/TOTAL'          1  10      (0 to 50 miles)
62 TYPE1OUT002     'CAN FAT/TOTAL'          1   6      (0 to 10 miles)
63 TYPE1OUT003     'ERL FAT/TOTAL'          1  10      (0 to 50 miles)
64 TYPE1OUT004     'ERL FAT/TOTAL'          1   2      (0 to  2 miles)
65 TYPE1OUT005     'ERL FAT/TOTAL'          1   1      (0 to  1 miles)

*****
* RESULT 2 OPTIONS BLOCK, LOADED BY INOUT2, STORED IN /INOUT2/
* FURTHEST DISTANCE AT WHICH A GIVEN RISK OF EARLY DEATH IS EXCEEDED.
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
66 TYPE2NUMBER    0
*
*          FATALITY RISK THRESHOLD
*
*TYPE2OUT001    0.

*****
* RESULT 3 OPTIONS BLOCK, LOADED BY INOUT3, STORED IN /INOUT3/
* NUMBER OF PEOPLE WHOSE DOSE TO A GIVEN ORGAN EXCEEDS A GIVEN THRESHOLD.
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
67 TYPE3NUMBER    0
*

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*                ORGAN NAME      DOSE THRESHOLD (Sv)
*
*TYPE3OUT001      'A-RED MARR'          1.5
*TYPE3OUT002      'A-LUNGS'            5.0
*TYPE3OUT003      'L-EDEWBODY'         0.05
*****
* RESULT 4 OPTIONS BLOCK, LOADED BY INOUT4, STORED IN /INOUT4/
* 360 DEGREE AVERAGE RISK OF A GIVEN EFFECT AT A GIVEN DISTANCE.
*
* POSSIBLE TYPES OF EFFECTS ARE:
*
*   'ERL FAT/TOTAL'
*   'ERL INJ/INJURY NAME'
*   'CAN FAT/CANCER NAME'
*   'CAN FAT/TOTAL'
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
68 TYPE4NUMBER      2
*
*                RADIAL INDEX      TYPE OF EFFECT
*
69 TYPE4OUT001        1          'ERL FAT/TOTAL'
70 TYPE4OUT002        2          'ERL FAT/TOTAL'
*TYPE4OUT003          6          'ERL FAT/TOTAL'
*TYPE4OUT004          1          'CAN FAT/TOTAL'
*TYPE4OUT005          2          'CAN FAT/TOTAL'
*TYPE4OUT006          6          'CAN FAT/TOTAL'
*****
* RESULT 5 OPTIONS BLOCK, LOADED BY INOUT5, STORED IN /INOUT5/
*
* TOTAL POPULATION DOSE TO A GIVEN ORGAN BETWEEN TWO DISTANCES.
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
71 TYPE5NUMBER        2
*
*                ORGAN      I1DIS5      I2DIS5
*
72 TYPE5OUT001 'L-EDEWBODY'      1          6          (0-10 MILES)
73 TYPE5OUT002 'L-EDEWBODY'      1          10         (0-50 MILES)
*****
* RESULT 6 OPTIONS BLOCK, LOADED BY INOUT6, STORED IN /INOUT6/
*
* CENTERLINE DOSE TO AN ORGAN VS DIST BY PATHWAY, PATHWAY NAMES ARE AS
FOLLOWS:
*
*   PATHWAY NAME:
*   'CLD'      - CLOUDSHINE
*   'GRD'      - GROUNDSHINE
*   'INH ACU'  - "ACUTE DOSE EQUIVALENT" FROM DIRECT INHALATION OF THE
CLOUD
*   'INH LIF'  - "LIFETIME DOSE COMMITMENT" FROM DIRECT INHALATION OF THE
CLOUD

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*      'RES ACU' - "ACUTE DOSE EQUIVALENT" FROM RESUSPENSION INHALATION
*      'RES LIF' - "LIFETIME DOSE COMMITMENT" FROM RESUSPENSION INHALATION
*      'TOT ACU' - "ACUTE DOSE EQUIVALENT" FROM ALL PATHWAYS
*      'TOT LIF' - "LIFETIME DOSE COMMITMENT" FROM ALL PATHWAYS
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
74 TYPE6NUMBER      0
*
*              ORGNAM          PATHNM          I1DIS6      I2DIS6
*
*TYPE6OUT001  'A-RED MARR'      'TOT ACU'          1          19      (0-50 MILES)
*TYPE6OUT002  'A-LUNGS'         'TOT ACU'          1          19      (0-50 MILES)
*TYPE6OUT003  'L-EDEWBODY'      'TOT LIF'          1          26      (0-1000
MILES)

*****
* RESULT 7 OPTIONS BLOCK, LOADED BY INOUT7, STORED IN /INOUT7/
*
* CENTERLINE RISK OF A GIVEN EFFECT VS DISTANCE
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
75 TYPE7NUMBER      0
*
*              NAME              I1DIS7          I2DIS7
*
*TYPE7OUT001  'ERL FAT/TOTAL'    1          10      (0-50 MILES)
*TYPE7OUT002  'CAN FAT/TOTAL'    1          10      (0-50 MILES)

*****
* RESULT 8 OPTIONS BLOCK, LOADED BY INOUT8, STORED IN /INOUT8/
*
* POPULATION WEIGHTED FATALITY RISK BETWEEN 2 DISTANCES
*
* NUMBER OF DESIRED RESULTS OF THIS TYPE
*
76 TYPE8NUMBER      6
*
*              NAME              I1DIS8      I2DIS8
*
77 TYPE8OUT001 'ERL FAT/TOTAL'    1          10      NOCCDF (0-50 MILES)
78 TYPE8OUT002 'ERL FAT/TOTAL'    1           2      NOCCDF (0- 2 MILES)
79 TYPE8OUT003 'ERL FAT/TOTAL'    1           1      NOCCDF (0- 1 MILES)
80 TYPE8OUT004 'ERL FAT/TOTAL'    3           3      NOCCDF (2- 3 MILES)
81 TYPE8OUT005 'CAN FAT/TOTAL'    1          10      NOCCDF (0-50 MILES)
82 TYPE8OUT006 'CAN FAT/TOTAL'    1           6      NOCCDF (0-10 MILES)

*****
* RESULT A OPTIONS BLOCK, LOADED BY INOUTA, STORED IN /INOUTA/
*
* peak dose to a given organ
*
*              NUMA
83 TYPEANUMBER      1
*
*              ORGNAM      I1DISA      I2DISA

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```

84  TYPEAOUT001 'L-EDEWBODY' 1      1      CCDF
      *
85  NUMB
***** WARNING -- RECORD IDENTIFIER HAS      4 CHARACTERS INSTEAD OF 11
CHARACTERS *****
86  TYPEBNUMBER      0
      .
***** TERMINATOR RECORD ENCOUNTERED -- END OF BASE CASE USER INPUT *****

```

#### USER INPUT PROCESSING SUMMARY - BASE CASE

```

NUMBER OF RECORDS READ                      = 363
NUMBER OF BLANK OR COMMENT RECORDS READ    = 276
NUMBER OF TERMINATOR RECORDS                = 1
NUMBER OF RECORDS PROCESSED                 = 86
      NUMBER OF PROCESSED RECORDS DUPLICATED = 0
      NUMBER OF PROCESSED RECORDS SORTED    = 86
*****
*****

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The list of defined organs is as follows (A- is ACUTE and L- is LIFETIME):

```

A-SKIN
A-RED MARR
A-LUNGS
A-THYROIDH
A-STOMACH
L-EDEWBODY
L-RED MARR
L-BONE SUR
L-BREAST
L-LUNGS
L-THYROID
L-LOWER LI
L-BLAD WAL
L-THYROIDH

```

Am using a DOSFAC/DOSFAC2/IDCF2 dose factor file

READING FROM A DOSE CONVERSION FILE WITH THE FOLLOWING HEADER:  
 MACCS File DOSDATA.INP: Changed by D. CHANIN25-JUN-92, 09:53:47  
 Seven new organs added with MACCS Version 1.5.11.1

USING THE FOLLOWING SITE DATA FILE:

```

SECPOP2000 V3.12  MACCS2 Site Data File for Vogtle + transients projected to ye
Lat: 33d 8'31'' Long: 81d45'45'' Population multiplier: 1.0000 10/06/2006
10 SPATIAL INTERVALS
16 WIND DIRECTIONS
7 CROP CATEGORIES
4 WATER PATHWAY ISOTOPES
1 WATERSHEDS
97 ECONOMIC REGIONS
SPATIAL DISTANCES      KILOMETERS

```

1.6093	3.2187	4.8280	6.4374	8.0467	16.0935	32.1869	48.2804		
64.3739	80.4674								
POPULATION									
0.	69.	0.	0.	0.	0.	8727.	92192.		
28873.	22032.								
0.	0.	0.	0.	0.	0.	4594.	14508.		
7731.	13488.								
0.	0.	0.	0.	0.	0.	0.	9309.		
5508.	10769.								
0.	0.	0.	0.	0.	0.	774.	13423.		
12596.	11961.								
0.	0.	0.	0.	0.	13.	735.	3547.		
1805.	3263.								
0.	0.	0.	22.	1.	346.	249.	6077.		
7848.	12492.								
0.	0.	0.	19.	17.	281.	336.	344.		
869.	11149.								
0.	0.	34.	0.	0.	991.	881.	7749.		
3263.	7071.								
0.	0.	0.	0.	25.	315.	2322.	1938.		
4168.	69610.								
0.	0.	0.	0.	3.	58.	609.	5337.		
2694.	9893.								
0.	7.	0.	7.	1.	193.	859.	737.		
2006.	7607.								
0.	0.	19.	79.	22.	763.	9211.	797.		
5609.	5525.								
0.	0.	70.	9.	4.	392.	4333.	1613.		
4660.	3290.								
0.	0.	90.	0.	86.	226.	4262.	10681.		
12014.	22397.								
0.	50.	0.	156.	122.	156.	12373.	142545.		
353009.	27595.								
0.	0.	0.	0.	0.	91.	4875.	140058.		
60057.	10509.								
LAND FRACTION									
0.00	0.00	0.99	0.00	0.00	0.98	0.98	0.98	0.98	0.98
0.00	0.00	0.00	0.00	0.00	0.00	0.98	0.98	0.98	0.98
0.91	0.00	0.00	0.00	0.00	0.00	0.00	0.99	0.98	0.99
0.91	0.00	0.00	0.00	0.99	0.00	0.99	0.99	0.99	0.99
0.91	0.00	0.00	0.00	0.00	0.99	1.00	0.99	0.99	0.98
0.91	0.91	0.91	0.91	0.91	0.92	0.99	1.00	0.91	0.85
0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.96	0.89	0.82
0.91	0.00	0.91	0.00	0.00	0.91	0.91	0.91	0.91	0.93
0.91	0.91	0.00	0.00	0.91	0.91	0.93	0.92	0.94	0.99
0.91	0.91	0.00	0.00	0.91	0.91	0.96	1.00	0.99	0.99
0.91	0.91	0.00	0.91	0.91	0.91	0.92	0.97	0.96	0.98
0.91	0.00	0.91	0.91	0.91	0.91	0.91	0.91	0.97	0.98
0.91	0.00	0.91	0.91	0.91	0.91	0.91	0.92	0.99	0.99
0.00	0.00	0.91	0.91	0.91	0.91	0.85	0.80	0.92	0.96
0.00	0.91	0.00	0.91	0.91	0.90	0.76	0.74	0.97	0.98
0.00	0.00	0.00	0.00	0.00	0.97	0.95	0.89	0.98	0.99
REGION INDEX									
1	2	2	2	2	3	4	5	6	7
1	8	8	8	8	9	10	11	12	13
11	14	14	14	14	15	16	17	18	19
12	20	20	20	21	22	23	24	25	

1	EXCLUSION	.214	0.001	4971.0	14888.0	143897.0
2	REGION_02	.331	0.252	1065.0	3848.0	80147.0
3	REGION_03	.327	0.002	1067.0	3003.0	86571.0
4	REGION_04	.327	0.002	1067.0	3003.0	86571.0
5	REGION_05	.327	0.002	1067.0	3003.0	86571.2
6	REGION_06	.364	0.017	1027.3	3086.3	85815.6
7	REGION_07	.468	0.097	763.3	4024.3	86190.3
8	REGION_08	.000	0.000	0.0	0.0	0.0
9	REGION_09	.000	0.000	0.0	0.0	0.0
10	REGION_10	.327	0.002	1067.0	3003.0	86571.0
11	REGION_11	.327	0.002	1067.0	3003.0	86571.0
12	REGION_12	.327	0.002	1067.0	3003.0	86571.0
13	REGION_13	.315	0.005	858.5	3170.5	85006.6
14	REGION_14	.000	0.000	0.0	0.0	0.0

15	REGION_15	.000	0.000	0.0	0.0	0.0
16	REGION_16	.000	0.000	0.0	0.0	0.0
17	REGION_17	.329	0.159	1065.7	3534.0	82534.3
18	REGION_18	.243	0.074	1119.9	6538.0	104101.4
19	REGION_19	.164	0.003	1046.3	9118.2	121204.5
20	REGION_20	.331	0.252	1065.0	3848.0	80147.0
21	REGION_21	.000	0.000	0.0	0.0	0.0
22	REGION_22	.331	0.252	1065.0	3848.0	80147.0
23	REGION_23	.331	0.252	1065.0	3848.0	80147.0
24	REGION_24	.277	0.131	981.5	5407.5	100054.8
25	REGION_25	.109	0.015	1139.1	11472.1	138770.2
26	REGION_26	.000	0.000	0.0	0.0	0.0
27	REGION_27	.331	0.252	1065.0	3848.0	80147.0
28	REGION_28	.231	0.149	485.0	2877.2	83330.2
29	REGION_29	.283	0.203	787.0	3382.7	81672.6
30	REGION_30	.247	0.078	716.8	4608.5	100922.2
31	REGION_31	.302	0.048	853.0	5113.6	104661.1
32	REGION_32	.214	0.001	4971.0	14888.0	143897.0
33	REGION_33	.222	0.019	4689.9	14094.3	139324.5
34	REGION_34	.163	0.075	275.8	2704.7	87813.1
35	REGION_35	.162	0.078	84.0	2206.0	85531.0
36	REGION_36	.107	0.041	84.5	2789.9	83824.1
37	REGION_37	.145	0.007	243.6	3442.7	83083.6
38	REGION_38	.214	0.001	4971.0	14888.0	143897.0
39	REGION_39	.214	0.001	4971.0	14888.0	143897.0
40	REGION_40	.077	0.028	4095.0	12799.2	131784.3
41	REGION_41	.105	0.057	1871.6	6954.9	105898.1
42	REGION_42	.097	0.034	86.6	2912.1	83506.2
43	REGION_43	.059	0.000	252.6	3687.0	82558.9
44	REGION_44	.214	0.001	4971.0	14888.0	143897.0
45	REGION_45	.214	0.001	4971.0	14888.0	143897.0
46	REGION_46	.075	0.027	4130.2	12894.8	132165.3
47	REGION_47	.040	0.034	3921.0	12399.0	129247.0
48	REGION_48	.040	0.034	3919.1	12394.5	129223.2
49	REGION_49	.140	0.013	1659.3	6804.9	104062.8
50	REGION_50	.214	0.001	4971.0	14888.0	143897.0
51	REGION_51	.214	0.001	4971.0	14888.0	143897.0
52	REGION_52	.193	0.011	3746.7	11842.2	127607.4
53	REGION_53	.080	0.030	3545.0	11426.9	124445.9
54	REGION_54	.108	0.031	2984.3	10214.6	121352.5
55	REGION_55	.243	0.027	1071.2	5772.9	105572.3
56	REGION_56	.214	0.001	4971.0	14888.0	143897.0
57	REGION_57	.214	0.001	4971.0	14888.0	143897.0
58	REGION_58	.308	0.000	2579.7	8833.1	112664.4
59	REGION_59	.381	0.000	727.0	4142.0	88467.0
60	REGION_60	.347	0.034	784.4	4286.9	91108.1
61	REGION_61	.240	0.107	692.0	3950.5	95403.3
62	REGION_62	.214	0.001	4971.0	14888.0	143897.0
63	REGION_63	.214	0.001	4971.0	14888.0	143897.0
64	REGION_64	.222	0.001	4778.3	14400.1	141380.3
65	REGION_65	.327	0.000	2092.0	7598.3	106295.1
66	REGION_66	.257	0.141	2006.6	6914.3	105976.2
67	REGION_67	.250	0.233	969.1	3969.4	92895.2
68	REGION_68	.214	0.001	4971.0	14888.0	143897.0
69	REGION_69	.214	0.001	4971.0	14888.0	143897.0
70	REGION_70	.214	0.001	4971.0	14888.0	143897.0
71	REGION_71	.214	0.001	4971.0	14888.0	143897.0

72	REGION_72	.166	0.333	1593.4	10683.1	122616.1
73	REGION_73	.219	0.359	342.5	7373.4	104993.8
74	REGION_74	.214	0.001	4971.0	14888.0	143897.0
75	REGION_75	.214	0.001	4971.0	14888.0	143897.0
76	REGION_76	.214	0.001	4971.0	14888.0	143897.0
77	REGION_77	.205	0.064	4336.7	14130.8	140041.0
78	REGION_78	.145	0.462	343.4	9363.9	115765.8
79	REGION_79	.247	0.343	272.7	7345.8	103055.8
80	REGION_80	.214	0.001	4971.0	14888.0	143897.0
81	REGION_81	.214	0.001	4971.0	14888.0	143897.0
82	REGION_82	.141	0.001	3521.8	11365.6	129080.4
83	REGION_83	.088	0.001	2452.0	8770.0	118158.2
84	REGION_84	.329	0.140	630.7	5364.1	97969.9
85	REGION_85	.595	0.027	645.2	3859.5	92133.0
86	REGION_86	.214	0.001	4971.0	14888.0	143897.0
87	REGION_87	.203	0.001	4667.1	14115.3	140542.7
88	REGION_88	.039	0.000	1469.0	6372.9	108068.8
89	REGION_89	.014	0.000	981.0	5190.0	103103.1
90	REGION_90	.523	0.013	890.5	3564.9	88208.1
91	REGION_91	.556	0.030	879.3	3475.5	86076.3
92	REGION_92	.000	0.000	0.0	0.0	0.0
93	REGION_93	.325	0.002	1066.2	3022.3	86717.2
94	REGION_94	.288	0.002	1056.3	3275.5	88631.1
95	REGION_95	.218	0.002	1036.9	3767.8	92352.3
96	REGION_96	.526	0.084	936.4	3909.6	83919.0
97	REGION_97	.522	0.098	1324.4	5422.0	86588.9

POPULATION

\*\*\*\*\* BEGINNING OF CHANGE CASE 1 USER INPUT \*\*\*\*\*

\*\*\*\*\*  
 \* EMERGENCY RESPONSE SCENARIO NUMBER 2

\*\*\*\*\*  
 \* EVACUATION ZONE DATA BLOCK, LOADED BY EVNETW, STORED IN /NETWORK/  
 /EOPTIO/  
 \*  
 \* SPECIFIC DESCRIPTION OF THE EMERGENCY RESPONSE SCENARIO BEING USED  
 \*

87 EZEANAM2001 'NO EVACUATION'  
 \*\*\*\*\* RECORD NUMBER 87 REPLACES RECORD NUMBER 33 \*\*\*\*\*

\*  
 \* WEIGHTING FRACTION APPLICABLE TO THIS SCENARIO  
 \*

88 EZWTFRAC001 0.05 \*5% of people relocated but not evacuated  
 \*\*\*\*\* RECORD NUMBER 88 REPLACES RECORD NUMBER 35 \*\*\*\*\*

\*  
 \* LAST RING IN THE MOVEMENT ZONE  
 \*

89 EZLASMOV001 0 (A ZERO TURNS OFF THE EVACUATION MODEL)  
 \*\*\*\*\* RECORD NUMBER 89 REPLACES RECORD NUMBER 36 \*\*\*\*\*

\*\*\*\*\*  
 \*\*\*\*\* TERMINATOR RECORD ENCOUNTERED -- END OF CHANGE CASE 1 USER INPUT  
 \*\*\*\*\*

USER INPUT PROCESSING SUMMARY - CHANGE CASE 1



```
NUMBER OF RECORDS CHANGED          =      3
NUMBER OF RECORDS ADDED            =      0
*****
*****
```

NO EVACUATION REQUESTED

\*\*\*\*\* WARNING -- THE FOLLOWING RECORDS WERE NEVER ACCESSED \*\*\*\*\*

NUMB

USER INPUT IS READ FROM UNIT 26  
RECORD IDENTIFIER FIELDS 11 CHARACTERS LONG ARE EXPECTED.  
THE FIRST 100 COLUMNS OF EACH INPUT RECORD ARE PROCESSED.  
THE MAXIMUM NUMBER OF IDENTIFIER RECORDS THAT MAY BE SAVED AS THE BASE CASE IS 1000.

RECORD NUMBER	RECORD
------------------	--------

\*\*\*\*\*

\*\*\*\*\*

```
* FILE NAME Vchronc.inp
*
* DESCRIPTIVE TITLE DESCRIBING THIS "CHRONC" INPUT FILE
*
```

1 CHCHNAME001 'SNC AP1000 CHRONC FILE'

\*\*\*\*\*

```
* EMERGENCY RESPONSE COST DATA BLOCK
*
* DAILY COST FOR A PERSON WHO IS EVACUATED (DOLLARS/PERSON-DAY)
* ESCALATED FROM $27/DAY IN 1986 TO
*   ESCALATED FROM $27/DAY IN 1986 TO 49.64 in 2006 {FACTOR OF 1.8385036}
```

FROM

```
* WWW.BLS.GOV/CPI/HOME.HTM, INFLATION CALCULATOR
2 CHEVACST001 49.64 (INCLUDES FOOD AND HOUSING COSTS BUT NOT LOST
```

INCOME)

```
*
* DAILY COST FOR A PERSON WHO IS RELOCATED (DOLLARS/PERSON-DAY)
*   ESCALATED '86 TO '06, FACTOR = 1.8385036
```

3 CHRELCST001 49.64 (INCLUDES FOOD AND HOUSING COSTS BUT NOT LOST INCOME)

\*\*\*\*\*

```
* LONG TERM PROTECTIVE ACTION DATA BLOCK
*
* Duration of the intermediate phase period--at version 1.11c TMIPND is
no
* longer processed. The new input variable DUR_INTPHAS is the period's
* duration, not the time after plume arrival at which the period ends.
```

```

*
4  DUR_INTPHAS    0.0      (in seconds)   (no intermediate phase)
*
* LONG-TERM PHASE DOSE PROJECTION PERIOD, THE DURATION OF THE EXPOSURE
* PERIOD OVER WHICH THE LONG-TERM DOSE CRITERION IS EVALUATED (SECONDS)
*
5  CHTMPACT001    1.58E8          (5 YEARS)
*
* DOSE CRITERION FOR INTERMEDIATE PHASE RELOCATION (Sv)
*
6  CHDSCRTI001    1.0E5          (NO INTERMEDIATE PHASE RELOCATION)
*
* DOSE CRITERION FOR LONG-TERM PHASE RELOCATION (Sv)
*
7  CHDSCRLT001     0.04
*
* CRITICAL ORGAN NAME FOR LONG-TERM ACTIONS
*
8  CHCRTOCR001    'L-EDEWBODY'
*
* Long Term Exposure Period      Previously permanently set to:
*   one million years = 3.15 E13 seconds
*   MACCS2 allowable range is 3.15E7 to 1.E10
*
9  CHEXPTIM001    1.E10
*****
* DECONTAMINATION PLAN DATA BLOCK
*
* NUMBER OF LEVELS OF DECONTAMINATION
*
10 CHLVLDEC001    2
*
* DECONTAMINATION TIMES CORRESPONDING TO THE LVLDEC LEVELS OF
DECONTAMINATION
* (SECONDS)
*
11 CHTIMDEC001    5.184E6  1.0368E7   (60, 120 DAYS)
*
* DOSE REDUCTION FACTORS CORRESPONDING TO THE LVLDEC LEVELS OF
DECONTAMINATION
*
12 CHDSRFCT001    3.        15.
*
* COST OF FARM DECONTAMINATION PER FARMLAND UNIT AREA (DOLLARS/HECTARE)
* FOR THE VARIOUS LEVELS OF DECONTAMINATION
*
*CHCDFRM0001    562.5    1250.  ESCALATED '86 TO '06
*          FACTOR = 1.8385036
13 CHCDFRM0001    1034.16  2298.13
*
* COST OF NONFARM DECONTAMINATION PER RESIDENT PERSON (DOLLARS/PERSON)
* FOR THE VARIOUS LEVELS OF DECONTAMINATION
*
*CHCDNFRM0001    3000.    8000.  ESCALATED '86 TO '06
*          FACTOR = 1.8385036
14 CHCDNFRM0001    5515.51  14708.03

```

```

*
* FRACTION OF FARMLAND DECONTAMINATION COST DUE TO LABOR
*   FOR THE VARIOUS DECONTAMINATION LEVELS
*
15  CHFRFDL0001  .3      .35
*
* FRACTION OF NON-FARM DECONTAMINATION COST DUE TO LABOR
*   FOR THE VARIOUS DECONTAMINATION LEVELS
*
16  CHFRNFDL001  .7      .5
*
* FRACTION OF TIME WORKERS IN FARM AREAS SPEND IN CONTAMINATED AREAS
*   FOR THE VARIOUS DECONTAMINATION LEVELS
*
17  CHTFWKF0001  .10     .33
*
* FRACTION OF TIME WORKERS IN NON-FARM AREAS SPEND IN CONTAMINATED AREAS
*   FOR THE VARIOUS DECONTAMINATION LEVELS
*
18  CHTFWKNF001  .33     .33
*
* AVERAGE COST OF DECONTAMINATION LABOR (DOLLARS/MAN-YEAR)
*
*CHDLBCST001  35000.  ESCALATED '86 TO '06
*          FACTOR = 1.8385036
19  CHDLBCST001  64347.63
*****
* INTERDICTION COST DATA BLOCK
*
* DEPRECIATION (DETERIORATION) RATE DURING INTERDICTION PERIOD (PER YEAR)
*
20  CHDPRATE001  .20     (VALUE OBTAINED FROM WASH-1400, APPENDIX 6)
*
* INVESTMENT INCOME RETURN (DISCOUNT RATE) DURING INTERDICTION PERIOD
(PER YEAR)
* THIS VALUE SHOULD BE DERIVED AS A REAL RETURN RATE ADJUSTED FOR
INFLATION
*
21  CHDSRATE001  .12     (VALUE OBTAINED FROM WASH-1400, APPENDIX 6)
*
* POPULATION RELOCATION COST (DOLLARS/PERSON):
*   ALTERNATIVE HOUSING, MOVING COSTS, AND LOST INCOME FOR PEOPLE IN
*   AREAS WHICH REQUIRE DECONTAMINATION, INTERDICTION, OR CONDEMNATION
*
*CHPOPCST001  5000.  ESCALATED '86 TO '06
*          FACTOR = 1.8385036
22  CHPOPCST001  9192.52
*****
* GROUNDSHINE WEATHERING DEFINITION DATA BLOCK
*
* NUMBER OF TERMS IN THE GROUNDSHINE WEATHERING RELATIONSHIP (EITHER 1 OR
2)
*
23  CHNGWTRM001  2
*

```

```

* GROUNDSHINE WEATHERING COEFFICIENTS
*
24 CHGWCOEF001    0.5    0.5                (JON HELTON)
*
* HALF LIVES CORRESPONDING TO THE GROUNDSHINE WEATHERING COEFFICIENTS (S)
*
25 CHTGWHLF001    1.6E7  2.8E9                (JON HELTON)
*****
* RESUSPENSION WEATHERING DEFINITION DATA BLOCK
*
* NUMBER OF TERMS IN THE RESUSPENSION WEATHERING RELATIONSHIP
*
26 CHNRWTRM001      3
*
* RESUSPENSION CONCENTRATION COEFFICIENTS    (/ METER)
* RELATIONSHIP BETWEEN GROUND CONCENTRATION AND INSTANTANEOUS AIR CONC.
*
27 CHRWCOEF001    1.0E-5    1.0E-7    1.0E-9  (VALUES HERE SELECTED BY JON
HELTON)
*
* HALF-LIVES CORRESPONDING TO THE RESUSPENSION CONCENTRATION COEFFICIENTS
(S)
*
28 CHTRWHLF001    1.6E7      1.6E8      1.6E9    (6 MONTHS, 5 YEARS, 50 YEARS)
*****
* SITE REGION DESCRIPTION DATA BLOCK
*
* FRACTION OF AREA THAT IS LAND IN THE REGION
*
29 CHFRACLD001    0.95    (ROUGH GUESS VALUE, SITE FILE OVERRIDES THIS VALUE)
*
* FRACTION OF LAND DEVOTED TO FARMING IN THE REGION
*
30 CHFRCFRM001    0.382    (VIRGINIA STATE VALUE, SITE FILE OVERRIDES THIS
VALUE)
*
* AVERAGE VALUE OF ANNUAL FARM PRODUCTION IN THE REGION (DOLLARS/HECTARE)
* (CASH RECEIPTS FROM FARMING PLUS VALUE OF HOME CONSUMPTION)/(LAND IN
FARMS)
*
31 CHFMRPRD001    371.0    (VIRGINIA STATE VALUE, SITE FILE OVERRIDES THIS
VALUE)
*
* FRACTION OF FARM PRODUCTION RESULTING FROM DAIRY PRODUCTION IN THE
REGION
* (VALUE OF MILK PRODUCED)/(CASH RECEIPTS FROM FARMING PLUS HOME
CONSUMPTION)
*
32 CHDPFRCT001    0.198    (VIRGINIA STATE VALUE, SITE FILE OVERRIDES THIS
VALUE)
*
* VALUE OF FARM WEALTH (DOLLARS/HECTARE)
* (AVERAGE VALUE PER HECTARE OF FARM LAND AND BUILDINGS TO 50 MILES)
*
*CHVALWF0001      2541.    ESCALATED '03 TO '06

```

```

*          FACTOR = 1.0951087
33 CHVALWF0001  2782.67 * FARM SIZE/AREA WEIGHTED AVERAGE FOR GA/SC
*                      COUNTIES WITHIN 50 MILE RADIUS TAKING SRS INTO
ACCOUNT
*
* FRACTION OF FARM WEALTH IN IMPROVEMENTS FOR THE REGION
*
34 CHFRFIM0001  0.25 * SURRY
*
* NON-FARM WEALTH, PROPERTY AND IMPROVEMENTS FOR THE REGION
(DOLLARS/PERSON)
* THE VALUE OF ALL RESIDENTIAL, BUSINESS, AND PUBLIC ASSETS WHICH WOULD
BE
* LOST IN THE EVENT OF PERMANENT INTERDICTION (CONDEMNATION) OF THE AREA
*
*CHVALWNF001  107602.  ESCALATED 2003 TO 2006
*          FACTOR = 1.0951087
35 CHVALWNF001  117836. * POPULATION/AREA WEIGHTED AVERAGE FOR GA/SC
*                      COUNTIES WITHIN 50 MILE RADIUS
*
* FRACTION OF NON-FARM WEALTH IN IMPROVEMENTS FOR THE REGION
*
36 CHFRNFIM001  0.8

*****
37 CHFDPATH001 'NEW'
*
* name of the COMIDA2 binary output file
*
38 BIN_FILE001 'C:\MACCS2\SAMP_A.BIN' (binary data file of 1/04)
*
* Dose limits triggering first year crop disposal of the separate
* milk and non-milk components of the diet, corresponding in purpose,
* more or less, to the MACCS 1.5 input variables PSCMLK and PSCOTH
*
* For NUREG-1150 calculations, the maximum allowable ground
concentrations for
* production of milk and non-milk crops contaminated by an accident
occurring
* in the growing season were derived based on an assumed maximum
allowable
* dose of 5 rem effective or 15 rem thyroid, per the 1982 FDA guidance
that's
* reprinted in the 1992 EPA PAG Manual. For purposes of comparison
against
* the prior results, it is being assumed, for simplicity, that milk and
* non-milk crops contribute equally to the first year dose. Thus, the 5
rem
* effective dose limit used in NUREG-1150 is equally split between milk
and
* non-milk crops, with 2.5 rem allowed for each. Similarly, the 15 rem
* thyroid limit is split into 7.5 and 7.5 rem for the milk and non-milk
* portions of the diet.
*
* SUPPORTING DOCUMENT FOR GUIDANCE LEVELS FOR RADIONUCLIDES IN DOMESTIC
AND

```

\* DOMESTIC FOODS, July, 2004, FDA (www.cfsan.fda.gov/~dms/nucleve2.html,  
 see  
 \* especially Section II) revises limits from 5/15 rem (effective/thyroid)  
 to  
 \* 0.5/5 rem. The latter is incorporated below.  
 \*  
 \* effective thyroid (doses in sieverts)  
 39 DOSEMILK001 0.0025 0.025  
 40 DOSEOTHR001 0.0025 0.025  
 \*  
 \* Annual dose limits for the subsequent year's (i.e., after the first  
 year)  
 \* interdiction of BOTH the milk and non-milk (combined) components of the  
 diet  
 \*  
 \* Note: the long-term food criteria, GCMAXR, used for NUREG-1150 were based  
 on  
 \* an ingestion dose integrated from zero to infinity. It is not possible  
 to  
 \* translate those parameter values into corresponding annual dose limits,  
 as is  
 \* required by the COMIDA2-based food model. The "total" dose limits used  
 in  
 \* NUREG-1150 for "root uptake", 0.5 rem effective and 1.5 rem thyroid,  
 are used  
 \* here as annual dose limits for interdiction of food production in years  
 the  
 \* years subsequent to the accident.  
 \*  
 \* effective thyroid (doses in sieverts)  
 41 DOSELONG001 0.005 0.015  
 \*  
 \*\*\*\*\*  
 \*  
 \* NUMBER OF NUCLIDES IN THE WATER INGESTION PATHWAY MODEL  
 \*  
 42 CHNUMWPI001 4  
 \*  
 \* TABLE OF NUCLIDE DEFINITIONS IN THE WATER INGESTION PATHWAY MODEL  
 \*  
 \* IF A SITE DATA FILE IS DEFINED, THE DATA DEFINING THE WATERSHED  
 INGESTION  
 \* FACTOR IS SUPERSEDED BY THE CORRESPONDING DATA IN THE SITE DATA FILE  
 \*  
 \*  

	WATER	INITIAL	ANNUAL	INGESTION FACTOR
	NUCLIDE	WASHOFF	WASHOFF	((Bq INGESTED)/
		FRACTION	RATE	(Bq IN WATER))
	NAMWPI	WSHFRI	WSHRTA	WINGF
43	CHWTRISO001 Sr-89	0.01	0.004	5.0E-6
44	CHWTRISO002 Sr-90	0.01	0.004	5.0E-6
45	CHWTRISO003 Cs-134	0.005	0.001	5.0E-6
46	CHWTRISO004 Cs-137	0.005	0.001	5.0E-6

  
 \*\*\*\*\*  
 \* SPECIAL OPTIONS DATA BLOCK

\*  
\* DETAILED PRINT OPTION CONTROL SWITCHES, LOOK AT THE CODE BEFORE TURNING  
ON!!

\* KSWDSC  
\*

47 CHKSWTCH001 0

\*\*\*\*\*

\* DEFINE THE TYPE 9 RESULTS  
\*  
\* LONG-TERM POPULATION DOSE IN A GIVEN REGION BROKEN DOWN BY THE 12  
PATHWAYS

\*  
\* NUMBER OF RESULTS OF THIS TYPE THAT ARE BEING REQUESTED  
\* FOR EACH RESULT YOU REQUEST, THE CODE WILL PRODUCE A SET OF 12  
\*

48 TYPE9NUMBER 2 (UP TO 10 ALLOWED)

\*  
\* ORGNAM INNER OUTER  
\*

49 TYPE9OUT001 'L-EDEWBODY' 1 6 (0-10 MILES)

50 TYPE9OUT002 'L-EDEWBODY' 1 10 (0-50 MILES)

\*\*\*\*\*

\* ECONOMIC COST RESULTS IN A REGION BROKEN DOWN BY 12 TYPES OF COSTS  
\*  
\* NUMBER OF RESULTS OF THIS TYPE THAT ARE BEING REQUESTED  
\* FOR EACH RESULT YOU REQUEST, THE CODE WILL PRODUCE A SET OF 12  
\*

51 TYP10NUMBER 1 (UP TO 10 ALLOWED)

\*  
\* INNER OUTER  
\*

52 TYP10OUT001 1 10 (0-50 MILES)

\*\*\*\*\*

\* DEFINE A FLAG THAT CONTROLS THE PRODUCTION OF THE ACTION DISTANCE  
RESULTS  
\*  
\* SPECIFYING A VALUE OF .TRUE. TURNS ON ALL 8 OF THE ACTION DISTANCE  
RESULTS,  
\* A VALUE OF .FALSE. WILL ELIMINATE THE ACTION DISTANCE RESULTS FROM THE  
OUTPUT.

\*  
53 TYP11FLAG11 .FALSE.

\*\*\*\*\*

\* IMPACTED AREA/POPULATION RESULTS IN A REGION BROKEN DOWN BY 6 TYPES OF  
IMPACTS

\*  
\* NUMBER OF RESULTS OF THIS TYPE THAT ARE BEING REQUESTED  
\* FOR EACH RESULT YOU REQUEST, THE CODE WILL PRODUCE A SET OF 8  
\*

54 TYP12NUMBER 1 (UP TO 10 ALLOWED)

\*  
\* INNER OUTER  
\*

55 TYP12OUT001 1 10 (0-50 MILES)

\*\*\*\*\*

\* Maximal annual food ingestion dose to an individual, requested by  
IXOT13

\*  
\* This result is calculated after accounting for temporary or  
\* permanent interdiction. It is only available for the "new" food model.  
\*  
\* NUMBER OF RESULTS OF THIS TYPE THAT ARE BEING REQUESTED  
\*

56 TYP13NUMBER 0 (UP TO 10 ALLOWED)

\*  
\* IRAD13 is the radial spatial interval at which results are requested  
\*  
\* ORGN13 is the name of the organ for which results are requested  
\* (allowable values for ORGN13 are 'EFFECTIVE' or 'THYROID')  
\*

\*  
\* IRAD13 ORGN13  
\*  
\*TYP13OUT001 2 EFFECTIVE  
\*TYP13OUT002 4 EFFECTIVE  
\*TYP13OUT003 6 EFFECTIVE  
\*TYP13OUT004 9 EFFECTIVE  
\*

\*\*\*\*\* TERMINATOR RECORD ENCOUNTERED -- END OF BASE CASE USER INPUT \*\*\*\*\*

#### USER INPUT PROCESSING SUMMARY - BASE CASE

NUMBER OF RECORDS READ	=	336
NUMBER OF BLANK OR COMMENT RECORDS READ	=	279
NUMBER OF TERMINATOR RECORDS	=	1
NUMBER OF RECORDS PROCESSED	=	56
NUMBER OF PROCESSED RECORDS DUPLICATED	=	0
NUMBER OF PROCESSED RECORDS SORTED	=	56

\*\*\*\*\*  
\*\*\*\*\*

COMIDA2 binary file header =  
COMIDA2 01/14/2004 13:06:02 Version 1.11.1, 01/12/2004

COMIDA2 descriptive title =  
MACCS File DOSDATA.INP: Changed by D. CHANIN25-JUN-92, 09:53:47

Seven new organs added with MACCS Version 1.5.11.1

A SITE DATA FILE IS BEING USED FOR BOTH "EARLY" AND "CHRONC"

1 CANCER EFFECTS ARE DEFINED IN THE MODEL.					
INDEX	CANCER EFFECT	ORGAN	ALPHA	BETA	
CFRISK	CIRISK				
1		OTHER	L-EDEWBODY	1.000E+00	0.000E+00
1.200E-01	1.600E-01				



TIME OF HOTSPOT RELOCATION IS 4.3200E+04.  
 TIME OF NORMAL RETURN IS 8.640E+04 AND THE EMERGENCY PHASE ENDS AT  
 6.048E+05.

GROUNDSHINE SHIELDING FACTOR = 0.330

RESUSPENSION PROTECTION FACTOR = 0.400

BREATHING RATE (CUBIC M/S) = 3.300E-04

DISPERSION MODEL FLAG IS 1

WINDROSE PROBABILITIES BY WIND DIRECTION AND MET BIN NUMBER

BIN	1	2	3	4	5	6	7	8	9	10	11
12	13	14	15	16							
1	0.0603	0.0686	0.0915	0.0769	0.0769	0.0437	0.0187	0.0416	0.0437	0.0541	
0.0541	0.1040	0.0936	0.0832	0.0437	0.0457						
2	0.0217	0.0527	0.0682	0.1225	0.1116	0.0698	0.0481	0.0729	0.0698	0.0357	
0.0574	0.0822	0.0915	0.0310	0.0434	0.0217						
3	0.0217	0.0652	0.0435	0.0870	0.0870	0.0652	0.0652	0.0000	0.0217	0.0652	
0.1304	0.0435	0.0435	0.0652	0.0870	0.1087						
4	0.0462	0.0522	0.0582	0.0743	0.0582	0.0663	0.0622	0.0643	0.1044	0.0723	
0.0602	0.0884	0.0683	0.0442	0.0382	0.0422						
5	0.0482	0.0547	0.0755	0.0755	0.0690	0.0560	0.0664	0.0690	0.1211	0.0885	
0.0729	0.0560	0.0573	0.0273	0.0260	0.0365						
6	0.0246	0.0615	0.0892	0.0815	0.0877	0.0462	0.0415	0.0831	0.0938	0.0585	
0.0969	0.0785	0.0462	0.0292	0.0508	0.0308						
7	0.0132	0.0789	0.1184	0.0526	0.1316	0.1447	0.0658	0.0395	0.1053	0.1184	
0.0263	0.0395	0.0000	0.0000	0.0395	0.0263						
8	0.0000	0.0000	0.2500	0.0000	0.2500	0.0000	0.0000	0.0000	0.0000	0.0000	
0.0000	0.2500	0.0000	0.0000	0.2500	0.0000						
9	0.1242	0.0458	0.0458	0.0654	0.0915	0.0458	0.0458	0.0327	0.0719	0.0523	
0.0261	0.0654	0.0654	0.0588	0.0523	0.1111						
10	0.0811	0.0723	0.0914	0.0782	0.0737	0.0383	0.0442	0.0295	0.0472	0.0501	
0.0723	0.0546	0.0619	0.0649	0.0560	0.0841						
11	0.0674	0.0601	0.0924	0.0689	0.0806	0.0499	0.0308	0.0484	0.0411	0.0689	
0.0630	0.0616	0.0499	0.0528	0.0850	0.0792						
12	0.0192	0.0466	0.0986	0.0301	0.0685	0.0685	0.0575	0.0877	0.0795	0.1178	
0.0822	0.0466	0.0247	0.0192	0.1233	0.0301						
13	0.0560	0.0560	0.0741	0.0741	0.0708	0.0626	0.0511	0.0362	0.0610	0.0362	
0.0807	0.0675	0.0857	0.0774	0.0478	0.0626						
14	0.0570	0.0925	0.1214	0.1273	0.0851	0.0600	0.0311	0.0407	0.0437	0.0281	
0.0392	0.0637	0.0622	0.0577	0.0392	0.0511						
15	0.0681	0.0929	0.0836	0.0372	0.0310	0.0310	0.0310	0.0681	0.0805	0.0464	
0.1207	0.1053	0.0681	0.0433	0.0402	0.0526						
16	0.0000	0.0968	0.0645	0.0645	0.0323	0.0000	0.0323	0.1613	0.0645	0.0968	
0.1935	0.0000	0.0323	0.0000	0.0000	0.1613						
17	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635	
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706						
18	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635	
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706						
19	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635	
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706						
20	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635	
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706						

21	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
22	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
23	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
24	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
25	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
26	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
27	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
28	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
29	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
30	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
31	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
32	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
33	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
34	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
35	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
36	0.0820	0.0913	0.0656	0.0471	0.0364	0.0178	0.0314	0.0385	0.0777	0.0635
0.0735	0.0913	0.0749	0.0628	0.0756	0.0706					
37	0.0566	0.0705	0.0848	0.0788	0.0716	0.0493	0.0416	0.0522	0.0701	0.0573
0.0680	0.0733	0.0654	0.0511	0.0547	0.0547					
38	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				
39	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				
40	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				
41	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000				

Processing a Site Data File with Header: SECPOP2000 V3.12 MACCS2 Site Data  
File for Vogtle + transients projected to ye

Lat: 33d 8'31'' Long: 81d45'45'' Population multiplier: 1.0000 10/06/2006

THIS PROGRAM CURRENTLY ALLOWS THE GENERATION OF UP TO 394 RESULTS

YOU HAVE REQUESTED 16 RESULTS FROM "EARLY" COMPOSED OF:

5 RESULTS OF TYPE 1  
0 RESULTS OF TYPE 2  
0 RESULTS OF TYPE 3  
2 RESULTS OF TYPE 4  
2 RESULTS OF TYPE 5  
0 RESULTS OF TYPE 6  
0 RESULTS OF TYPE 7  
6 RESULTS OF TYPE 8  
1 RESULTS OF TYPE A  
0 RESULTS OF TYPE B

YOU HAVE REQUESTED 55 RESULTS FROM "CHRONC" COMPOSED OF:

34 RESULTS OF TYPE 9  
13 RESULTS OF TYPE 10  
0 RESULTS OF TYPE 11  
8 RESULTS OF TYPE 12  
0 RESULTS OF TYPE 13

TRIAL	DAY	HOUR	BIN	PRBMET
1	153	16	21	6.31E-03

WARNING!! WARNING!! WARNING!! WARNING!!

THE TOTAL RELEASE DURATION EXCEEDS 20 HOURS.

THIS MAY CAUSE ERRONEOUS RESULTS TO BE PRODUCED.

WARNING!! WARNING!! WARNING!! WARNING!!

For Julian Day 153, selecting COMIDA2 results # 4 of 9	2	154	4	18	1.68E-03
For Julian Day 154, selecting COMIDA2 results # 4 of 9	3	154	18	24	5.42E-04
For Julian Day 154, selecting COMIDA2 results # 4 of 9	4	160	10	1	1.37E-02
For Julian Day 160, selecting COMIDA2 results # 4 of 9	5	160	15	2	1.84E-02
For Julian Day 160, selecting COMIDA2 results # 4 of 9	6	162	4	25	1.57E-03
For Julian Day 162, selecting COMIDA2 results # 4 of 9	7	162	9	32	1.14E-03
For Julian Day 162, selecting COMIDA2 results # 4 of 9	8	167	3	26	1.46E-03
For Julian Day 167, selecting COMIDA2 results # 5 of 9	9	169	1	6	1.86E-02
For Julian Day 169, selecting COMIDA2 results # 5 of 9	10	173	18	3	1.31E-03
For Julian Day 173, selecting COMIDA2 results # 5 of 9	11	174	8	4	1.42E-02
For Julian Day 174, selecting COMIDA2 results # 5 of 9	12	175	7	9	4.37E-03
For Julian Day 175, selecting COMIDA2 results # 5 of 9	13	179	3	12	1.04E-02
For Julian Day 179, selecting COMIDA2 results # 5 of 9	14	180	12	20	8.22E-03
For Julian Day 180, selecting COMIDA2 results # 5 of 9	15	182	9	19	3.40E-03
For Julian Day 182, selecting COMIDA2 results # 5 of 9	16	182	14	17	1.00E-02
For Julian Day 182, selecting COMIDA2 results # 5 of 9	17	183	6	33	1.43E-04
For Julian Day 183, selecting COMIDA2 results # 5 of 9	18	183	19	10	1.93E-02
For Julian Day 183, selecting COMIDA2 results # 5 of 9	19	186	24	31	2.57E-04
For Julian Day 186, selecting COMIDA2 results # 5 of 9	20	187	2	31	2.57E-04
For Julian Day 187, selecting COMIDA2 results # 5 of 9	21	187	4	31	2.57E-04
For Julian Day 187, selecting COMIDA2 results # 5 of 9	22	187	6	30	2.57E-04
For Julian Day 187, selecting COMIDA2 results # 5 of 9	23	187	8	30	2.57E-04
For Julian Day 187, selecting COMIDA2 results # 5 of 9	24	187	10	30	2.57E-04
For Julian Day 187, selecting COMIDA2 results # 5 of 9	25	187	12	29	1.43E-04

For Julian Day 187, selecting COMIDA2 results # 5 of 9  
     26       187       13       29   1.43E-04  
 For Julian Day 187, selecting COMIDA2 results # 5 of 9  
     27       187       21       33   1.43E-04  
 For Julian Day 187, selecting COMIDA2 results # 5 of 9  
     28       192       18       22   1.88E-03  
 For Julian Day 192, selecting COMIDA2 results # 6 of 9  
     29       193       4       36   1.11E-03  
 For Julian Day 193, selecting COMIDA2 results # 6 of 9  
     30       193       12       35   1.06E-03  
 For Julian Day 193, selecting COMIDA2 results # 6 of 9  
     31       193       16       34   2.57E-04  
 For Julian Day 193, selecting COMIDA2 results # 6 of 9  
     32       193       17       33   1.43E-04  
 For Julian Day 193, selecting COMIDA2 results # 6 of 9  
     33       193       18       32   1.14E-03  
 For Julian Day 193, selecting COMIDA2 results # 6 of 9  
     34       193       21       27   4.57E-04  
 For Julian Day 193, selecting COMIDA2 results # 6 of 9  
     35       197       7       35   1.06E-03  
 For Julian Day 197, selecting COMIDA2 results # 6 of 9  
     36       197       12       34   2.57E-04  
 For Julian Day 197, selecting COMIDA2 results # 6 of 9  
     37       197       13       33   1.43E-04  
 For Julian Day 197, selecting COMIDA2 results # 6 of 9  
     38       197       17       17   1.00E-02  
 For Julian Day 197, selecting COMIDA2 results # 6 of 9  
     39       200       15       19   3.40E-03  
 For Julian Day 200, selecting COMIDA2 results # 6 of 9  
     40       205       18       21   6.31E-03  
 For Julian Day 205, selecting COMIDA2 results # 6 of 9  
     41       210       20       18   1.68E-03  
 For Julian Day 210, selecting COMIDA2 results # 6 of 9  
     42       213       8       5   2.19E-02  
 For Julian Day 213, selecting COMIDA2 results # 6 of 9  
     43       222       22       11   1.95E-02  
 For Julian Day 222, selecting COMIDA2 results # 7 of 9  
     44       226       3       10   1.93E-02  
 For Julian Day 226, selecting COMIDA2 results # 7 of 9  
     45       226       7       36   1.11E-03  
 For Julian Day 226, selecting COMIDA2 results # 7 of 9  
     46       232       2       27   4.57E-04  
 For Julian Day 232, selecting COMIDA2 results # 7 of 9  
     47       236       10       1   1.37E-02  
 For Julian Day 236, selecting COMIDA2 results # 7 of 9  
     48       239       24       13   1.73E-02  
 For Julian Day 239, selecting COMIDA2 results # 7 of 9  
     49       248       2       14   3.86E-02  
 For Julian Day 248, selecting COMIDA2 results # 7 of 9  
     50       249       3       15   9.22E-03  
 For Julian Day 249, selecting COMIDA2 results # 7 of 9

TRIAL	DAY	HOUR	BIN	PRBMET
51	252	5	9	4.37E-03
For Julian Day 252, selecting COMIDA2 results # 7 of 9				
52	252	12	36	1.11E-03

For Julian Day 252, selecting	COMIDA2	results	# 7 of 9
53	252	16	35 1.06E-03
For Julian Day 252, selecting	COMIDA2	results	# 7 of 9
54	257	6	16 8.85E-04
For Julian Day 257, selecting	COMIDA2	results	# 8 of 9
55	262	22	18 1.68E-03
For Julian Day 262, selecting	COMIDA2	results	# 8 of 9
56	264	10	20 8.22E-03
For Julian Day 264, selecting	COMIDA2	results	# 8 of 9
57	265	1	7 2.17E-03
For Julian Day 265, selecting	COMIDA2	results	# 8 of 9
58	266	15	5 2.19E-02
For Julian Day 266, selecting	COMIDA2	results	# 8 of 9
59	271	11	3 1.31E-03
For Julian Day 271, selecting	COMIDA2	results	# 8 of 9
60	272	9	26 1.46E-03
For Julian Day 272, selecting	COMIDA2	results	# 8 of 9
61	272	14	24 5.42E-04
For Julian Day 272, selecting	COMIDA2	results	# 8 of 9
62	276	7	14 3.86E-02
For Julian Day 276, selecting	COMIDA2	results	# 8 of 9
63	277	13	32 1.14E-03
For Julian Day 277, selecting	COMIDA2	results	# 8 of 9
64	284	7	9 4.37E-03
For Julian Day 284, selecting	COMIDA2	results	# 8 of 9
65	297	17	11 1.95E-02
For Julian Day 297, selecting	COMIDA2	results	# 9 of 9
66	298	12	4 1.42E-02
For Julian Day 298, selecting	COMIDA2	results	# 9 of 9
67	306	4	22 1.88E-03
For Julian Day 306, selecting	COMIDA2	results	# 9 of 9
68	307	13	2 1.84E-02
For Julian Day 307, selecting	COMIDA2	results	# 9 of 9
69	312	4	13 1.73E-02
For Julian Day 312, selecting	COMIDA2	results	# 9 of 9
70	314	10	15 9.22E-03
For Julian Day 314, selecting	COMIDA2	results	# 9 of 9
71	314	13	16 8.85E-04
For Julian Day 314, selecting	COMIDA2	results	# 9 of 9
72	336	9	13 1.73E-02
For Julian Day 336, selecting	COMIDA2	results	# 1 of 9
73	342	12	4 1.42E-02
For Julian Day 342, selecting	COMIDA2	results	# 1 of 9
74	344	15	7 2.17E-03
For Julian Day 344, selecting	COMIDA2	results	# 1 of 9
75	348	16	6 1.86E-02
For Julian Day 348, selecting	COMIDA2	results	# 1 of 9
76	349	21	16 8.85E-04
For Julian Day 349, selecting	COMIDA2	results	# 1 of 9
77	354	19	25 1.57E-03
For Julian Day 354, selecting	COMIDA2	results	# 1 of 9
78	355	9	24 5.42E-04
For Julian Day 355, selecting	COMIDA2	results	# 1 of 9
79	355	10	23 1.14E-04
For Julian Day 355, selecting	COMIDA2	results	# 1 of 9
80	359	16	5 2.19E-02
For Julian Day 359, selecting	COMIDA2	results	# 1 of 9

81	360	5	14	3.86E-02
For Julian Day	360,	selecting	COMIDA2 results # 1 of 9	
82	362	9	10	1.93E-02
For Julian Day	362,	selecting	COMIDA2 results # 1 of 9	
83	362	23	12	1.04E-02
For Julian Day	362,	selecting	COMIDA2 results # 1 of 9	
84	2	19	29	1.43E-04
For Julian Day	2,	selecting	COMIDA2 results # 1 of 9	
85	2	22	17	1.00E-02
For Julian Day	2,	selecting	COMIDA2 results # 1 of 9	
86	8	10	3	1.31E-03
For Julian Day	8,	selecting	COMIDA2 results # 1 of 9	
87	9	7	20	8.22E-03
For Julian Day	9,	selecting	COMIDA2 results # 1 of 9	
88	9	13	18	1.68E-03
For Julian Day	9,	selecting	COMIDA2 results # 1 of 9	
89	14	14	36	1.11E-03
For Julian Day	14,	selecting	COMIDA2 results # 1 of 9	
90	14	19	34	2.57E-04
For Julian Day	14,	selecting	COMIDA2 results # 1 of 9	
91	15	1	23	1.14E-04
For Julian Day	15,	selecting	COMIDA2 results # 1 of 9	
92	15	2	22	1.88E-03
For Julian Day	15,	selecting	COMIDA2 results # 1 of 9	
93	17	9	21	6.31E-03
For Julian Day	17,	selecting	COMIDA2 results # 1 of 9	
94	18	3	35	1.06E-03
For Julian Day	18,	selecting	COMIDA2 results # 1 of 9	
95	18	6	34	2.57E-04
For Julian Day	18,	selecting	COMIDA2 results # 1 of 9	
96	18	7	32	1.14E-03
For Julian Day	18,	selecting	COMIDA2 results # 1 of 9	
97	23	12	29	1.43E-04
For Julian Day	23,	selecting	COMIDA2 results # 1 of 9	
98	26	4	11	1.95E-02
For Julian Day	26,	selecting	COMIDA2 results # 1 of 9	
99	31	14	8	1.14E-04
For Julian Day	31,	selecting	COMIDA2 results # 1 of 9	
100	32	11	22	1.88E-03
For Julian Day	32,	selecting	COMIDA2 results # 2 of 9	

TRIAL	DAY	HOUR	BIN	PRBMET
101	33	6	19	3.40E-03
For Julian Day	33,	selecting	COMIDA2 results # 2 of 9	
102	38	15	8	1.14E-04
For Julian Day	38,	selecting	COMIDA2 results # 2 of 9	
103	40	22	25	1.57E-03
For Julian Day	40,	selecting	COMIDA2 results # 2 of 9	
104	41	5	24	5.42E-04
For Julian Day	41,	selecting	COMIDA2 results # 2 of 9	
105	41	6	23	1.14E-04
For Julian Day	41,	selecting	COMIDA2 results # 2 of 9	
106	41	12	4	1.42E-02
For Julian Day	41,	selecting	COMIDA2 results # 2 of 9	
107	43	10	6	1.86E-02
For Julian Day	43,	selecting	COMIDA2 results # 2 of 9	

108	43	24	12	1.04E-02
For Julian Day	43, selecting	COMIDA2 results	# 2 of 9	
109	48	16	21	6.31E-03
For Julian Day	48, selecting	COMIDA2 results	# 2 of 9	
110	53	16	1	1.37E-02
For Julian Day	53, selecting	COMIDA2 results	# 2 of 9	
111	59	15	8	1.14E-04
For Julian Day	59, selecting	COMIDA2 results	# 2 of 9	
112	59	17	7	2.17E-03
For Julian Day	59, selecting	COMIDA2 results	# 2 of 9	
113	61	13	1	1.37E-02
For Julian Day	61, selecting	COMIDA2 results	# 2 of 9	
114	72	11	2	1.84E-02
For Julian Day	72, selecting	COMIDA2 results	# 2 of 9	
115	72	23	31	2.57E-04
For Julian Day	72, selecting	COMIDA2 results	# 2 of 9	
116	73	2	30	2.57E-04
For Julian Day	73, selecting	COMIDA2 results	# 2 of 9	
117	73	4	27	4.57E-04
For Julian Day	73, selecting	COMIDA2 results	# 2 of 9	
118	76	7	15	9.22E-03
For Julian Day	76, selecting	COMIDA2 results	# 2 of 9	
119	84	1	26	1.46E-03
For Julian Day	84, selecting	COMIDA2 results	# 2 of 9	
120	84	5	26	1.46E-03
For Julian Day	84, selecting	COMIDA2 results	# 2 of 9	
121	84	10	25	1.57E-03
For Julian Day	84, selecting	COMIDA2 results	# 2 of 9	
122	84	17	19	3.40E-03
For Julian Day	84, selecting	COMIDA2 results	# 2 of 9	
123	92	20	14	3.86E-02
For Julian Day	92, selecting	COMIDA2 results	# 3 of 9	
124	93	12	6	1.86E-02
For Julian Day	93, selecting	COMIDA2 results	# 3 of 9	
125	95	18	8	1.14E-04
For Julian Day	95, selecting	COMIDA2 results	# 3 of 9	
126	99	16	7	2.17E-03
For Julian Day	99, selecting	COMIDA2 results	# 3 of 9	
127	101	24	15	9.22E-03
For Julian Day	101, selecting	COMIDA2 results	# 3 of 9	
128	102	2	12	1.04E-02
For Julian Day	102, selecting	COMIDA2 results	# 3 of 9	
129	103	20	13	1.73E-02
For Julian Day	103, selecting	COMIDA2 results	# 3 of 9	
130	107	4	11	1.95E-02
For Julian Day	107, selecting	COMIDA2 results	# 3 of 9	
131	111	23	10	1.93E-02
For Julian Day	111, selecting	COMIDA2 results	# 3 of 9	
132	120	13	27	4.57E-04
For Julian Day	120, selecting	COMIDA2 results	# 3 of 9	
133	120	16	17	1.00E-02
For Julian Day	120, selecting	COMIDA2 results	# 3 of 9	
134	120	20	20	8.22E-03
For Julian Day	120, selecting	COMIDA2 results	# 3 of 9	
135	124	12	5	2.19E-02
For Julian Day	124, selecting	COMIDA2 results	# 3 of 9	
136	141	20	16	8.85E-04



For Julian Day 141, selecting COMIDA2 results # 4 of 9  
137 147 6 9 4.37E-03  
For Julian Day 147, selecting COMIDA2 results # 4 of 9  
138 148 8 3 1.31E-03  
For Julian Day 148, selecting COMIDA2 results # 4 of 9  
139 150 12 2 1.84E-02  
For Julian Day 150, selecting COMIDA2 results # 4 of 9

WARNING!! WARNING!! WARNING!! WARNING!!

THE TOTAL RELEASE DURATION EXCEEDS 20 HOURS.

THIS MAY CAUSE ERRONEOUS RESULTS TO BE PRODUCED.

WARNING!! WARNING!! WARNING!! WARNING!!

For Julian Day 153, selecting COMIDA2 results # 4 of 9  
For Julian Day 154, selecting COMIDA2 results # 4 of 9  
For Julian Day 154, selecting COMIDA2 results # 4 of 9  
For Julian Day 160, selecting COMIDA2 results # 4 of 9  
For Julian Day 160, selecting COMIDA2 results # 4 of 9  
For Julian Day 162, selecting COMIDA2 results # 4 of 9  
For Julian Day 162, selecting COMIDA2 results # 4 of 9  
For Julian Day 167, selecting COMIDA2 results # 5 of 9  
For Julian Day 169, selecting COMIDA2 results # 5 of 9  
For Julian Day 173, selecting COMIDA2 results # 5 of 9  
For Julian Day 174, selecting COMIDA2 results # 5 of 9  
For Julian Day 175, selecting COMIDA2 results # 5 of 9  
For Julian Day 179, selecting COMIDA2 results # 5 of 9  
For Julian Day 180, selecting COMIDA2 results # 5 of 9  
For Julian Day 182, selecting COMIDA2 results # 5 of 9  
For Julian Day 182, selecting COMIDA2 results # 5 of 9  
For Julian Day 183, selecting COMIDA2 results # 5 of 9  
For Julian Day 183, selecting COMIDA2 results # 5 of 9  
For Julian Day 186, selecting COMIDA2 results # 5 of 9  
For Julian Day 187, selecting COMIDA2 results # 5 of 9  
For Julian Day 187, selecting COMIDA2 results # 5 of 9  
For Julian Day 187, selecting COMIDA2 results # 5 of 9  
For Julian Day 187, selecting COMIDA2 results # 5 of 9  
For Julian Day 187, selecting COMIDA2 results # 5 of 9  
For Julian Day 187, selecting COMIDA2 results # 5 of 9  
For Julian Day 187, selecting COMIDA2 results # 5 of 9  
For Julian Day 187, selecting COMIDA2 results # 5 of 9  
For Julian Day 192, selecting COMIDA2 results # 6 of 9  
For Julian Day 193, selecting COMIDA2 results # 6 of 9  
For Julian Day 193, selecting COMIDA2 results # 6 of 9  
For Julian Day 193, selecting COMIDA2 results # 6 of 9  
For Julian Day 193, selecting COMIDA2 results # 6 of 9  
For Julian Day 193, selecting COMIDA2 results # 6 of 9  
For Julian Day 197, selecting COMIDA2 results # 6 of 9  
For Julian Day 197, selecting COMIDA2 results # 6 of 9  
For Julian Day 197, selecting COMIDA2 results # 6 of 9  
For Julian Day 197, selecting COMIDA2 results # 6 of 9  
For Julian Day 200, selecting COMIDA2 results # 6 of 9  
For Julian Day 205, selecting COMIDA2 results # 6 of 9  
For Julian Day 210, selecting COMIDA2 results # 6 of 9  
For Julian Day 213, selecting COMIDA2 results # 6 of 9  
For Julian Day 222, selecting COMIDA2 results # 7 of 9  
For Julian Day 226, selecting COMIDA2 results # 7 of 9  
For Julian Day 226, selecting COMIDA2 results # 7 of 9  
For Julian Day 232, selecting COMIDA2 results # 7 of 9  
For Julian Day 236, selecting COMIDA2 results # 7 of 9  
For Julian Day 239, selecting COMIDA2 results # 7 of 9

[illegible]

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WARNING!! WARNING!! WARNING!! WARNING!!

THE TOTAL RELEASE DURATION EXCEEDS 20 HOURS.

THIS MAY CAUSE ERRONEOUS RESULTS TO BE PRODUCED.

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WARNING!! WARNING!! WARNING!! WARNING!!

THE TOTAL RELEASE DURATION EXCEEDS 20 HOURS.

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WARNING!! WARNING!! WARNING!! WARNING!!

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DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last  
revised 1/8/04, K. McFadden  
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation  
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 1 OF 6:  
CFI

OVERALL RESULTS OBTAINED BY COMBINING 2 EMERGENCY RESPONSE COHORTS FROM "EARLY"  
WITH THE WEIGHTING FRACTIONS BELOW APPLIED TO THEM:

FRACTION OF THE PEOPLE

-----  
COHORT 1 = 95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION  
0.950

COHORT 2 = NO EVACUATION  
0.050

AND THEN MERGING THE 2 RESULTS ABOVE WITH THE SINGLE SET OF RESULTS FROM  
"CHRONC" DESCRIBED BELOW:

COHORT 3 = SNC AP1000 CHRONC FILE

RESULTS WHICH ARE PRODUCED ONLY BY "EARLY" OR ONLY BY "CHRONC" ARE PRESENTED IN  
LATER SECTIONS.

06-AUG-07 19:50:04 PAGE 1				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL			0-80.5 km	1.0000	7.04E+02	2.91E+02	1.99E+03
3.09E+03	4.91E+03	5.65E+03	8.43E+03	2.57E-04	39		
CAN FAT/TOTAL			0-16.1 km	1.0000	1.28E+01	8.83E+00	2.64E+01
3.73E+01	6.44E+01	7.33E+01	1.22E+02	2.34E-05	31		
ERL FAT/TOTAL			0-80.5 km	0.0046	2.12E-04	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.02E-02	1.31E-03	65		
ERL FAT/TOTAL			0-3.2 km	0.0046	2.12E-04	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	8.02E-02	1.31E-03	65		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL			0-1.6 km	0.3668	4.47E-04	0.00E+00	2.08E-03
3.01E-03	3.10E-03	3.15E-03	3.22E-03	1.57E-03	77		
ERL FAT/TOTAL			1.6-3.2 km	0.0210	1.42E-06	0.00E+00	0.00E+00
0.00E+00	NOT-FOUND	NOT-FOUND	7.26E-05	1.95E-02	65		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF			0-16.1 km	1.0000	1.89E+02	1.30E+02	3.75E+02
5.12E+02	9.30E+02	1.06E+03	2.02E+03	2.34E-05	31		
L-EDEWBODY TOT LIF			0-80.5 km	1.0000	1.09E+04	4.28E+03	3.23E+04
4.95E+04	7.18E+04	7.54E+04	1.04E+05	8.42E-05	29		

POPULATION WEIGHTED RISK

ERL FAT/TOTAL			0-80.5 km	0.0046	1.67E-10	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.30E-08	1.31E-03	65		
ERL FAT/TOTAL			0-3.2 km	0.0046	1.68E-06	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	6.36E-04	1.31E-03	65		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
CAN FAT/TOTAL			0-80.5 km	1.0000	5.28E-04	2.08E-04	1.43E-03
2.25E-03	3.86E-03	4.69E-03	6.54E-03	2.57E-04	39		
CAN FAT/TOTAL			0-16.1 km	0.9667	1.05E-03	6.42E-04	2.48E-03
3.53E-03	7.59E-03	9.97E-03	1.31E-02	1.66E-03	65		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	5.40E+00	3.24E+00	1.42E+01
2.03E+01	NOT-FOUND	NOT-FOUND	2.33E+01	1.95E-02	65		

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last  
revised 1/8/04, K. McFadden  
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation

SOURCE TERM 1 OF 6:  
CFI

RESULTS FOR A SINGLE EMERGENCY RESPONSE COHORT WITHOUT ANY WEIGHTING FRACTIONS  
BEING APPLIED

COHORT 1 = 95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION

06-AUG-07 19:50:04 PAGE 2				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL			0-80.5 km	1.0000	5.04E+02	1.89E+02	1.32E+03
2.18E+03	3.95E+03	4.94E+03	7.61E+03	2.57E-04	39		
CAN FAT/TOTAL			0-16.1 km	0.8311	1.68E+00	1.84E-01	4.77E+00
8.95E+00	2.11E+01	3.02E+01	4.32E+01	5.71E-04	80		
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			1.6-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF			0-16.1 km	0.8311	1.83E+01	2.97E+00	5.24E+01
9.11E+01	1.88E+02	2.36E+02	3.61E+02	5.71E-04	80		
L-EDEWBODY TOT LIF			0-80.5 km	1.0000	7.58E+03	2.92E+03	2.16E+04
3.26E+04	5.72E+04	6.95E+04	8.77E+04	5.42E-04	73		
POPULATION WEIGHTED RISK							
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
CAN FAT/TOTAL			0-80.5 km	1.0000	3.96E-04	1.50E-04	1.06E-03
1.60E-03	2.98E-03	3.63E-03	5.98E-03	2.57E-04	39		
CAN FAT/TOTAL			0-16.1 km	0.8311	3.55E-04	3.88E-05	9.94E-04
1.90E-03	4.62E-03	6.11E-03	9.13E-03	5.71E-04	80		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	3.26E+00	1.66E+00	8.56E+00
1.12E+01	NOT-FOUND	NOT-FOUND	1.46E+01	1.95E-02	65		

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"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation

SOURCE TERM 1 OF 6:  
CFI

RESULTS FOR A SINGLE EMERGENCY RESPONSE COHORT WITHOUT ANY WEIGHTING FRACTIONS  
BEING APPLIED

COHORT 2 = NO EVACUATION

06-AUG-07 19:50:04 PAGE 3				PROB				
QUANTILES				PEAK	PEAK	PEAK		
				NON-ZERO	MEAN	50TH	90TH	
95TH	99TH	99.5TH	CONS	PROB	TRIAL			
HEALTH EFFECTS CASES								
CAN FAT/TOTAL				0-80.5 km	1.0000	5.39E+02	2.18E+02	1.37E+03
2.23E+03	4.16E+03	5.12E+03	7.85E+03	2.57E-04	39			
CAN FAT/TOTAL				0-16.1 km	0.9667	3.71E+01	1.76E+01	9.65E+01
1.33E+02	2.41E+02	2.91E+02	4.41E+02	1.66E-03	65			
ERL FAT/TOTAL				0-80.5 km	0.0046	4.24E-03	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E+00	1.31E-03	65			
ERL FAT/TOTAL				0-3.2 km	0.0046	4.24E-03	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.60E+00	1.31E-03	65			
ERL FAT/TOTAL				0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
AVERAGE INDIVIDUAL RISK								
ERL FAT/TOTAL				0-1.6 km	0.3668	8.94E-03	0.00E+00	3.85E-02
5.06E-02	5.66E-02	5.94E-02	6.44E-02	1.57E-03	77			
ERL FAT/TOTAL				1.6-3.2 km	0.0210	2.84E-05	0.00E+00	0.00E+00
0.00E+00	NOT-FOUND	NOT-FOUND	1.45E-03	1.95E-02	65			
POPULATION DOSE (Sv)								
L-EDEWBODY TOT LIF				0-16.1 km	0.9667	3.25E+02	1.77E+02	8.31E+02
1.17E+03	2.10E+03	2.42E+03	3.73E+03	1.66E-03	65			
L-EDEWBODY TOT LIF				0-80.5 km	1.0000	7.88E+03	3.24E+03	2.19E+04
3.29E+04	5.72E+04	6.95E+04	8.86E+04	5.42E-04	73			
POPULATION WEIGHTED RISK								
ERL FAT/TOTAL				0-80.5 km	0.0046	3.34E-09	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.26E-06	1.31E-03	65			
ERL FAT/TOTAL				0-3.2 km	0.0046	3.37E-05	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.27E-02	1.31E-03	65			
ERL FAT/TOTAL				0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
CAN FAT/TOTAL				0-80.5 km	1.0000	4.24E-04	1.74E-04	1.10E-03
1.70E-03	3.00E-03	3.64E-03	6.17E-03	2.57E-04	39			
CAN FAT/TOTAL				0-16.1 km	0.9667	7.83E-03	3.68E-03	2.03E-02
2.98E-02	5.21E-02	5.86E-02	9.31E-02	1.66E-03	65			

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	4.43E+01	2.81E+01	1.01E+02
1.12E+02	1.43E+02	1.59E+02	1.89E+02	1.57E-03	77		

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last revised 1/8/04, K. McFadden  
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 "EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation  
 "CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 1 OF 6:  
 CFI

RESULTS FROM THE "CHRONC" MODULE ALONE

COHORT 3 = SNC AP1000 CHRONC FILE

06-AUG-07 19:50:04 PAGE 4				PROB				
QUANTILES				PEAK	PEAK	PEAK		
				NON-ZERO	MEAN	50TH	90TH	
95TH	99TH	99.5TH	CONS	PROB	TRIAL			
HEALTH EFFECTS CASES								
CAN FAT/TOTAL				0-80.5 km	1.0000	1.99E+02	7.83E+01	5.29E+02
8.46E+02	1.33E+03	1.55E+03	2.41E+03	7.86E-05	29			
CAN FAT/TOTAL				0-16.1 km	1.0000	9.30E+00	6.84E+00	1.69E+01
2.41E+01	5.37E+01	6.86E+01	1.21E+02	2.34E-05	31			
POPULATION DOSE (Sv)								
L-EDEWBODY TOT LIF				0-16.1 km	1.0000	1.55E+02	1.11E+02	2.93E+02
4.09E+02	8.99E+02	1.06E+03	2.01E+03	2.34E-05	31			
L-EDEWBODY TOT LIF				0-80.5 km	1.0000	3.32E+03	1.34E+03	8.81E+03
1.36E+04	2.43E+04	2.82E+04	4.02E+04	7.86E-05	29			
POPULATION WEIGHTED RISK								
CAN FAT/TOTAL				0-80.5 km	1.0000	1.31E-04	4.54E-05	3.66E-04
5.79E-04	1.01E-03	1.08E-03	1.53E-03	7.86E-05	45			
CAN FAT/TOTAL				0-16.1 km	0.9346	3.25E-04	2.69E-04	7.17E-04
7.95E-04	1.01E-03	1.05E-03	1.46E-03	4.07E-05	30			
PEAK DOSE FOUND ON SPATIAL GRID (Sv)								
L-EDEWBODY				0-1.6 km	0.9966	9.35E-02	8.26E-02	1.16E-01
1.26E-01	1.52E-01	1.65E-01	1.97E-01	1.11E-03	52			
L-EDEWBODY POP. DOSE (Sv) 0-16.1 km								
TOTAL LONG-TERM PATHWAYS DOSE					1.0000	1.55E+02	1.11E+02	2.93E+02
4.09E+02	8.99E+02	1.06E+03	2.01E+03	2.34E-05	31			
LONG-TERM DIRECT EXPOSURE PATHWAYS					0.9346	2.57E+01	2.17E+01	5.51E+01
6.32E+01	7.76E+01	8.29E+01	1.15E+02	4.07E-05	30			
TOTAL INGESTION PATHWAYS DOSE					1.0000	1.11E+02	6.70E+01	2.39E+02
3.47E+02	7.92E+02	1.03E+03	1.98E+03	2.34E-05	31			
LONG-TERM GROUNDSHINE DOSE					0.9346	1.25E+01	9.06E+00	2.98E+01
3.50E+01	5.03E+01	5.66E+01	8.58E+01	4.07E-05	30			
LONG-TERM RESUSPENSION DOSE					0.9346	1.32E+01	1.11E+01	2.89E+01
3.34E+01	4.48E+01	5.02E+01	5.36E+01	1.51E-03	135			
WATER INGESTION DOSE					1.0000	1.03E+02	5.41E+01	2.32E+02
3.35E+02	7.78E+02	1.03E+03	1.98E+03	2.34E-05	31			
POP.-DEPENDENT DECONTAMINATION DOSE					0.8924	1.76E+01	8.03E+00	4.89E+01
7.07E+01	1.08E+02	1.24E+02	2.24E+02	1.08E-05	26			
FARM-DEPENDENT DECONTAMINATION DOSE					0.9293	4.59E-01	8.87E-02	1.36E+00
1.99E+00	4.55E+00	5.12E+00	5.69E+00	4.00E-04	114			

INGESTION OF GRAINS				0.9734	3.20E-01	2.64E-01	6.94E-01
8.21E-01	1.08E+00	1.16E+00	1.61E+00	1.79E-04	85		
INGESTION OF LEAF VEG				0.9734	2.06E+00	1.38E+00	4.41E+00
5.79E+00	1.01E+01	1.11E+01	1.70E+01	1.79E-04	85		
INGESTION OF ROOT CROPS				0.9734	1.29E+00	9.38E-01	2.84E+00
3.63E+00	6.38E+00	7.82E+00	1.09E+01	1.79E-04	85		
INGESTION OF FRUITS				0.9734	6.75E-01	5.45E-01	1.33E+00
1.64E+00	2.31E+00	2.57E+00	3.66E+00	1.79E-04	85		
INGESTION OF LEGUMES				0.9734	2.20E+00	1.34E+00	5.16E+00
7.16E+00	1.12E+01	1.33E+01	2.06E+01	1.79E-04	85		
INGESTION OF BEEF				0.9734	5.34E-01	3.02E-01	1.29E+00
2.05E+00	3.03E+00	3.19E+00	3.92E+00	3.14E-04	108		
INGESTION OF MILK				0.9734	1.13E+00	6.66E-01	2.78E+00
3.85E+00	5.49E+00	5.86E+00	7.43E+00	4.45E-04	93		
INGESTION OF POULTRY				0.9734	1.86E-01	1.43E-01	4.13E-01
5.20E-01	6.42E-01	7.03E-01	8.19E-01	1.62E-03	130		
INGESTION OF OTHER MEAT CROPS				0.9734	1.86E-01	1.19E-01	4.44E-01
5.87E-01	8.12E-01	8.90E-01	1.07E+00	5.99E-04	73		

L-EDEWBODY POP. DOSE (Sv)				0-80.5 km			
TOTAL LONG-TERM PATHWAYS DOSE				1.0000	3.32E+03	1.34E+03	8.81E+03
1.36E+04	2.43E+04	2.82E+04	4.02E+04	7.86E-05	29		
LONG-TERM DIRECT EXPOSURE PATHWAYS				1.0000	2.77E+03	9.47E+02	7.83E+03
1.16E+04	2.05E+04	2.19E+04	3.24E+04	7.86E-05	45		
TOTAL INGESTION PATHWAYS DOSE				1.0000	3.18E+02	2.33E+02	6.43E+02
8.30E+02	1.22E+03	1.39E+03	2.29E+03	9.36E-06	26		
LONG-TERM GROUNDSHINE DOSE				1.0000	1.43E+03	4.71E+02	3.86E+03
6.32E+03	1.16E+04	1.34E+04	2.08E+04	6.28E-04	47		
LONG-TERM RESUSPENSION DOSE				1.0000	1.34E+03	4.74E+02	3.77E+03
5.84E+03	1.01E+04	1.13E+04	1.67E+04	4.85E-04	12		
WATER INGESTION DOSE				1.0000	1.43E+02	8.14E+01	3.36E+02
4.63E+02	9.10E+02	1.08E+03	2.02E+03	2.34E-05	31		



06-AUG-07 19:50:04 PAGE 5  
QUANTILES

				PROB	PEAK NON-ZERO	PEAK MEAN	PEAK 50TH	PEAK 90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL			
L-EDEWBODY POP. DOSE (Sv)				0-80.5 km				
POP.-DEPENDENT DECONTAMINATION DOSE				0.9626	2.25E+02	3.88E+01	4.16E+02	
9.46E+02	3.53E+03	5.00E+03	1.33E+04	8.42E-05	29			
FARM-DEPENDENT DECONTAMINATION DOSE				0.9865	2.95E+00	1.12E+00	7.91E+00	
1.19E+01	2.24E+01	2.67E+01	5.25E+01	1.19E-04	119			
INGESTION OF GRAINS				1.0000	6.62E+00	5.69E+00	1.29E+01	
1.68E+01	2.71E+01	3.07E+01	4.59E+01	1.94E-05	19			
INGESTION OF LEAF VEG				1.0000	3.63E+01	2.36E+01	8.03E+01	
1.09E+02	1.60E+02	1.89E+02	3.07E+02	1.03E-04	119			
INGESTION OF ROOT CROPS				1.0000	2.11E+01	1.35E+01	4.66E+01	
6.89E+01	1.08E+02	1.19E+02	1.98E+02	1.03E-04	119			
INGESTION OF FRUITS				1.0000	1.36E+01	1.09E+01	2.72E+01	
3.54E+01	5.50E+01	6.18E+01	9.43E+01	1.94E-05	19			
INGESTION OF LEGUMES				1.0000	3.36E+01	2.01E+01	7.51E+01	
1.13E+02	2.00E+02	2.23E+02	3.73E+02	1.03E-04	119			
INGESTION OF BEEF				1.0000	2.22E+01	1.73E+01	4.41E+01	
5.36E+01	7.32E+01	8.35E+01	1.06E+02	5.99E-04	4			
INGESTION OF MILK				1.0000	3.35E+01	2.91E+01	6.07E+01	
7.44E+01	1.03E+02	1.12E+02	1.77E+02	8.42E-05	45			
INGESTION OF POULTRY				1.0000	4.96E+00	4.24E+00	9.05E+00	
1.07E+01	1.47E+01	1.68E+01	2.56E+01	1.28E-03	13			
INGESTION OF OTHER MEAT CROPS				1.0000	3.60E+00	3.05E+00	6.17E+00	
7.98E+00	1.17E+01	1.31E+01	1.67E+01	1.08E-03	72			
ECONOMIC COST MEASURES (\$)				0-80.5 km				
TOTAL ECONOMIC COSTS				1.0000	1.19E+09	3.05E+08	2.87E+09	
4.95E+09	1.63E+10	2.05E+10	2.47E+10	1.08E-03	44			
POP.-DEPENDENT COSTS				0.9678	1.09E+09	2.21E+08	2.80E+09	
4.81E+09	1.62E+10	2.02E+10	2.41E+10	1.10E-04	119			
FARM-DEPENDENT COSTS				1.0000	9.91E+07	6.16E+07	2.35E+08	
3.32E+08	5.08E+08	5.27E+08	5.95E+08	4.85E-04	51			
POP.-DEPENDENT DECONTAMINATION COST				0.9626	3.52E+08	6.78E+07	7.49E+08	
1.65E+09	5.23E+09	7.11E+09	9.35E+09	1.10E-04	119			
FARM-DEPENDENT DECONTAMINATION COST				0.9865	1.77E+07	9.28E+06	4.45E+07	
5.73E+07	8.28E+07	9.41E+07	1.74E+08	1.03E-04	119			
POP.-DEPENDENT INTERDICTION COST				0.9626	7.31E+08	1.49E+08	2.00E+09	
3.47E+09	1.01E+10	1.07E+10	1.48E+10	1.10E-04	119			
FARM-DEPENDENT INTERDICTION COST				0.9993	1.33E+07	6.51E+06	3.38E+07	
4.62E+07	7.09E+07	7.57E+07	9.46E+07	4.85E-04	51			
POP.-DEPENDENT CONDEMNATION COST				0.0062	3.42E+04	0.00E+00	0.00E+00	
0.00E+00	0.00E+00	1.62E+06	1.38E+07	2.33E-04	27			
FARM-DEPENDENT CONDEMNATION COST				0.9840	2.41E+07	8.17E+06	6.28E+07	
1.13E+08	2.16E+08	2.35E+08	2.94E+08	7.92E-04	14			
EMERGENCY PHASE COST				0.9441	4.47E+06	1.00E+06	5.74E+06	
3.13E+07	5.26E+07	6.73E+07	1.58E+08	7.99E-04	68			
INTERMEDIATE PHASE COST				0.0000	0.00E+00	0.00E+00	0.00E+00	
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
MILK DISPOSAL COST				1.0000	6.19E+05	2.91E+05	1.69E+06	
2.18E+06	3.03E+06	3.16E+06	3.77E+06	2.85E-04	51			
CROP DISPOSAL COST				1.0000	4.34E+07	2.65E+07	1.02E+08	
1.09E+08	1.26E+08	1.35E+08	2.12E+08	8.18E-05	45			
AFFECTED AREA/POPULATION				0-80.5 km				

FARM DECONTAMINATION (HECTARES)	0.9865	1.47E+04	8.09E+03	3.55E+04
4.76E+04 6.98E+04 7.52E+04 1.25E+05	1.03E-04	119		
POP. DECONTAMINATION (INDIVIDUALS)	0.9626	4.46E+04	9.51E+03	1.17E+05
2.18E+05 6.16E+05 7.17E+05 9.03E+05	1.73E-03	44		
FARM INTERDICTION (HECTARES)	0.9993	3.02E+04	2.03E+04	7.30E+04
9.55E+04 1.17E+05 1.25E+05 1.60E+05	4.85E-04	51		
POP. INTERDICTION (INDIVIDUALS)	0.9626	4.46E+04	9.51E+03	1.17E+05
2.18E+05 6.16E+05 7.17E+05 9.03E+05	1.73E-03	44		
FARM CONDEMNATION (HECTARES)	0.9840	3.34E+03	8.68E+02	8.46E+03
1.74E+04 3.48E+04 4.12E+04 5.45E+04	6.13E-04	14		
POP. CONDEMNATION (INDIVIDUALS)	0.0062	2.76E-01	0.00E+00	0.00E+00
0.00E+00 0.00E+00 8.98E+00 9.00E+01	2.33E-04	27		
MILK DISPOSAL AREA (HECTARES)	1.0000	3.38E+04	2.36E+04	8.20E+04
1.02E+05 1.29E+05 1.43E+05 2.07E+05	4.85E-04	51		
CROP DISPOSAL AREA (HECTARES)	1.0000	3.01E+04	1.47E+04	8.03E+04
1.03E+05 1.30E+05 1.43E+05 2.07E+05	4.85E-04	51		

SOURCE TERM 1 OF 6:  
 CFI

RESULT NAME = PEAK DOSE FOUND ON SPATIAL GRID (Sv)  
 L-EDEWBODY 0-1.6 km

PEOPLE FRACTION =		0.9500		0.0500		
OVERALL		EMER. RESP. # 1		EMER. RESP. # 2		CHRONC
RESULTS						
-----		-----		-----		-----
X	PROB>=X	X	PROB>=X	X	PROB>=X	X
PROB>=X						
1.00E-06	1.00E+00	1.00E-06	1.00E+00	1.00E-05	1.00E+00	1.00E-07
9.97E-01						
2.00E-06	1.00E+00	2.00E-06	1.00E+00	2.00E-05	1.00E+00	2.00E-07
9.97E-01						
3.00E-06	1.00E+00	3.00E-06	1.00E+00	3.00E-05	1.00E+00	3.00E-07
9.97E-01						
5.00E-06	1.00E+00	5.00E-06	1.00E+00	5.00E-05	1.00E+00	5.00E-07
9.97E-01						
7.00E-06	1.00E+00	7.00E-06	1.00E+00	7.00E-05	1.00E+00	7.00E-07
9.97E-01						
1.00E-05	1.00E+00	1.00E-05	1.00E+00	1.00E-04	1.00E+00	1.00E-06
9.97E-01						
2.00E-05	1.00E+00	2.00E-05	1.00E+00	2.00E-04	1.00E+00	2.00E-06
9.97E-01						
3.00E-05	1.00E+00	3.00E-05	1.00E+00	3.00E-04	1.00E+00	3.00E-06
9.97E-01						
5.00E-05	1.00E+00	5.00E-05	1.00E+00	5.00E-04	1.00E+00	5.00E-06
9.97E-01						
7.00E-05	1.00E+00	7.00E-05	1.00E+00	7.00E-04	1.00E+00	7.00E-06
9.97E-01						
1.00E-04	1.00E+00	1.00E-04	1.00E+00	1.00E-03	1.00E+00	1.00E-05
9.97E-01						
2.00E-04	1.00E+00	2.00E-04	1.00E+00	2.00E-03	1.00E+00	2.00E-05
9.97E-01						
3.00E-04	1.00E+00	3.00E-04	1.00E+00	3.00E-03	1.00E+00	3.00E-05
9.97E-01						
5.00E-04	1.00E+00	5.00E-04	1.00E+00	5.00E-03	1.00E+00	5.00E-05
9.97E-01						
7.00E-04	1.00E+00	7.00E-04	1.00E+00	7.00E-03	1.00E+00	7.00E-05
9.97E-01						
1.00E-03	1.00E+00	1.00E-03	1.00E+00	1.00E-02	1.00E+00	1.00E-04
9.97E-01						
2.00E-03	1.00E+00	2.00E-03	1.00E+00	2.00E-02	1.00E+00	2.00E-04
9.97E-01						
3.00E-03	1.00E+00	3.00E-03	1.00E+00	3.00E-02	1.00E+00	3.00E-04
9.97E-01						
5.00E-03	1.00E+00	5.00E-03	1.00E+00	5.00E-02	1.00E+00	5.00E-04
9.97E-01						
7.00E-03	1.00E+00	7.00E-03	1.00E+00	7.00E-02	1.00E+00	7.00E-04
9.97E-01						

[illegible]

[illegible]

[illegible]

[illegible]

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last  
revised 1/8/04, K. McFadden  
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation  
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 2 OF 6:  
CFE

OVERALL RESULTS OBTAINED BY COMBINING 2 EMERGENCY RESPONSE COHORTS FROM "EARLY"  
WITH THE WEIGHTING FRACTIONS BELOW APPLIED TO THEM:

FRACTION OF THE PEOPLE

-----  
COHORT 1 = 95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION  
0.950

COHORT 2 = NO EVACUATION  
0.050

AND THEN MERGING THE 2 RESULTS ABOVE WITH THE SINGLE SET OF RESULTS FROM  
"CHRONC" DESCRIBED BELOW:

COHORT 3 = SNC AP1000 CHRONC FILE

RESULTS WHICH ARE PRODUCED ONLY BY "EARLY" OR ONLY BY "CHRONC" ARE PRESENTED IN  
LATER SECTIONS.

06-AUG-07 19:50:04 PAGE 7				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL			0-80.5 km	1.0000	4.38E+02	1.70E+02	1.17E+03
1.98E+03	3.48E+03	4.03E+03	6.29E+03	1.94E-05	21		
CAN FAT/TOTAL			0-16.1 km	1.0000	1.85E+01	1.16E+01	3.61E+01
4.92E+01	1.22E+02	1.67E+02	3.04E+02	1.30E-05	32		
ERL FAT/TOTAL			0-80.5 km	0.0075	8.79E-05	0.00E+00	0.00E+00
0.00E+00	0.00E+00	2.56E-03	1.32E-01	1.29E-04	77		
ERL FAT/TOTAL			0-3.2 km	0.0075	8.79E-05	0.00E+00	0.00E+00
0.00E+00	0.00E+00	2.56E-03	1.32E-01	1.29E-04	77		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL			0-1.6 km	0.5451	5.05E-04	4.70E-06	2.01E-03
2.20E-03	2.71E-03	2.97E-03	3.31E-03	1.43E-04	32		
ERL FAT/TOTAL			1.6-3.2 km	0.0396	7.11E-07	0.00E+00	0.00E+00
0.00E+00	2.22E-05	2.48E-05	1.20E-04	1.57E-03	77		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF			0-16.1 km	1.0000	2.94E+02	1.90E+02	5.72E+02
7.88E+02	2.19E+03	3.03E+03	5.07E+03	1.30E-05	32		
L-EDEWBODY TOT LIF			0-80.5 km	1.0000	7.19E+03	2.75E+03	2.02E+04
3.17E+04	5.56E+04	6.21E+04	1.05E+05	1.94E-05	21		



POPULATION WEIGHTED RISK

ERL FAT/TOTAL			0-80.5 km	0.0075	6.91E-11	0.00E+00	0.00E+00
0.00E+00	0.00E+00	1.52E-09	1.04E-07	1.29E-04	77		
ERL FAT/TOTAL			0-3.2 km	0.0075	6.98E-07	0.00E+00	0.00E+00
0.00E+00	0.00E+00	1.52E-05	1.05E-03	1.29E-04	77		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
CAN FAT/TOTAL			0-80.5 km	1.0000	3.19E-04	1.17E-04	9.00E-04
1.45E-03	2.45E-03	2.78E-03	4.24E-03	1.94E-05	21		
CAN FAT/TOTAL			0-16.1 km	0.9729	1.07E-03	7.28E-04	2.51E-03
3.29E-03	5.57E-03	6.49E-03	9.14E-03	9.42E-04	75		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	4.83E+00	3.26E+00	1.09E+01
1.21E+01	1.53E+01	1.69E+01	2.42E+01	1.57E-03	77		

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last  
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"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation

SOURCE TERM 2 OF 6:  
CFE

RESULTS FOR A SINGLE EMERGENCY RESPONSE COHORT WITHOUT ANY WEIGHTING FRACTIONS  
BEING APPLIED

COHORT 1 = 95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION

06-AUG-07 19:50:04 PAGE 8				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL			0-80.5 km	1.0000	1.29E+02	4.48E+01	3.16E+02
5.98E+02	1.10E+03	1.30E+03	1.95E+03	9.42E-04	75		
CAN FAT/TOTAL			0-16.1 km	0.8236	1.53E+00	2.09E-01	4.67E+00
8.14E+00	1.55E+01	1.93E+01	3.50E+01	9.42E-04	75		
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			1.6-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF			0-16.1 km	0.8236	1.71E+01	3.31E+00	5.33E+01
8.60E+01	1.73E+02	2.14E+02	3.06E+02	9.42E-04	75		
L-EDEWBODY TOT LIF			0-80.5 km	1.0000	2.03E+03	7.39E+02	5.12E+03
9.98E+03	2.02E+04	2.47E+04	3.13E+04	4.77E-04	1		
POPULATION WEIGHTED RISK							
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
CAN FAT/TOTAL			0-80.5 km	1.0000	1.01E-04	3.54E-05	2.46E-04
4.82E-04	9.89E-04	1.13E-03	1.53E-03	9.42E-04	75		
CAN FAT/TOTAL			0-16.1 km	0.8236	3.24E-04	4.33E-05	1.01E-03
1.87E-03	3.62E-03	4.60E-03	7.40E-03	9.42E-04	75		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	3.67E+00	2.45E+00	8.62E+00
1.04E+01	1.35E+01	1.50E+01	1.81E+01	1.57E-03	77		

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"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation

SOURCE TERM 2 OF 6:  
CFE

RESULTS FOR A SINGLE EMERGENCY RESPONSE COHORT WITHOUT ANY WEIGHTING FRACTIONS  
BEING APPLIED

COHORT 2 = NO EVACUATION

06-AUG-07 19:50:04 PAGE 9				PROB				
QUANTILES				PEAK	PEAK	PEAK		
				NON-ZERO	MEAN	50TH	90TH	
95TH	99TH	99.5TH	CONS	PROB	TRIAL			
HEALTH EFFECTS CASES								
CAN FAT/TOTAL				0-80.5 km	1.0000	1.45E+02	5.58E+01	3.49E+02
6.42E+02	1.10E+03	1.31E+03	2.06E+03	9.42E-04	75			
CAN FAT/TOTAL				0-16.1 km	0.9729	1.80E+01	6.77E+00	5.01E+01
7.65E+01	1.12E+02	1.22E+02	1.96E+02	1.19E-04	77			
ERL FAT/TOTAL				0-80.5 km	0.0075	1.76E-03	0.00E+00	0.00E+00
0.00E+00	0.00E+00	4.09E-02	2.64E+00	1.29E-04	77			
ERL FAT/TOTAL				0-3.2 km	0.0075	1.76E-03	0.00E+00	0.00E+00
0.00E+00	0.00E+00	4.09E-02	2.64E+00	1.29E-04	77			
ERL FAT/TOTAL				0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
AVERAGE INDIVIDUAL RISK								
ERL FAT/TOTAL				0-1.6 km	0.5451	1.01E-02	9.56E-05	3.79E-02
4.83E-02	5.38E-02	5.57E-02	6.62E-02	1.43E-04	32			
ERL FAT/TOTAL				1.6-3.2 km	0.0396	1.42E-05	0.00E+00	0.00E+00
0.00E+00	3.42E-04	3.94E-04	2.40E-03	1.57E-03	77			
POPULATION DOSE (Sv)								
L-EDEWBODY TOT LIF				0-16.1 km	0.9729	1.64E+02	8.09E+01	4.36E+02
6.69E+02	1.03E+03	1.11E+03	1.69E+03	1.19E-04	77			
L-EDEWBODY TOT LIF				0-80.5 km	1.0000	2.18E+03	8.57E+02	5.32E+03
1.02E+04	2.09E+04	2.52E+04	3.19E+04	4.77E-04	1			
POPULATION WEIGHTED RISK								
ERL FAT/TOTAL				0-80.5 km	0.0075	1.38E-09	0.00E+00	0.00E+00
0.00E+00	0.00E+00	4.09E-08	2.08E-06	1.29E-04	77			
ERL FAT/TOTAL				0-3.2 km	0.0075	1.40E-05	0.00E+00	0.00E+00
0.00E+00	0.00E+00	4.09E-04	2.10E-02	1.29E-04	77			
ERL FAT/TOTAL				0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
CAN FAT/TOTAL				0-80.5 km	1.0000	1.14E-04	4.50E-05	2.75E-04
4.92E-04	1.03E-03	1.17E-03	1.62E-03	9.42E-04	75			
CAN FAT/TOTAL				0-16.1 km	0.9729	3.81E-03	1.37E-03	1.03E-02
1.54E-02	2.86E-02	3.12E-02	4.13E-02	1.19E-04	77			

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	2.48E+01	1.52E+01	6.03E+01
7.15E+01	8.36E+01	8.94E+01	1.40E+02	1.57E-03	77		

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last revised 1/8/04, K. McFadden  
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 "EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation  
 "CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 2 OF 6:  
 CFE

RESULTS FROM THE "CHRONC" MODULE ALONE

COHORT 3 = SNC AP1000 CHRONC FILE

06-AUG-07 19:50:04 PAGE 10				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL 0-80.5 km				1.0000	3.09E+02	1.15E+02	7.92E+02
1.30E+03	2.50E+03	2.98E+03	4.65E+03	1.94E-05	21		
CAN FAT/TOTAL 0-16.1 km				1.0000	1.62E+01	1.02E+01	3.07E+01
4.43E+01	1.21E+02	1.67E+02	3.04E+02	1.30E-05	32		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF 0-16.1 km				1.0000	2.69E+02	1.63E+02	5.13E+02
7.59E+02	2.17E+03	3.01E+03	5.06E+03	1.30E-05	32		
L-EDEWBODY TOT LIF 0-80.5 km				1.0000	5.14E+03	1.93E+03	1.31E+04
2.22E+04	4.02E+04	4.96E+04	7.76E+04	1.94E-05	21		
POPULATION WEIGHTED RISK							
CAN FAT/TOTAL 0-80.5 km				1.0000	2.17E-04	7.20E-05	6.01E-04
1.03E-03	1.71E-03	2.04E-03	3.00E-03	1.10E-04	8		
CAN FAT/TOTAL 0-16.1 km				0.9345	5.75E-04	4.86E-04	1.19E-03
1.41E-03	2.03E-03	2.18E-03	3.23E-03	6.05E-05	121		
PEAK DOSE FOUND ON SPATIAL GRID (Sv)							
L-EDEWBODY 0-1.6 km				0.8737	1.05E-01	1.03E-01	1.32E-01
1.47E-01	NOT-FOUND	NOT-FOUND	1.88E-01	1.00E-02	133		
L-EDEWBODY POP. DOSE (Sv) 0-16.1 km							
TOTAL LONG-TERM PATHWAYS DOSE				1.0000	2.69E+02	1.63E+02	5.13E+02
7.59E+02	2.17E+03	3.01E+03	5.06E+03	1.30E-05	32		
LONG-TERM DIRECT EXPOSURE PATHWAYS				0.9345	4.54E+01	3.62E+01	1.03E+02
1.15E+02	1.50E+02	1.69E+02	2.55E+02	6.05E-05	121		
TOTAL INGESTION PATHWAYS DOSE				1.0000	2.17E+02	1.04E+02	4.69E+02
7.28E+02	2.16E+03	3.01E+03	5.06E+03	1.30E-05	32		
LONG-TERM GROUNDSHINE DOSE				0.9345	4.42E+01	3.55E+01	1.01E+02
1.14E+02	1.49E+02	1.67E+02	2.55E+02	6.05E-05	121		
LONG-TERM RESUSPENSION DOSE				0.9345	1.22E+00	8.88E-01	2.78E+00
3.42E+00	5.21E+00	6.12E+00	1.37E+01	2.28E-04	51		
WATER INGESTION DOSE				1.0000	2.14E+02	1.01E+02	4.65E+02
7.27E+02	2.14E+03	2.84E+03	5.06E+03	1.30E-05	32		
POP.-DEPENDENT DECONTAMINATION DOSE				0.8236	7.11E+00	2.24E+00	2.00E+01
2.81E+01	4.85E+01	5.96E+01	1.21E+02	6.05E-05	121		
FARM-DEPENDENT DECONTAMINATION DOSE				0.8632	2.08E-01	3.40E-02	9.25E-01
1.19E+00	1.81E+00	2.07E+00	3.27E+00	2.85E-05	71		

INGESTION OF GRAINS	0.9748	9.45E-02	4.56E-02	2.57E-01
3.26E-01 4.44E-01 5.07E-01 9.46E-01	2.00E-04	51		
INGESTION OF LEAF VEG	0.9748	4.68E-01	2.30E-01	1.20E+00
1.49E+00 2.08E+00 2.17E+00 2.95E+00	2.85E-05	71		
INGESTION OF ROOT CROPS	0.9748	2.60E-01	1.46E-01	6.54E-01
7.88E-01 1.04E+00 1.10E+00 1.67E+00	2.85E-05	71		
INGESTION OF FRUITS	0.9748	3.71E-01	1.83E-01	1.01E+00
1.26E+00 2.03E+00 2.15E+00 2.86E+00	1.79E-04	85		
INGESTION OF LEGUMES	0.9748	4.71E-01	2.62E-01	1.15E+00
1.54E+00 2.48E+00 2.88E+00 3.55E+00	2.85E-05	71		
INGESTION OF BEEF	0.9748	5.07E-01	3.02E-01	1.24E+00
1.65E+00 2.66E+00 3.06E+00 4.31E+00	1.12E-04	109		
INGESTION OF MILK	0.9748	3.80E-01	1.71E-01	1.06E+00
1.31E+00 2.07E+00 2.30E+00 3.23E+00	2.80E-05	103		
INGESTION OF POULTRY	0.9748	2.00E-01	7.14E-02	5.02E-01
1.00E+00 1.68E+00 2.04E+00 2.44E+00	1.51E-03	62		
INGESTION OF OTHER MEAT CROPS	0.9748	4.95E-02	2.09E-02	1.20E-01
2.04E-01 5.11E-01 5.68E-01 7.02E-01	1.28E-03	68		
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km				
TOTAL LONG-TERM PATHWAYS DOSE	1.0000	5.14E+03	1.93E+03	1.31E+04
2.22E+04 4.02E+04 4.96E+04 7.76E+04	1.94E-05	21		
LONG-TERM DIRECT EXPOSURE PATHWAYS	1.0000	4.60E+03	1.52E+03	1.22E+04
2.17E+04 3.67E+04 4.25E+04 6.35E+04	1.10E-04	8		
TOTAL INGESTION PATHWAYS DOSE	1.0000	3.75E+02	2.54E+02	7.00E+02
9.48E+02 2.41E+03 3.12E+03 5.29E+03	2.34E-05	31		
LONG-TERM GROUNDSHINE DOSE	1.0000	4.46E+03	1.48E+03	1.19E+04
2.11E+04 3.56E+04 4.06E+04 6.20E+04	1.10E-04	8		
LONG-TERM RESUSPENSION DOSE	1.0000	1.39E+02	4.68E+01	3.67E+02
6.36E+02 1.05E+03 1.13E+03 3.13E+03	1.94E-05	31		
WATER INGESTION DOSE	1.0000	2.68E+02	1.41E+02	5.80E+02
8.67E+02 2.28E+03 3.05E+03 5.09E+03	1.30E-05	32		

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QUANTILES

				PROB	PEAK	PEAK	PEAK	
				NON-ZERO	MEAN		50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL			
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km								
POP.-DEPENDENT DECONTAMINATION DOSE				0.9372	1.72E+02		1.82E+01	3.36E+02
7.01E+02	3.22E+03	4.50E+03	1.38E+04	1.94E-05	21			
FARM-DEPENDENT DECONTAMINATION DOSE				0.9601	1.18E+00		2.66E-01	3.46E+00
6.42E+00	1.20E+01	1.57E+01	4.38E+01	2.85E-05	99			
INGESTION OF GRAINS				1.0000	5.32E+00		2.99E+00	1.29E+01
1.72E+01	2.48E+01	2.80E+01	3.52E+01	9.42E-04	124			
INGESTION OF LEAF VEG				1.0000	1.11E+01		8.44E+00	2.31E+01
2.92E+01	3.85E+01	4.31E+01	5.41E+01	2.85E-05	99			
INGESTION OF ROOT CROPS				1.0000	8.51E+00		5.89E+00	1.88E+01
2.36E+01	3.38E+01	3.75E+01	4.84E+01	9.42E-04	124			
INGESTION OF FRUITS				1.0000	1.24E+01		8.87E+00	2.77E+01
3.43E+01	5.11E+01	5.61E+01	7.07E+01	9.42E-04	124			
INGESTION OF LEGUMES				1.0000	9.87E+00		8.04E+00	1.93E+01
2.35E+01	3.16E+01	3.34E+01	6.52E+01	2.85E-05	99			
INGESTION OF BEEF				1.0000	2.35E+01		1.84E+01	4.83E+01
6.01E+01	9.21E+01	1.03E+02	1.25E+02	4.00E-04	114			
INGESTION OF MILK				1.0000	2.05E+01		1.42E+01	4.20E+01
5.38E+01	8.21E+01	1.00E+02	1.66E+02	4.77E-04	109			
INGESTION OF POULTRY				1.0000	1.18E+01		7.75E+00	2.74E+01
3.25E+01	4.24E+01	4.75E+01	5.80E+01	4.85E-04	64			
INGESTION OF OTHER MEAT CROPS				1.0000	4.36E+00		2.91E+00	1.02E+01
1.21E+01	1.81E+01	2.09E+01	2.63E+01	9.42E-04	107			
ECONOMIC COST MEASURES (\$) 0-80.5 km								
TOTAL ECONOMIC COSTS				1.0000	1.10E+09		3.07E+08	2.59E+09
4.58E+09	1.45E+10	1.94E+10	3.22E+10	1.94E-05	20			
POP.-DEPENDENT COSTS				0.9378	9.38E+08		1.51E+08	2.39E+09
4.49E+09	1.43E+10	1.92E+10	3.16E+10	1.94E-05	20			
FARM-DEPENDENT COSTS				1.0000	1.57E+08		1.25E+08	2.90E+08
3.57E+08	5.24E+08	5.65E+08	7.40E+08	1.02E-04	45			
POP.-DEPENDENT DECONTAMINATION COST				0.9372	3.22E+08		4.93E+07	7.38E+08
1.57E+09	5.42E+09	7.49E+09	1.26E+10	7.86E-05	45			
FARM-DEPENDENT DECONTAMINATION COST				0.9601	1.07E+07		5.35E+06	2.99E+07
4.17E+07	7.22E+07	8.23E+07	1.44E+08	1.03E-04	120			
POP.-DEPENDENT INTERDICTION COST				0.9372	6.12E+08		1.04E+08	1.55E+09
2.90E+09	1.00E+10	1.11E+10	2.18E+10	1.94E-05	20			
FARM-DEPENDENT INTERDICTION COST				1.0000	3.05E+07		2.59E+07	5.61E+07
6.58E+07	8.50E+07	9.40E+07	1.18E+08	8.06E-05	7			
POP.-DEPENDENT CONDEMNATION COST				0.1785	3.10E+06		0.00E+00	6.09E+06
1.22E+07	6.38E+07	9.28E+07	1.46E+09	7.98E-05	35			
FARM-DEPENDENT CONDEMNATION COST				0.9806	3.31E+07		4.44E+06	1.01E+08
1.67E+08	3.23E+08	3.62E+08	5.23E+08	5.99E-04	47			
EMERGENCY PHASE COST				0.7788	2.52E+05		3.51E+04	4.58E+05
1.36E+06	3.31E+06	3.63E+06	4.20E+06	1.66E-03	65			
INTERMEDIATE PHASE COST				0.0000	0.00E+00		0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
MILK DISPOSAL COST				1.0000	1.22E+06		1.06E+06	2.38E+06
2.89E+06	3.21E+06	3.31E+06	3.77E+06	2.85E-04	51			
CROP DISPOSAL COST				1.0000	8.18E+07		7.33E+07	1.27E+08
1.44E+08	1.95E+08	2.03E+08	2.25E+08	1.14E-04	51			
AFFECTED AREA/POPULATION 0-80.5 km								



FARM DECONTAMINATION (HECTARES)	0.9601	9.07E+03	4.15E+03	2.48E+04
3.36E+04 5.59E+04 6.45E+04 9.14E+04	1.03E-04	120		
POP. DECONTAMINATION (INDIVIDUALS)	0.9372	3.48E+04	6.03E+03	9.73E+04
1.72E+05 5.33E+05 5.76E+05 9.03E+05	7.86E-05	45		
FARM INTERDICTION (HECTARES)	1.0000	5.99E+04	5.15E+04	1.04E+05
1.13E+05 1.38E+05 1.50E+05 2.01E+05	4.85E-04	51		
POP. INTERDICTION (INDIVIDUALS)	0.9372	3.48E+04	6.03E+03	9.73E+04
1.72E+05 5.33E+05 5.76E+05 9.03E+05	7.86E-05	45		
FARM CONDEMNATION (HECTARES)	0.9806	5.26E+03	2.99E+02	1.42E+04
2.87E+04 6.41E+04 7.90E+04 1.23E+05	5.99E-04	47		
POP. CONDEMNATION (INDIVIDUALS)	0.1785	2.23E+01	0.00E+00	5.47E+01
7.81E+01 3.97E+02 6.27E+02 1.24E+04	7.98E-05	35		
MILK DISPOSAL AREA (HECTARES)	1.0000	6.68E+04	5.94E+04	1.12E+05
1.27E+05 1.70E+05 1.93E+05 2.25E+05	4.85E-04	51		
CROP DISPOSAL AREA (HECTARES)	1.0000	6.51E+04	5.70E+04	1.07E+05
1.16E+05 1.40E+05 1.52E+05 2.03E+05	4.85E-04	51		

SOURCE TERM 2 OF 6:  
 CFE

RESULT NAME = PEAK DOSE FOUND ON SPATIAL GRID (Sv)  
 L-EDEWBODY 0-1.6 km

PEOPLE FRACTION =		0.9500		0.0500		
OVERALL		EMER. RESP. # 1		EMER. RESP. # 2		CHRONC
RESULTS						
-----		-----		-----		-----
X	PROB>=X	X	PROB>=X	X	PROB>=X	X
PROB>=X						
1.00E-06	1.00E+00	1.00E-06	1.00E+00	1.00E-05	1.00E+00	1.00E-07
8.16E-01						
2.00E-06	1.00E+00	2.00E-06	1.00E+00	2.00E-05	1.00E+00	2.00E-07
8.05E-01						
3.00E-06	1.00E+00	3.00E-06	1.00E+00	3.00E-05	1.00E+00	3.00E-07
8.05E-01						
5.00E-06	1.00E+00	5.00E-06	1.00E+00	5.00E-05	1.00E+00	5.00E-07
8.05E-01						
7.00E-06	1.00E+00	7.00E-06	1.00E+00	7.00E-05	1.00E+00	7.00E-07
8.05E-01						
1.00E-05	1.00E+00	1.00E-05	1.00E+00	1.00E-04	1.00E+00	1.00E-06
8.05E-01						
2.00E-05	1.00E+00	2.00E-05	1.00E+00	2.00E-04	1.00E+00	2.00E-06
8.05E-01						
3.00E-05	1.00E+00	3.00E-05	1.00E+00	3.00E-04	1.00E+00	3.00E-06
8.05E-01						
5.00E-05	1.00E+00	5.00E-05	1.00E+00	5.00E-04	1.00E+00	5.00E-06
8.05E-01						
7.00E-05	1.00E+00	7.00E-05	1.00E+00	7.00E-04	1.00E+00	7.00E-06
8.05E-01						
1.00E-04	1.00E+00	1.00E-04	1.00E+00	1.00E-03	1.00E+00	1.00E-05
8.05E-01						
2.00E-04	1.00E+00	2.00E-04	1.00E+00	2.00E-03	1.00E+00	2.00E-05
8.05E-01						
3.00E-04	1.00E+00	3.00E-04	1.00E+00	3.00E-03	1.00E+00	3.00E-05
8.05E-01						
5.00E-04	1.00E+00	5.00E-04	1.00E+00	5.00E-03	1.00E+00	5.00E-05
8.05E-01						
7.00E-04	1.00E+00	7.00E-04	1.00E+00	7.00E-03	1.00E+00	7.00E-05
8.05E-01						
1.00E-03	1.00E+00	1.00E-03	1.00E+00	1.00E-02	1.00E+00	1.00E-04
8.05E-01						
2.00E-03	1.00E+00	2.00E-03	1.00E+00	2.00E-02	1.00E+00	2.00E-04
8.05E-01						
3.00E-03	1.00E+00	3.00E-03	1.00E+00	3.00E-02	1.00E+00	3.00E-04
8.05E-01						
5.00E-03	1.00E+00	5.00E-03	1.00E+00	5.00E-02	1.00E+00	5.00E-04
8.05E-01						
7.00E-03	1.00E+00	7.00E-03	1.00E+00	7.00E-02	1.00E+00	7.00E-04
8.05E-01						

[illegible]

[illegible]

[illegible]

[illegible]

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last  
revised 1/8/04, K. McFadden  
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation  
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 3 OF 6:  
IC

OVERALL RESULTS OBTAINED BY COMBINING 2 EMERGENCY RESPONSE COHORTS FROM "EARLY"  
WITH THE WEIGHTING FRACTIONS BELOW APPLIED TO THEM:

FRACTION OF THE PEOPLE

-----  
COHORT 1 = 95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION  
0.950

COHORT 2 = NO EVACUATION  
0.050

AND THEN MERGING THE 2 RESULTS ABOVE WITH THE SINGLE SET OF RESULTS FROM  
"CHRONC" DESCRIBED BELOW:

COHORT 3 = SNC AP1000 CHRONC FILE

RESULTS WHICH ARE PRODUCED ONLY BY "EARLY" OR ONLY BY "CHRONC" ARE PRESENTED IN  
LATER SECTIONS.

06-AUG-07 19:50:04 PAGE 13				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL			0-80.5 km	1.0000	8.05E-01	2.55E-01	1.72E+00
3.08E+00	1.06E+01	1.22E+01	2.78E+01	8.42E-05	29		
CAN FAT/TOTAL			0-16.1 km	1.0000	7.62E-02	4.41E-02	1.74E-01
2.45E-01	5.05E-01	5.53E-01	9.06E-01	1.94E-05	31		
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			1.6-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF			0-16.1 km	1.0000	1.27E+00	7.57E-01	2.97E+00
4.08E+00	7.63E+00	8.67E+00	1.51E+01	1.94E-05	31		
L-EDEWBODY TOT LIF			0-80.5 km	1.0000	1.34E+01	4.24E+00	3.08E+01
5.13E+01	1.66E+02	2.32E+02	4.63E+02	8.42E-05	29		

POPULATION WEIGHTED RISK

ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
CAN FAT/TOTAL			0-80.5 km	1.0000	4.39E-07	1.02E-07	8.37E-07
1.73E-06	7.05E-06	1.01E-05	2.07E-05	8.42E-05	29		
CAN FAT/TOTAL			0-16.1 km	0.9652	5.00E-06	1.47E-06	1.31E-05
2.11E-05	4.50E-05	5.57E-05	1.26E-04	1.94E-05	31		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	2.42E-02	2.18E-02	4.62E-02
5.77E-02	7.21E-02	7.35E-02	8.14E-02	1.43E-04	27		



DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last  
revised 1/8/04, K. McFadden  
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation

SOURCE TERM 3 OF 6:  
IC

RESULTS FOR A SINGLE EMERGENCY RESPONSE COHORT WITHOUT ANY WEIGHTING FRACTIONS  
BEING APPLIED

COHORT 1 = 95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION

06-AUG-07 19:50:04 PAGE 14				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL			0-80.5 km	1.0000	1.20E-01	4.32E-02	2.63E-01
5.14E-01	1.23E+00	1.69E+00	2.63E+00	7.99E-04	68		
CAN FAT/TOTAL			0-16.1 km	0.8087	7.02E-04	1.04E-04	2.11E-03
3.29E-03	7.60E-03	8.67E-03	1.39E-02	1.43E-04	136		
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			1.6-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF			0-16.1 km	0.8087	1.17E-02	1.73E-03	3.43E-02
5.49E-02	1.28E-01	1.58E-01	2.32E-01	1.43E-04	136		
L-EDEWBODY TOT LIF			0-80.5 km	1.0000	2.01E+00	7.16E-01	4.37E+00
8.62E+00	1.98E+01	2.85E+01	4.39E+01	7.99E-04	68		
POPULATION WEIGHTED RISK							
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
CAN FAT/TOTAL			0-80.5 km	1.0000	9.46E-08	3.34E-08	2.11E-07
4.09E-07	9.54E-07	1.19E-06	2.07E-06	7.99E-04	68		
CAN FAT/TOTAL			0-16.1 km	0.8087	1.48E-07	2.25E-08	4.47E-07
6.90E-07	1.44E-06	1.81E-06	2.94E-06	1.43E-04	136		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	1.80E-03	1.04E-03	4.00E-03
4.89E-03	NOT-FOUND	NOT-FOUND	9.81E-03	1.95E-02	65		

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last  
revised 1/8/04, K. McFadden  
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation

SOURCE TERM 3 OF 6:  
IC

RESULTS FOR A SINGLE EMERGENCY RESPONSE COHORT WITHOUT ANY WEIGHTING FRACTIONS  
BEING APPLIED

COHORT 2 = NO EVACUATION

06-AUG-07 19:50:04 PAGE 15				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL			0-80.5 km	1.0000	1.32E-01	5.23E-02	2.84E-01
5.47E-01	1.30E+00	1.80E+00	2.69E+00	7.99E-04	68		
CAN FAT/TOTAL			0-16.1 km	0.9652	1.25E-02	4.99E-03	3.39E-02
4.76E-02	7.86E-02	8.91E-02	1.50E-01	1.66E-03	65		
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			1.6-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF			0-16.1 km	0.9652	2.08E-01	8.33E-02	5.80E-01
8.11E-01	1.31E+00	1.55E+00	2.50E+00	1.66E-03	65		
L-EDEWBODY TOT LIF			0-80.5 km	1.0000	2.20E+00	8.50E-01	4.71E+00
9.06E+00	2.05E+01	2.87E+01	4.48E+01	7.99E-04	68		
POPULATION WEIGHTED RISK							
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
CAN FAT/TOTAL			0-80.5 km	1.0000	1.04E-07	4.02E-08	2.35E-07
4.33E-07	9.66E-07	1.19E-06	2.11E-06	7.99E-04	68		
CAN FAT/TOTAL			0-16.1 km	0.9652	2.63E-06	1.03E-06	7.38E-06
1.04E-05	1.67E-05	2.05E-05	3.16E-05	1.66E-03	65		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY		0-1.6 km	1.0000	2.42E-02	1.57E-02	5.27E-02
7.46E-02	NOT-FOUND	NOT-FOUND	1.30E-01	1.95E-02	65	

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last revised 1/8/04, K. McFadden  
 "ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
 "EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation  
 "CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 3 OF 6:  
 IC

RESULTS FROM THE "CHRONC" MODULE ALONE

COHORT 3 = SNC AP1000 CHRONC FILE

06-AUG-07 19:50:04 PAGE 16				PROB				
QUANTILES				PEAK	PEAK	PEAK		
				NON-ZERO	MEAN	50TH	90TH	
95TH	99TH	99.5TH	CONS	PROB	TRIAL			
HEALTH EFFECTS CASES								
CAN FAT/TOTAL				0-80.5 km	1.0000	6.84E-01	1.96E-01	1.42E+00
2.56E+00	1.00E+01	1.12E+01	2.62E+01	8.42E-05	29			
CAN FAT/TOTAL				0-16.1 km	1.0000	7.49E-02	4.30E-02	1.68E-01
2.38E-01	5.05E-01	5.51E-01	9.00E-01	1.94E-05	31			
POPULATION DOSE (Sv)								
L-EDEWBODY TOT LIF				0-16.1 km	1.0000	1.25E+00	7.32E-01	2.95E+00
4.01E+00	7.62E+00	8.63E+00	1.50E+01	1.94E-05	31			
L-EDEWBODY TOT LIF				0-80.5 km	1.0000	1.14E+01	3.30E+00	2.47E+01
4.25E+01	1.48E+02	2.06E+02	4.37E+02	8.42E-05	29			
POPULATION WEIGHTED RISK								
CAN FAT/TOTAL				0-80.5 km	1.0000	3.44E-07	5.80E-08	6.11E-07
1.21E-06	6.69E-06	9.70E-06	1.94E-05	8.42E-05	29			
CAN FAT/TOTAL				0-16.1 km	0.9369	4.73E-06	1.34E-06	1.23E-05
2.01E-05	4.44E-05	5.55E-05	1.24E-04	1.94E-05	31			
PEAK DOSE FOUND ON SPATIAL GRID (Sv)								
L-EDEWBODY				0-1.6 km	1.0000	2.13E-02	1.85E-02	4.33E-02
5.06E-02	5.53E-02	5.75E-02	7.62E-02	1.43E-04	27			
L-EDEWBODY POP. DOSE (Sv) 0-16.1 km								
TOTAL LONG-TERM PATHWAYS DOSE					1.0000	1.25E+00	7.32E-01	2.95E+00
4.01E+00	7.62E+00	8.63E+00	1.50E+01	1.94E-05	31			
LONG-TERM DIRECT EXPOSURE PATHWAYS					0.9369	3.73E-01	1.10E-01	9.99E-01
1.48E+00	3.56E+00	4.39E+00	9.82E+00	1.94E-05	31			
TOTAL INGESTION PATHWAYS DOSE					1.0000	8.75E-01	4.47E-01	2.11E+00
2.92E+00	5.21E+00	5.70E+00	8.73E+00	8.42E-05	45			
LONG-TERM GROUNDSHINE DOSE					0.9369	3.27E-01	9.83E-02	8.49E-01
1.31E+00	3.31E+00	3.86E+00	8.61E+00	1.94E-05	31			
LONG-TERM RESUSPENSION DOSE					0.9369	4.61E-02	1.32E-02	1.22E-01
1.98E-01	4.40E-01	5.46E-01	1.21E+00	1.94E-05	31			
WATER INGESTION DOSE					1.0000	9.13E-02	5.24E-02	2.04E-01
3.02E-01	7.09E-01	8.38E-01	1.71E+00	2.34E-05	31			
POP.-DEPENDENT DECONTAMINATION DOSE					0.0000	1.97E-06	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.56E-02	1.17E-05	27			
FARM-DEPENDENT DECONTAMINATION DOSE					0.0344	1.57E-05	0.00E+00	0.00E+00
0.00E+00	4.20E-04	5.17E-04	2.21E-03	3.77E-05	27			

INGESTION OF GRAINS	1.0000	2.45E-02	4.93E-03	7.12E-02
9.84E-02 2.06E-01 2.29E-01 3.53E-01	8.42E-05	45		
INGESTION OF LEAF VEG	1.0000	5.75E-02	1.81E-02	1.40E-01
2.50E-01 5.28E-01 5.73E-01 8.90E-01	8.42E-05	45		
INGESTION OF ROOT CROPS	1.0000	3.66E-02	1.22E-02	1.02E-01
1.39E-01 2.89E-01 3.19E-01 4.84E-01	8.42E-05	45		
INGESTION OF FRUITS	1.0000	4.81E-02	1.05E-02	1.34E-01
1.88E-01 3.46E-01 4.05E-01 6.81E-01	8.42E-05	45		
INGESTION OF LEGUMES	1.0000	3.69E-02	1.68E-02	9.37E-02
1.32E-01 2.50E-01 3.02E-01 4.41E-01	8.42E-05	45		
INGESTION OF BEEF	1.0000	2.37E-01	9.53E-02	6.93E-01
8.15E-01 1.12E+00 1.25E+00 2.41E+00	1.81E-05	24		
INGESTION OF MILK	1.0000	2.74E-01	1.16E-01	7.30E-01
9.74E-01 2.04E+00 2.17E+00 3.45E+00	7.46E-05	35		
INGESTION OF POULTRY	1.0000	5.00E-02	1.95E-02	1.29E-01
2.07E-01 3.49E-01 4.03E-01 7.33E-01	8.42E-05	45		
INGESTION OF OTHER MEAT CROPS	1.0000	1.88E-02	1.46E-02	3.89E-02
4.97E-02 8.09E-02 9.20E-02 1.44E-01	8.42E-05	45		
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km				
TOTAL LONG-TERM PATHWAYS DOSE	1.0000	1.14E+01	3.30E+00	2.47E+01
4.25E+01 1.48E+02 2.06E+02 4.37E+02	8.42E-05	29		
LONG-TERM DIRECT EXPOSURE PATHWAYS	1.0000	7.30E+00	1.26E+00	1.28E+01
2.58E+01 1.35E+02 2.01E+02 4.12E+02	8.42E-05	29		
TOTAL INGESTION PATHWAYS DOSE	1.0000	4.09E+00	1.57E+00	1.06E+01
2.12E+01 3.31E+01 3.63E+01 5.16E+01	4.85E-04	51		
LONG-TERM GROUNDSHINE DOSE	1.0000	6.40E+00	1.10E+00	1.12E+01
2.22E+01 1.17E+02 1.54E+02 3.61E+02	8.42E-05	29		
LONG-TERM RESUSPENSION DOSE	1.0000	9.04E-01	1.52E-01	1.61E+00
3.15E+00 1.54E+01 2.24E+01 5.10E+01	8.42E-05	29		
WATER INGESTION DOSE	1.0000	1.21E-01	6.94E-02	2.85E-01
3.87E-01 7.89E-01 1.00E+00 1.78E+00	9.36E-06	26		

06-AUG-07 19:50:04 PAGE 17  
QUANTILES

				PROB	PEAK	PEAK	PEAK	
				NON-ZERO	MEAN		50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL			
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km								
POP.-DEPENDENT DECONTAMINATION DOSE				0.0000	1.97E-06		0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	9.56E-02	1.17E-05	27			
FARM-DEPENDENT DECONTAMINATION DOSE				0.0344	1.57E-05		0.00E+00	0.00E+00
0.00E+00	4.20E-04	5.17E-04	2.21E-03	3.77E-05	27			
INGESTION OF GRAINS				1.0000	1.42E-01		3.23E-02	3.83E-01
8.62E-01	1.32E+00	1.51E+00	2.36E+00	4.85E-04	51			
INGESTION OF LEAF VEG				1.0000	3.32E-01		5.89E-02	1.00E+00
2.09E+00	3.59E+00	4.17E+00	7.64E+00	1.19E-04	60			
INGESTION OF ROOT CROPS				1.0000	2.00E-01		5.04E-02	5.17E-01
1.11E+00	1.90E+00	2.18E+00	3.22E+00	4.85E-04	51			
INGESTION OF FRUITS				1.0000	2.76E-01		6.24E-02	7.26E-01
1.58E+00	2.85E+00	3.23E+00	4.55E+00	4.85E-04	51			
INGESTION OF LEGUMES				1.0000	1.88E-01		5.11E-02	4.56E-01
1.08E+00	1.85E+00	2.13E+00	2.89E+00	4.85E-04	51			
INGESTION OF BEEF				1.0000	1.14E+00		4.48E-01	2.67E+00
5.81E+00	9.18E+00	1.03E+01	1.35E+01	4.85E-04	51			
INGESTION OF MILK				1.0000	1.33E+00		6.98E-01	3.19E+00
5.95E+00	8.93E+00	1.01E+01	1.31E+01	4.85E-04	51			
INGESTION OF POULTRY				1.0000	2.91E-01		6.55E-02	9.29E-01
1.55E+00	3.05E+00	3.41E+00	4.93E+00	4.85E-04	51			
INGESTION OF OTHER MEAT CROPS				1.0000	7.61E-02		3.74E-02	2.05E-01
3.36E-01	6.08E-01	7.10E-01	1.02E+00	1.19E-04	60			
ECONOMIC COST MEASURES (\$)								
TOTAL ECONOMIC COSTS 0-80.5 km				0.7495	3.21E+05		6.71E+04	8.60E+05
1.27E+06	5.22E+06	5.64E+06	7.55E+06	7.91E-05	30			
POP.-DEPENDENT COSTS				0.0000	2.93E+01		0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.42E+06	1.17E-05	27			
FARM-DEPENDENT COSTS				0.7495	3.21E+05		6.71E+04	8.60E+05
1.27E+06	5.22E+06	5.64E+06	7.55E+06	7.91E-05	30			
POP.-DEPENDENT DECONTAMINATION COST				0.0000	7.83E+00		0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	3.81E+05	1.17E-05	27			
FARM-DEPENDENT DECONTAMINATION COST				0.0344	3.54E+02		0.00E+00	0.00E+00
0.00E+00	1.14E+04	1.23E+04	4.10E+04	3.77E-05	27			
POP.-DEPENDENT INTERDICTION COST				0.0000	2.14E+01		0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	1.04E+06	1.17E-05	27			
FARM-DEPENDENT INTERDICTION COST				0.7006	2.90E+04		4.69E+03	7.33E+04
1.09E+05	5.06E+05	5.30E+05	7.29E+05	7.68E-05	30			
POP.-DEPENDENT CONDEMNATION COST				0.0000	0.00E+00		0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
FARM-DEPENDENT CONDEMNATION COST				0.0000	0.00E+00		0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
EMERGENCY PHASE COST				0.0000	0.00E+00		0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
INTERMEDIATE PHASE COST				0.0000	0.00E+00		0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
MILK DISPOSAL COST				0.7489	1.33E+03		2.47E+01	1.33E+03
6.12E+03	1.79E+04	7.11E+04	8.41E+04	3.84E-05	30			
CROP DISPOSAL COST				0.7006	2.90E+05		4.69E+04	8.05E+05
1.21E+06	5.05E+06	5.32E+06	6.93E+06	1.58E-04	30			
AFFECTED AREA/POPULATION 0-80.5 km								

FARM DECONTAMINATION (HECTARES)	0.0344	3.42E-01	0.00E+00	0.00E+00
0.00E+00 7.49E+00 7.77E+00 3.96E+01	3.77E-05	27		
POP. DECONTAMINATION (INDIVIDUALS)	0.0000	1.42E-03	0.00E+00	0.00E+00
0.00E+00 0.00E+00 0.00E+00 6.90E+01	1.17E-05	27		
FARM INTERDICTION (HECTARES)	0.7006	6.71E+01	9.56E+00	1.57E+02
2.30E+02 1.06E+03 1.13E+03 1.69E+03	7.68E-05	30		
POP. INTERDICTION (INDIVIDUALS)	0.0000	1.42E-03	0.00E+00	0.00E+00
0.00E+00 0.00E+00 0.00E+00 6.90E+01	1.17E-05	27		
FARM CONDEMNATION (HECTARES)	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00	0.00E+00	0		
POP. CONDEMNATION (INDIVIDUALS)	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00 0.00E+00 0.00E+00 0.00E+00	0.00E+00	0		
MILK DISPOSAL AREA (HECTARES)	0.7489	1.39E+02	1.44E+01	2.73E+02
8.70E+02 1.07E+03 1.12E+03 1.45E+03	3.84E-05	30		
CROP DISPOSAL AREA (HECTARES)	0.7006	6.71E+01	9.56E+00	1.57E+02
2.30E+02 1.06E+03 1.13E+03 1.69E+03	7.68E-05	30		



SOURCE TERM 3 OF 6:  
 IC

RESULT NAME = PEAK DOSE FOUND ON SPATIAL GRID (Sv)  
 L-EDEWBODY 0-1.6 km

PEOPLE FRACTION =		0.9500		0.0500		
OVERALL		EMER. RESP. # 1		EMER. RESP. # 2		CHRONC
RESULTS						
-----		-----		-----		-----
X	PROB>=X	X	PROB>=X	X	PROB>=X	X
PROB>=X						
1.00E-08	1.00E+00	1.00E-09	1.00E+00	1.00E-08	1.00E+00	1.00E-08
1.00E+00						
2.00E-08	1.00E+00	2.00E-09	1.00E+00	2.00E-08	1.00E+00	2.00E-08
1.00E+00						
3.00E-08	1.00E+00	3.00E-09	1.00E+00	3.00E-08	1.00E+00	3.00E-08
1.00E+00						
5.00E-08	1.00E+00	5.00E-09	1.00E+00	5.00E-08	1.00E+00	5.00E-08
1.00E+00						
7.00E-08	1.00E+00	7.00E-09	1.00E+00	7.00E-08	1.00E+00	7.00E-08
1.00E+00						
1.00E-07	1.00E+00	1.00E-08	1.00E+00	1.00E-07	1.00E+00	1.00E-07
1.00E+00						
2.00E-07	1.00E+00	2.00E-08	1.00E+00	2.00E-07	1.00E+00	2.00E-07
1.00E+00						
3.00E-07	1.00E+00	3.00E-08	1.00E+00	3.00E-07	1.00E+00	3.00E-07
1.00E+00						
5.00E-07	1.00E+00	5.00E-08	1.00E+00	5.00E-07	1.00E+00	5.00E-07
1.00E+00						
7.00E-07	1.00E+00	7.00E-08	1.00E+00	7.00E-07	1.00E+00	7.00E-07
1.00E+00						
1.00E-06	1.00E+00	1.00E-07	1.00E+00	1.00E-06	1.00E+00	1.00E-06
1.00E+00						
2.00E-06	1.00E+00	2.00E-07	1.00E+00	2.00E-06	1.00E+00	2.00E-06
1.00E+00						
3.00E-06	1.00E+00	3.00E-07	1.00E+00	3.00E-06	1.00E+00	3.00E-06
1.00E+00						
5.00E-06	1.00E+00	5.00E-07	1.00E+00	5.00E-06	1.00E+00	5.00E-06
1.00E+00						
7.00E-06	1.00E+00	7.00E-07	1.00E+00	7.00E-06	1.00E+00	7.00E-06
1.00E+00						
1.00E-05	1.00E+00	1.00E-06	1.00E+00	1.00E-05	1.00E+00	1.00E-05
1.00E+00						
2.00E-05	1.00E+00	2.00E-06	1.00E+00	2.00E-05	1.00E+00	2.00E-05
1.00E+00						
3.00E-05	1.00E+00	3.00E-06	1.00E+00	3.00E-05	1.00E+00	3.00E-05
1.00E+00						
5.00E-05	1.00E+00	5.00E-06	1.00E+00	5.00E-05	1.00E+00	5.00E-05
1.00E+00						
7.00E-05	1.00E+00	7.00E-06	1.00E+00	7.00E-05	1.00E+00	7.00E-05
1.00E+00						

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[illegible]

[illegible]

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last revised 1/8/04, K. McFadden  
 "ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
 "EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation  
 "CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 4 OF 6:  
 BP

OVERALL RESULTS OBTAINED BY COMBINING 2 EMERGENCY RESPONSE COHORTS FROM "EARLY" WITH THE WEIGHTING FRACTIONS BELOW APPLIED TO THEM:

FRACTION OF THE PEOPLE

-----  
 COHORT 1 = 95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION  
 0.950

COHORT 2 = NO EVACUATION  
 0.050

AND THEN MERGING THE 2 RESULTS ABOVE WITH THE SINGLE SET OF RESULTS FROM "CHRONC" DESCRIBED BELOW:

COHORT 3 = SNC AP1000 CHRONC FILE

RESULTS WHICH ARE PRODUCED ONLY BY "EARLY" OR ONLY BY "CHRONC" ARE PRESENTED IN LATER SECTIONS.

06-AUG-07 19:50:04 PAGE 19				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL			0-80.5 km	1.0000	1.30E+03	5.50E+02	3.54E+03
5.32E+03	8.56E+03	9.92E+03	1.62E+04	1.94E-05	20		
CAN FAT/TOTAL			0-16.1 km	1.0000	7.66E+01	5.68E+01	1.38E+02
1.85E+02	4.73E+02	5.90E+02	1.09E+03	1.30E-05	32		
ERL FAT/TOTAL			0-80.5 km	0.0618	1.62E-02	0.00E+00	0.00E+00
9.50E-03	5.99E-01	1.01E+00	2.35E+00	1.29E-04	77		
ERL FAT/TOTAL			0-3.2 km	0.0493	1.56E-02	0.00E+00	0.00E+00
0.00E+00	5.99E-01	1.01E+00	2.35E+00	1.29E-04	77		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL			0-1.6 km	0.7490	2.43E-03	1.30E-03	5.05E-03
6.55E-03	1.35E-02	1.57E-02	3.81E-02	1.57E-03	77		
ERL FAT/TOTAL			1.6-3.2 km	0.2714	1.44E-04	0.00E+00	6.03E-04
1.03E-03	1.40E-03	1.60E-03	2.13E-03	1.57E-03	77		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF			0-16.1 km	1.0000	1.20E+03	8.60E+02	2.12E+03
2.89E+03	7.47E+03	9.67E+03	1.82E+04	1.30E-05	32		
L-EDEWBODY TOT LIF			0-80.5 km	1.0000	1.96E+04	8.35E+03	5.59E+04
7.96E+04	1.15E+05	1.26E+05	2.47E+05	1.94E-05	21		

POPULATION WEIGHTED RISK

ERL FAT/TOTAL			0-80.5 km	0.0618	1.28E-08	0.00E+00	0.00E+00
7.46E-09	4.28E-07	7.86E-07	1.85E-06	1.29E-04	77		
ERL FAT/TOTAL			0-3.2 km	0.0493	1.24E-04	0.00E+00	0.00E+00
0.00E+00	4.27E-03	7.86E-03	1.86E-02	1.29E-04	77		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0106	2.97E-06	0.00E+00	0.00E+00
0.00E+00	2.16E-05	1.56E-04	2.19E-03	9.85E-05	77		
CAN FAT/TOTAL			0-80.5 km	1.0000	9.15E-04	3.52E-04	2.67E-03
3.83E-03	6.42E-03	7.15E-03	1.04E-02	1.94E-05	20		
CAN FAT/TOTAL			0-16.1 km	0.9779	2.80E-03	1.41E-03	7.10E-03
1.05E-02	1.83E-02	2.20E-02	3.54E-02	9.42E-04	75		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	1.75E+01	1.11E+01	4.00E+01
5.09E+01	5.90E+01	6.29E+01	8.90E+01	1.57E-03	77		

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"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation

SOURCE TERM 4 OF 6:  
BP

RESULTS FOR A SINGLE EMERGENCY RESPONSE COHORT WITHOUT ANY WEIGHTING FRACTIONS  
BEING APPLIED

COHORT 1 = 95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION

06-AUG-07 19:50:04 PAGE 20				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL			0-80.5 km	1.0000	5.79E+02	1.97E+02	1.41E+03
2.64E+03	5.67E+03	6.87E+03	9.96E+03	1.08E-03	18		
CAN FAT/TOTAL			0-16.1 km	0.8159	7.17E+00	8.77E-01	2.32E+01
3.94E+01	7.09E+01	9.41E+01	1.50E+02	9.42E-04	75		
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL			0-1.6 km	0.1884	8.62E-04	0.00E+00	2.02E-03
2.77E-03	1.35E-02	1.57E-02	3.58E-02	1.57E-03	77		
ERL FAT/TOTAL			1.6-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF			0-16.1 km	0.8159	6.39E+01	1.16E+01	1.96E+02
3.18E+02	6.36E+02	7.61E+02	1.25E+03	9.42E-04	75		
L-EDEWBODY TOT LIF			0-80.5 km	1.0000	7.67E+03	2.83E+03	2.17E+04
3.40E+04	6.46E+04	7.57E+04	9.81E+04	1.08E-03	18		
POPULATION WEIGHTED RISK							
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
CAN FAT/TOTAL			0-80.5 km	1.0000	4.55E-04	1.55E-04	1.08E-03
2.13E-03	4.60E-03	5.62E-03	7.83E-03	1.08E-03	18		
CAN FAT/TOTAL			0-16.1 km	0.8159	1.51E-03	1.84E-04	4.76E-03
8.05E-03	1.64E-02	2.08E-02	3.16E-02	9.42E-04	75		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)



L-EDEWBODY			0-1.6 km	1.0000	1.41E+01	9.79E+00	3.58E+01
4.61E+01	5.74E+01	6.14E+01	6.89E+01	1.57E-03	77		

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"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation

SOURCE TERM 4 OF 6:  
BP

RESULTS FOR A SINGLE EMERGENCY RESPONSE COHORT WITHOUT ANY WEIGHTING FRACTIONS  
BEING APPLIED

COHORT 2 = NO EVACUATION

06-AUG-07 19:50:04 PAGE 21				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL			0-80.5 km	1.0000	6.29E+02	2.33E+02	1.50E+03
2.67E+03	5.84E+03	7.14E+03	1.02E+04	9.42E-04	75		
CAN FAT/TOTAL			0-16.1 km	0.9779	5.72E+01	2.18E+01	1.51E+02
2.30E+02	3.85E+02	4.49E+02	5.89E+02	9.42E-04	65		
ERL FAT/TOTAL			0-80.5 km	0.0618	3.25E-01	0.00E+00	0.00E+00
1.89E-01	1.20E+01	2.01E+01	4.70E+01	1.29E-04	77		
ERL FAT/TOTAL			0-3.2 km	0.0493	3.12E-01	0.00E+00	0.00E+00
0.00E+00	1.20E+01	2.01E+01	4.70E+01	1.29E-04	77		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL			0-1.6 km	0.7490	3.22E-02	3.03E-02	6.99E-02
7.43E-02	8.56E-02	9.10E-02	1.04E-01	2.57E-04	21		
ERL FAT/TOTAL			1.6-3.2 km	0.2714	2.88E-03	0.00E+00	1.30E-02
2.04E-02	2.44E-02	2.64E-02	4.25E-02	1.57E-03	77		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF			0-16.1 km	0.9779	5.09E+02	2.19E+02	1.34E+03
2.08E+03	3.29E+03	3.72E+03	6.00E+03	1.19E-04	77		
L-EDEWBODY TOT LIF			0-80.5 km	1.0000	8.11E+03	3.16E+03	2.20E+04
3.50E+04	6.97E+04	7.80E+04	9.96E+04	1.08E-03	18		
POPULATION WEIGHTED RISK							
ERL FAT/TOTAL			0-80.5 km	0.0618	2.55E-07	0.00E+00	0.00E+00
1.31E-07	8.63E-06	1.50E-05	3.69E-05	1.29E-04	77		
ERL FAT/TOTAL			0-3.2 km	0.0493	2.48E-03	0.00E+00	0.00E+00
0.00E+00	8.61E-02	1.50E-01	3.73E-01	1.29E-04	77		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0106	5.94E-05	0.00E+00	0.00E+00
0.00E+00	5.34E-04	2.59E-03	4.39E-02	9.85E-05	77		
CAN FAT/TOTAL			0-80.5 km	1.0000	4.95E-04	1.80E-04	1.13E-03
2.18E-03	4.61E-03	5.63E-03	8.05E-03	9.42E-04	75		
CAN FAT/TOTAL			0-16.1 km	0.9779	1.21E-02	4.55E-03	3.32E-02
4.91E-02	8.35E-02	9.71E-02	1.24E-01	9.42E-04	65		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	8.02E+01	4.99E+01	2.00E+02
2.72E+02	3.63E+02	4.00E+02	4.69E+02	1.57E-03	77		

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 "EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation  
 "CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 4 OF 6:  
 BP

RESULTS FROM THE "CHRONC" MODULE ALONE

COHORT 3 = SNC AP1000 CHRONC FILE

06-AUG-07 19:50:04 PAGE 22				PROB				
QUANTILES				PEAK	PEAK	PEAK		
				NON-ZERO	MEAN	50TH	90TH	
95TH	99TH	99.5TH	CONS	PROB	TRIAL			
HEALTH EFFECTS CASES								
CAN FAT/TOTAL				0-80.5 km	1.0000	7.15E+02	3.25E+02	1.93E+03
2.71E+03	4.39E+03	5.15E+03	9.51E+03	1.94E-05	21			
CAN FAT/TOTAL				0-16.1 km	1.0000	6.69E+01	4.52E+01	1.25E+02
1.76E+02	4.71E+02	5.90E+02	1.09E+03	1.30E-05	32			
POPULATION DOSE (Sv)								
L-EDEWBODY TOT LIF				0-16.1 km	1.0000	1.12E+03	7.61E+02	2.03E+03
2.85E+03	7.43E+03	9.59E+03	1.82E+04	1.30E-05	32			
L-EDEWBODY TOT LIF				0-80.5 km	1.0000	1.19E+04	5.44E+03	3.22E+04
4.50E+04	7.46E+04	8.50E+04	1.59E+05	1.94E-05	21			
POPULATION WEIGHTED RISK								
CAN FAT/TOTAL				0-80.5 km	1.0000	4.58E-04	1.81E-04	1.26E-03
1.91E-03	3.02E-03	3.20E-03	5.06E-03	1.94E-05	21			
CAN FAT/TOTAL				0-16.1 km	0.9191	7.56E-04	6.32E-04	1.61E-03
2.02E-03	2.23E-03	2.32E-03	3.03E-03	8.06E-06	24			
PEAK DOSE FOUND ON SPATIAL GRID (Sv)								
L-EDEWBODY				0-1.6 km	0.4224	3.29E-02	0.00E+00	1.01E-01
1.07E-01	1.23E-01	1.31E-01	1.78E-01	1.43E-04	32			
L-EDEWBODY POP. DOSE (Sv) 0-16.1 km								
TOTAL LONG-TERM PATHWAYS DOSE					1.0000	1.12E+03	7.61E+02	2.03E+03
2.85E+03	7.43E+03	9.59E+03	1.82E+04	1.30E-05	32			
LONG-TERM DIRECT EXPOSURE PATHWAYS					0.9191	5.97E+01	5.13E+01	1.18E+02
1.35E+02	1.83E+02	2.01E+02	2.39E+02	8.06E-06	24			
TOTAL INGESTION PATHWAYS DOSE					1.0000	1.04E+03	6.81E+02	2.01E+03
2.83E+03	7.14E+03	9.44E+03	1.82E+04	1.30E-05	32			
LONG-TERM GROUNDSHINE DOSE					0.9191	5.93E+01	5.10E+01	1.18E+02
1.34E+02	1.83E+02	2.01E+02	2.39E+02	8.06E-06	24			
LONG-TERM RESUSPENSION DOSE					0.9191	3.89E-01	2.84E-01	9.55E-01
1.17E+00	1.78E+00	2.02E+00	2.50E+00	8.06E-06	95			
WATER INGESTION DOSE					1.0000	1.04E+03	6.77E+02	2.01E+03
2.83E+03	7.14E+03	9.44E+03	1.82E+04	1.30E-05	32			
POP.-DEPENDENT DECONTAMINATION DOSE					0.9127	1.63E+01	1.02E+01	3.83E+01
5.17E+01	8.18E+01	9.13E+01	1.22E+02	8.06E-06	24			
FARM-DEPENDENT DECONTAMINATION DOSE					0.6132	2.31E-01	5.68E-02	6.31E-01
1.21E+00	2.34E+00	2.68E+00	4.16E+00	2.05E-03	68			

INGESTION OF GRAINS	0.6732	7.13E-02	2.43E-02	1.91E-01
3.23E-01 7.27E-01 8.75E-01 1.19E+00	1.77E-03	18		
INGESTION OF LEAF VEG	0.6732	1.90E-01	9.43E-02	4.85E-01
7.02E-01 1.11E+00 1.17E+00 1.75E+00	3.36E-05	92		
INGESTION OF ROOT CROPS	0.6732	1.27E-01	5.83E-02	3.31E-01
5.38E-01 1.03E+00 1.22E+00 1.57E+00	1.77E-03	18		
INGESTION OF FRUITS	0.6732	3.69E-01	1.92E-01	8.72E-01
1.33E+00 2.59E+00 3.06E+00 4.22E+00	4.00E-04	68		
INGESTION OF LEGUMES	0.6732	2.10E-01	1.07E-01	5.29E-01
8.36E-01 1.21E+00 1.34E+00 2.10E+00	3.36E-05	92		
INGESTION OF BEEF	0.6732	4.49E-01	1.33E-01	1.21E+00
2.02E+00 3.07E+00 3.18E+00 4.46E+00	4.58E-06	115		
INGESTION OF MILK	0.6732	2.97E-01	8.67E-02	7.79E-01
1.19E+00 2.05E+00 2.12E+00 2.95E+00	4.58E-06	115		
INGESTION OF POULTRY	0.6732	1.31E-01	4.24E-02	3.82E-01
5.70E-01 1.10E+00 1.37E+00 1.90E+00	1.77E-03	18		
INGESTION OF OTHER MEAT CROPS	0.6732	2.06E-02	6.41E-03	6.17E-02
8.45E-02 1.71E-01 2.19E-01 1.04E+00	2.85E-05	111		
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km				
TOTAL LONG-TERM PATHWAYS DOSE	1.0000	1.19E+04	5.44E+03	3.22E+04
4.50E+04 7.46E+04 8.50E+04 1.59E+05	1.94E-05	21		
LONG-TERM DIRECT EXPOSURE PATHWAYS	1.0000	9.70E+03	3.86E+03	2.84E+04
3.85E+04 6.37E+04 7.20E+04 1.07E+05	1.94E-05	21		
TOTAL INGESTION PATHWAYS DOSE	1.0000	1.40E+03	9.87E+02	2.72E+03
3.75E+03 8.16E+03 1.03E+04 1.86E+04	2.34E-05	31		
LONG-TERM GROUNDSHINE DOSE	1.0000	9.57E+03	3.78E+03	2.81E+04
3.82E+04 6.34E+04 7.19E+04 1.07E+05	1.94E-05	21		
LONG-TERM RESUSPENSION DOSE	1.0000	1.32E+02	5.31E+01	3.60E+02
5.35E+02 8.12E+02 9.13E+02 1.38E+03	1.01E-05	25		
WATER INGESTION DOSE	1.0000	1.30E+03	8.46E+02	2.55E+03
3.61E+03 8.12E+03 1.03E+04 1.86E+04	2.34E-05	31		

06-AUG-07 19:50:04 PAGE 23  
QUANTILES

				PROB	PEAK	PEAK	PEAK	
				NON-ZERO	MEAN		50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL			
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km								
POP.-DEPENDENT DECONTAMINATION DOSE				0.9983	8.09E+02		1.91E+02	1.81E+03
3.36E+03	1.02E+04	1.39E+04	4.51E+04	1.94E-05	21			
FARM-DEPENDENT DECONTAMINATION DOSE				0.9949	3.73E+00		1.09E+00	1.03E+01
1.61E+01	2.79E+01	3.18E+01	5.33E+01	1.10E-04	119			
INGESTION OF GRAINS				0.9997	4.88E+00		1.72E+00	1.34E+01
1.81E+01	2.50E+01	2.79E+01	3.11E+01	1.08E-05	27			
INGESTION OF LEAF VEG				0.9997	9.26E+00		6.32E+00	2.15E+01
2.60E+01	3.34E+01	3.58E+01	5.41E+01	8.63E-05	63			
INGESTION OF ROOT CROPS				0.9997	7.43E+00		3.77E+00	2.02E+01
2.50E+01	3.40E+01	3.70E+01	4.23E+01	1.66E-03	130			
INGESTION OF FRUITS				0.9997	1.50E+01		1.11E+01	3.19E+01
3.91E+01	5.13E+01	5.24E+01	6.39E+01	1.08E-05	27			
INGESTION OF LEGUMES				0.9997	9.06E+00		6.82E+00	1.94E+01
2.37E+01	3.18E+01	3.36E+01	4.06E+01	4.77E-04	93			
INGESTION OF BEEF				0.9997	1.90E+01		1.33E+01	4.11E+01
5.36E+01	7.98E+01	9.08E+01	1.61E+02	1.10E-04	119			
INGESTION OF MILK				0.9997	1.49E+01		9.37E+00	3.53E+01
4.93E+01	7.60E+01	8.45E+01	1.31E+02	2.57E-04	101			
INGESTION OF POULTRY				0.9997	9.91E+00		4.44E+00	2.69E+01
3.14E+01	3.69E+01	3.95E+01	7.39E+01	8.63E-05	63			
INGESTION OF OTHER MEAT CROPS				0.9997	3.02E+00		1.05E+00	7.48E+00
1.30E+01	2.36E+01	2.73E+01	3.24E+01	1.66E-03	98			
ECONOMIC COST MEASURES (\$) 0-80.5 km								
TOTAL ECONOMIC COSTS				1.0000	3.43E+09		1.21E+09	8.88E+09
1.43E+10	3.08E+10	3.48E+10	6.64E+10	8.42E-05	52			
POP.-DEPENDENT COSTS				0.9983	3.14E+09		9.58E+08	8.46E+09
1.42E+10	2.99E+10	3.41E+10	6.57E+10	8.42E-05	52			
FARM-DEPENDENT COSTS				1.0000	2.88E+08		2.45E+08	4.98E+08
5.83E+08	7.47E+08	7.91E+08	9.43E+08	5.76E-04	1			
POP.-DEPENDENT DECONTAMINATION COST				0.9983	1.03E+09		3.02E+08	2.87E+09
4.78E+09	9.66E+09	1.04E+10	1.33E+10	2.24E-04	20			
FARM-DEPENDENT DECONTAMINATION COST				0.9949	3.11E+07		2.61E+07	5.87E+07
7.25E+07	1.06E+08	1.17E+08	1.97E+08	1.10E-04	119			
POP.-DEPENDENT INTERDICTION COST				0.9983	2.06E+09		6.19E+08	4.93E+09
9.56E+09	2.02E+10	2.38E+10	5.32E+10	1.94E-05	21			
FARM-DEPENDENT INTERDICTION COST				0.9997	4.22E+07		3.59E+07	7.16E+07
8.26E+07	1.06E+08	1.13E+08	1.42E+08	4.00E-04	139			
POP.-DEPENDENT CONDEMNATION COST				0.6197	4.69E+07		3.74E+06	6.86E+07
1.08E+08	3.90E+08	1.03E+09	1.75E+10	8.42E-05	89			
FARM-DEPENDENT CONDEMNATION COST				1.0000	1.02E+08		5.18E+07	2.73E+08
3.65E+08	5.20E+08	5.40E+08	7.48E+08	2.34E-05	20			
EMERGENCY PHASE COST				0.9329	3.56E+06		6.45E+05	4.49E+06
9.35E+06	4.87E+07	5.90E+07	1.55E+08	9.42E-04	75			
INTERMEDIATE PHASE COST				0.0000	0.00E+00		0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
MILK DISPOSAL COST				1.0000	1.71E+06		1.41E+06	2.87E+06
3.05E+06	3.21E+06	3.28E+06	3.80E+06	4.95E-05	3			
CROP DISPOSAL COST				1.0000	1.11E+08		1.04E+08	1.50E+08
1.76E+08	2.08E+08	2.14E+08	2.56E+08	4.06E-05	3			
AFFECTED AREA/POPULATION 0-80.5 km								

FARM DECONTAMINATION (HECTARES)	0.9949	2.55E+04	2.25E+04	4.49E+04
5.42E+04 7.47E+04 8.29E+04 1.19E+05	4.77E-04	93		
POP. DECONTAMINATION (INDIVIDUALS)	0.9983	1.01E+05	3.17E+04	2.78E+05
5.49E+05 7.53E+05 8.09E+05 9.03E+05	1.73E-03	1		
FARM INTERDICTION (HECTARES)	0.9997	7.61E+04	7.26E+04	1.12E+05
1.24E+05 1.58E+05 1.75E+05 2.19E+05	4.00E-04	139		
POP. INTERDICTION (INDIVIDUALS)	0.9983	1.01E+05	3.17E+04	2.78E+05
5.49E+05 7.53E+05 8.09E+05 9.03E+05	1.73E-03	1		
FARM CONDEMNATION (HECTARES)	1.0000	1.63E+04	6.62E+03	5.02E+04
6.38E+04 1.01E+05 1.05E+05 1.45E+05	1.81E-05	20		
POP. CONDEMNATION (INDIVIDUALS)	0.6197	3.87E+02	2.40E+01	4.11E+02
7.42E+02 3.16E+03 9.71E+03 1.55E+05	8.42E-05	89		
MILK DISPOSAL AREA (HECTARES)	1.0000	9.31E+04	8.30E+04	1.26E+05
1.45E+05 1.99E+05 2.03E+05 2.29E+05	3.83E-05	3		
CROP DISPOSAL AREA (HECTARES)	1.0000	9.24E+04	8.23E+04	1.25E+05
1.42E+05 1.94E+05 2.03E+05 2.29E+05	3.83E-05	3		

SOURCE TERM 4 OF 6:  
 BP

RESULT NAME = PEAK DOSE FOUND ON SPATIAL GRID (Sv)  
 L-EDEWBODY 0-1.6 km

PEOPLE FRACTION =		0.9500		0.0500		
OVERALL		EMER. RESP. # 1		EMER. RESP. # 2		CHRONC
RESULTS						
-----		-----		-----		-----
X	PROB>=X	X	PROB>=X	X	PROB>=X	X
PROB>=X						
1.00E-05	1.00E+00	1.00E-06	1.00E+00	1.00E-05	1.00E+00	1.00E-08
4.22E-01						
2.00E-05	1.00E+00	2.00E-06	1.00E+00	2.00E-05	1.00E+00	2.00E-08
4.22E-01						
3.00E-05	1.00E+00	3.00E-06	1.00E+00	3.00E-05	1.00E+00	3.00E-08
4.22E-01						
5.00E-05	1.00E+00	5.00E-06	1.00E+00	5.00E-05	1.00E+00	5.00E-08
4.22E-01						
7.00E-05	1.00E+00	7.00E-06	1.00E+00	7.00E-05	1.00E+00	7.00E-08
4.22E-01						
1.00E-04	1.00E+00	1.00E-05	1.00E+00	1.00E-04	1.00E+00	1.00E-07
4.22E-01						
2.00E-04	1.00E+00	2.00E-05	1.00E+00	2.00E-04	1.00E+00	2.00E-07
4.22E-01						
3.00E-04	1.00E+00	3.00E-05	1.00E+00	3.00E-04	1.00E+00	3.00E-07
4.22E-01						
5.00E-04	1.00E+00	5.00E-05	1.00E+00	5.00E-04	1.00E+00	5.00E-07
4.22E-01						
7.00E-04	1.00E+00	7.00E-05	1.00E+00	7.00E-04	1.00E+00	7.00E-07
4.22E-01						
1.00E-03	1.00E+00	1.00E-04	1.00E+00	1.00E-03	1.00E+00	1.00E-06
4.22E-01						
2.00E-03	1.00E+00	2.00E-04	1.00E+00	2.00E-03	1.00E+00	2.00E-06
4.22E-01						
3.00E-03	1.00E+00	3.00E-04	1.00E+00	3.00E-03	1.00E+00	3.00E-06
4.22E-01						
5.00E-03	1.00E+00	5.00E-04	1.00E+00	5.00E-03	1.00E+00	5.00E-06
4.22E-01						
7.00E-03	1.00E+00	7.00E-04	1.00E+00	7.00E-03	1.00E+00	7.00E-06
4.22E-01						
1.00E-02	1.00E+00	1.00E-03	1.00E+00	1.00E-02	1.00E+00	1.00E-05
4.22E-01						
2.00E-02	1.00E+00	2.00E-03	1.00E+00	2.00E-02	1.00E+00	2.00E-05
4.22E-01						
3.00E-02	1.00E+00	3.00E-03	1.00E+00	3.00E-02	1.00E+00	3.00E-05
4.22E-01						
5.00E-02	1.00E+00	5.00E-03	1.00E+00	5.00E-02	1.00E+00	5.00E-05
4.22E-01						
7.00E-02	1.00E+00	7.00E-03	1.00E+00	7.00E-02	1.00E+00	7.00E-05
4.22E-01						



[illegible]

[illegible]

[illegible]

[illegible]

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last  
revised 1/8/04, K. McFadden  
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation  
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 5 OF 6:  
CI

OVERALL RESULTS OBTAINED BY COMBINING 2 EMERGENCY RESPONSE COHORTS FROM "EARLY"  
WITH THE WEIGHTING FRACTIONS BELOW APPLIED TO THEM:

FRACTION OF THE PEOPLE

-----  
COHORT 1 = 95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION  
0.950

COHORT 2 = NO EVACUATION  
0.050

AND THEN MERGING THE 2 RESULTS ABOVE WITH THE SINGLE SET OF RESULTS FROM  
"CHRONC" DESCRIBED BELOW:

COHORT 3 = SNC AP1000 CHRONC FILE

RESULTS WHICH ARE PRODUCED ONLY BY "EARLY" OR ONLY BY "CHRONC" ARE PRESENTED IN  
LATER SECTIONS.

06-AUG-07 19:50:04 PAGE 25				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL				0-80.5 km	1.0000	5.05E+02	2.03E+02
2.19E+03	4.54E+03	5.46E+03	8.26E+03	7.99E-04	68		1.14E+03
CAN FAT/TOTAL				0-16.1 km	1.0000	1.76E+01	1.17E+01
5.27E+01	8.98E+01	1.04E+02	1.93E+02	2.34E-05	31		3.84E+01
ERL FAT/TOTAL				0-80.5 km	0.0241	5.12E-03	0.00E+00
0.00E+00	1.67E-02	1.36E-01	1.71E+00	1.31E-03	65		0.00E+00
ERL FAT/TOTAL				0-3.2 km	0.0237	5.12E-03	0.00E+00
0.00E+00	1.67E-02	1.36E-01	1.71E+00	1.31E-03	65		0.00E+00
ERL FAT/TOTAL				0-1.6 km	0.0000	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		0.00E+00
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL				0-1.6 km	0.6013	1.09E-03	9.21E-05
3.55E-03	NOT-FOUND	NOT-FOUND	4.54E-03	1.95E-02	65		2.95E-03
ERL FAT/TOTAL				1.6-3.2 km	0.1295	3.64E-05	0.00E+00
1.11E-04	NOT-FOUND	NOT-FOUND	1.55E-03	1.95E-02	65		4.79E-06
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF				0-16.1 km	1.0000	2.63E+02	1.78E+02
7.51E+02	1.29E+03	1.56E+03	3.22E+03	2.34E-05	31		5.47E+02
L-EDEWBODY TOT LIF				0-80.5 km	1.0000	7.61E+03	3.13E+03
3.36E+04	7.09E+04	7.83E+04	1.12E+05	8.42E-05	29		1.78E+04

POPULATION WEIGHTED RISK

ERL FAT/TOTAL			0-80.5 km	0.0241	4.03E-09	0.00E+00	0.00E+00
0.00E+00	1.55E-08	1.23E-07	1.34E-06	1.31E-03	65		
ERL FAT/TOTAL			0-3.2 km	0.0237	4.06E-05	0.00E+00	0.00E+00
0.00E+00	1.55E-04	1.23E-03	1.36E-02	1.31E-03	65		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0004	7.15E-09	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	2.94E-05	9.85E-05	77		
CAN FAT/TOTAL			0-80.5 km	1.0000	3.68E-04	1.34E-04	8.78E-04
1.62E-03	3.41E-03	4.09E-03	6.36E-03	7.99E-04	68		
CAN FAT/TOTAL			0-16.1 km	0.9606	1.37E-03	6.99E-04	3.48E-03
4.86E-03	1.01E-02	1.09E-02	1.65E-02	1.43E-04	136		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	5.81E+00	3.87E+00	1.22E+01
1.52E+01	NOT-FOUND	NOT-FOUND	3.08E+01	1.95E-02	65		

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last  
revised 1/8/04, K. McFadden  
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation

SOURCE TERM 5 OF 6:  
CI

RESULTS FOR A SINGLE EMERGENCY RESPONSE COHORT WITHOUT ANY WEIGHTING FRACTIONS  
BEING APPLIED

COHORT 1 = 95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION

06-AUG-07 19:50:04 PAGE 26				PROB				
QUANTILES				PEAK	PEAK	PEAK		
				NON-ZERO	MEAN	50TH	90TH	
95TH	99TH	99.5TH	CONS	PROB	TRIAL			
HEALTH EFFECTS CASES								
CAN FAT/TOTAL				0-80.5 km	1.0000	2.86E+02	9.75E+01	6.35E+02
1.13E+03	3.13E+03	4.12E+03	7.21E+03	7.99E-04	68			
CAN FAT/TOTAL				0-16.1 km	0.8087	2.27E+00	2.31E-01	6.94E+00
1.17E+01	3.20E+01	3.60E+01	5.46E+01	1.43E-04	136			
ERL FAT/TOTAL				0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
AVERAGE INDIVIDUAL RISK								
ERL FAT/TOTAL				0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				1.6-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
POPULATION DOSE (Sv)								
L-EDEWBODY TOT LIF				0-16.1 km	0.8087	2.32E+01	3.67E+00	7.08E+01
1.10E+02	2.39E+02	2.79E+02	4.55E+02	1.43E-04	136			
L-EDEWBODY TOT LIF				0-80.5 km	1.0000	3.98E+03	1.45E+03	8.90E+03
1.70E+04	4.11E+04	5.20E+04	8.11E+04	7.99E-04	68			
POPULATION WEIGHTED RISK								
ERL FAT/TOTAL				0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
CAN FAT/TOTAL				0-80.5 km	1.0000	2.25E-04	7.61E-05	4.76E-04
8.95E-04	2.29E-03	3.05E-03	5.67E-03	7.99E-04	68			
CAN FAT/TOTAL				0-16.1 km	0.8087	4.79E-04	4.70E-05	1.37E-03
2.46E-03	6.18E-03	7.79E-03	1.15E-02	1.43E-04	136			

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	3.67E+00	2.34E+00	7.84E+00
1.15E+01	NOT-FOUND	NOT-FOUND	1.98E+01	1.95E-02	65		



DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last revised 1/8/04, K. McFadden  
 "ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
 "EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation

SOURCE TERM 5 OF 6:  
 CI

RESULTS FOR A SINGLE EMERGENCY RESPONSE COHORT WITHOUT ANY WEIGHTING FRACTIONS BEING APPLIED

COHORT 2 = NO EVACUATION

06-AUG-07 19:50:04 PAGE 27				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL			0-80.5 km	1.0000	3.25E+02	1.26E+02	7.21E+02
1.25E+03	3.16E+03	4.33E+03	7.42E+03	7.99E-04	68		
CAN FAT/TOTAL			0-16.1 km	0.9606	4.17E+01	1.45E+01	1.16E+02
1.70E+02	2.78E+02	3.15E+02	5.09E+02	1.19E-04	77		
ERL FAT/TOTAL			0-80.5 km	0.0241	1.02E-01	0.00E+00	0.00E+00
0.00E+00	3.42E-01	3.13E+00	3.42E+01	1.31E-03	65		
ERL FAT/TOTAL			0-3.2 km	0.0237	1.02E-01	0.00E+00	0.00E+00
0.00E+00	3.42E-01	3.13E+00	3.42E+01	1.31E-03	65		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL			0-1.6 km	0.6013	2.19E-02	1.74E-03	6.23E-02
7.69E-02	NOT-FOUND	NOT-FOUND	9.08E-02	3.06E-02	65		
ERL FAT/TOTAL			1.6-3.2 km	0.1295	7.28E-04	0.00E+00	9.70E-05
2.12E-03	NOT-FOUND	NOT-FOUND	3.10E-02	1.95E-02	65		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF			0-16.1 km	0.9606	3.66E+02	1.48E+02	1.02E+03
1.39E+03	2.33E+03	2.66E+03	4.52E+03	1.66E-03	65		
L-EDEWBODY TOT LIF			0-80.5 km	1.0000	4.32E+03	1.69E+03	9.30E+03
1.88E+04	4.11E+04	5.20E+04	8.28E+04	7.99E-04	68		
POPULATION WEIGHTED RISK							
ERL FAT/TOTAL			0-80.5 km	0.0241	8.05E-08	0.00E+00	0.00E+00
0.00E+00	2.62E-07	2.25E-06	2.69E-05	1.31E-03	65		
ERL FAT/TOTAL			0-3.2 km	0.0237	8.13E-04	0.00E+00	0.00E+00
0.00E+00	2.62E-03	2.25E-02	2.71E-01	1.31E-03	65		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0004	1.43E-07	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	5.88E-04	9.85E-05	77		
CAN FAT/TOTAL			0-80.5 km	1.0000	2.56E-04	9.90E-05	5.65E-04
9.69E-04	2.42E-03	3.27E-03	5.83E-03	7.99E-04	68		
CAN FAT/TOTAL			0-16.1 km	0.9606	8.80E-03	3.05E-03	2.52E-02
3.61E-02	5.93E-02	6.86E-02	1.08E-01	1.19E-04	77		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	4.41E+01	2.92E+01	8.98E+01
1.19E+02	NOT-FOUND	NOT-FOUND	2.40E+02	1.95E-02	65		

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last revised 1/8/04, K. McFadden  
 "ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
 "EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation  
 "CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 5 OF 6:  
 CI

RESULTS FROM THE "CHRONC" MODULE ALONE

COHORT 3 = SNC AP1000 CHRONC FILE

06-AUG-07 19:50:04 PAGE 28				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL 0-80.5 km				1.0000	2.17E+02	8.18E+01	5.23E+02
9.46E+02	2.02E+03	2.15E+03	3.16E+03	8.42E-05	29		
CAN FAT/TOTAL 0-16.1 km				1.0000	1.34E+01	9.26E+00	2.67E+01
3.79E+01	7.61E+01	1.00E+02	1.92E+02	2.34E-05	31		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF 0-16.1 km				1.0000	2.23E+02	1.49E+02	4.45E+02
6.43E+02	1.23E+03	1.51E+03	3.21E+03	2.34E-05	31		
L-EDEWBODY TOT LIF 0-80.5 km				1.0000	3.62E+03	1.38E+03	8.51E+03
1.55E+04	3.13E+04	3.36E+04	5.26E+04	8.42E-05	29		
POPULATION WEIGHTED RISK							
CAN FAT/TOTAL 0-80.5 km				1.0000	1.42E-04	4.65E-05	3.62E-04
6.75E-04	1.15E-03	1.28E-03	2.03E-03	1.81E-05	23		
CAN FAT/TOTAL 0-16.1 km				0.9329	4.75E-04	3.52E-04	1.04E-03
1.17E-03	1.51E-03	1.68E-03	2.70E-03	5.50E-06	25		
PEAK DOSE FOUND ON SPATIAL GRID (Sv)							
L-EDEWBODY 0-1.6 km				0.9297	1.19E-01	1.04E-01	1.24E-01
1.33E-01	1.59E-01	1.71E-01	1.88E-01	2.17E-03	57		
L-EDEWBODY POP. DOSE (Sv) 0-16.1 km							
TOTAL LONG-TERM PATHWAYS DOSE				1.0000	2.23E+02	1.49E+02	4.45E+02
6.43E+02	1.23E+03	1.51E+03	3.21E+03	2.34E-05	31		
LONG-TERM DIRECT EXPOSURE PATHWAYS				0.9329	3.75E+01	2.79E+01	8.60E+01
1.02E+02	1.16E+02	1.23E+02	2.14E+02	5.50E-06	25		
TOTAL INGESTION PATHWAYS DOSE				1.0000	1.70E+02	9.89E+01	3.74E+02
5.55E+02	1.15E+03	1.45E+03	3.21E+03	2.34E-05	31		
LONG-TERM GROUNDSHINE DOSE				0.9329	3.42E+01	2.50E+01	7.92E+01
9.99E+01	1.14E+02	1.21E+02	2.10E+02	5.50E-06	25		
LONG-TERM RESUSPENSION DOSE				0.9329	3.29E+00	2.72E+00	7.52E+00
8.67E+00	1.04E+01	1.07E+01	1.23E+01	1.98E-04	1		
WATER INGESTION DOSE				1.0000	1.65E+02	9.15E+01	3.70E+02
5.46E+02	1.15E+03	1.45E+03	3.21E+03	2.34E-05	31		
POP.-DEPENDENT DECONTAMINATION DOSE				0.8127	1.50E+01	3.97E+00	4.28E+01
6.36E+01	1.13E+02	1.30E+02	3.33E+02	5.50E-06	25		
FARM-DEPENDENT DECONTAMINATION DOSE				0.8323	1.48E-01	7.45E-02	3.13E-01
4.50E-01	1.94E+00	2.30E+00	3.41E+00	2.85E-04	70		

INGESTION OF GRAINS	0.9484	1.75E-01	1.16E-01	4.25E-01
6.08E-01 8.18E-01 8.91E-01 1.02E+00	1.97E-03	49		
INGESTION OF LEAF VEG	0.9484	1.37E+00	1.08E+00	2.81E+00
3.47E+00 5.34E+00 6.05E+00 1.00E+01	9.67E-06	78		
INGESTION OF ROOT CROPS	0.9484	8.21E-01	7.00E-01	1.70E+00
2.19E+00 3.27E+00 3.86E+00 6.08E+00	9.67E-06	78		
INGESTION OF FRUITS	0.9484	4.29E-01	3.23E-01	1.01E+00
1.20E+00 1.79E+00 2.02E+00 2.71E+00	9.67E-06	78		
INGESTION OF LEGUMES	0.9484	1.53E+00	1.13E+00	3.26E+00
4.00E+00 6.87E+00 8.00E+00 1.22E+01	9.67E-06	78		
INGESTION OF BEEF	0.9484	2.80E-01	1.48E-01	7.29E-01
9.09E-01 1.15E+00 1.24E+00 2.08E+00	2.85E-05	111		
INGESTION OF MILK	0.9484	5.19E-01	4.15E-01	1.05E+00
1.24E+00 1.81E+00 2.08E+00 3.64E+00	9.67E-06	78		
INGESTION OF POULTRY	0.9484	1.49E-01	2.22E-02	6.38E-01
9.05E-01 1.19E+00 1.30E+00 1.74E+00	4.85E-04	64		
INGESTION OF OTHER MEAT CROPS	0.9484	7.32E-02	3.56E-02	1.99E-01
3.01E-01 4.22E-01 4.88E-01 6.30E-01	9.70E-04	98		
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km				
TOTAL LONG-TERM PATHWAYS DOSE	1.0000	3.62E+03	1.38E+03	8.51E+03
1.55E+04 3.13E+04 3.36E+04 5.26E+04	8.42E-05	29		
LONG-TERM DIRECT EXPOSURE PATHWAYS	1.0000	3.01E+03	9.80E+02	7.61E+03
1.36E+04 2.84E+04 3.09E+04 4.31E+04	1.81E-05	23		
TOTAL INGESTION PATHWAYS DOSE	1.0000	3.56E+02	2.54E+02	7.16E+02
9.32E+02 1.76E+03 2.12E+03 3.55E+03	2.34E-05	31		
LONG-TERM GROUNDSHINE DOSE	1.0000	2.69E+03	8.75E+02	6.90E+03
1.23E+04 2.58E+04 3.03E+04 3.86E+04	1.81E-05	23		
LONG-TERM RESUSPENSION DOSE	1.0000	3.21E+02	1.06E+02	8.31E+02
1.43E+03 3.02E+03 3.28E+03 4.65E+03	2.40E-04	15		
WATER INGESTION DOSE	1.0000	2.16E+02	1.20E+02	5.12E+02
6.90E+02 1.33E+03 1.73E+03 3.28E+03	2.34E-05	31		

				PROB			
				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
L-EDEWBODY POP. DOSE (Sv)				0-80.5 km			
POP.-DEPENDENT DECONTAMINATION DOSE				0.8789	2.50E+02	2.31E+01	4.26E+02
8.90E+02	4.93E+03	6.80E+03	1.84E+04	8.42E-05	29		
FARM-DEPENDENT DECONTAMINATION DOSE				0.9447	1.62E+00	3.43E-01	4.90E+00
7.37E+00	1.42E+01	1.77E+01	5.81E+01	2.85E-05	99		
INGESTION OF GRAINS				1.0000	6.06E+00	4.52E+00	1.22E+01
1.45E+01	2.08E+01	2.25E+01	3.57E+01	3.45E-05	132		
INGESTION OF LEAF VEG				1.0000	2.49E+01	2.04E+01	4.94E+01
6.20E+01	9.35E+01	1.05E+02	2.15E+02	2.85E-05	99		
INGESTION OF ROOT CROPS				1.0000	1.66E+01	1.27E+01	3.19E+01
3.88E+01	5.86E+01	6.85E+01	1.30E+02	2.85E-05	99		
INGESTION OF FRUITS				1.0000	1.31E+01	1.04E+01	2.71E+01
3.19E+01	4.07E+01	4.52E+01	7.53E+01	3.45E-05	132		
INGESTION OF LEGUMES				1.0000	2.62E+01	1.95E+01	5.49E+01
7.32E+01	1.10E+02	1.25E+02	2.61E+02	2.85E-05	99		
INGESTION OF BEEF				1.0000	1.94E+01	1.31E+01	4.03E+01
5.31E+01	7.69E+01	8.37E+01	1.39E+02	1.43E-04	136		
INGESTION OF MILK				1.0000	1.98E+01	1.36E+01	4.00E+01
5.22E+01	9.06E+01	1.05E+02	1.91E+02	2.85E-05	99		
INGESTION OF POULTRY				1.0000	8.58E+00	7.19E+00	1.68E+01
2.08E+01	2.70E+01	3.02E+01	4.57E+01	1.14E-04	59		
INGESTION OF OTHER MEAT CROPS				1.0000	4.74E+00	3.18E+00	1.04E+01
1.29E+01	2.05E+01	2.24E+01	2.61E+01	1.51E-03	81		
ECONOMIC COST MEASURES (\$)				0-80.5 km			
TOTAL ECONOMIC COSTS				1.0000	1.02E+09	2.29E+08	2.17E+09
4.20E+09	1.88E+10	2.08E+10	2.69E+10	8.42E-05	29		
POP.-DEPENDENT COSTS				0.8805	8.78E+08	7.81E+07	1.98E+09
4.10E+09	1.87E+10	2.07E+10	2.65E+10	8.42E-05	29		
FARM-DEPENDENT COSTS				1.0000	1.42E+08	1.13E+08	2.63E+08
3.23E+08	4.70E+08	5.09E+08	6.38E+08	2.34E-05	19		
POP.-DEPENDENT DECONTAMINATION COST				0.8789	2.88E+08	2.51E+07	5.89E+08
1.20E+09	5.21E+09	7.18E+09	1.07E+10	1.94E-05	19		
FARM-DEPENDENT DECONTAMINATION COST				0.9447	1.13E+07	3.74E+06	3.38E+07
4.87E+07	7.18E+07	7.69E+07	1.14E+08	1.19E-04	119		
POP.-DEPENDENT INTERDICTION COST				0.8789	5.89E+08	5.61E+07	1.31E+09
2.80E+09	1.01E+10	1.08E+10	1.64E+10	7.86E-05	29		
FARM-DEPENDENT INTERDICTION COST				0.9999	2.79E+07	2.45E+07	5.23E+07
6.02E+07	7.33E+07	7.60E+07	9.26E+07	1.19E-04	2		
POP.-DEPENDENT CONDEMNATION COST				0.0744	5.43E+05	0.00E+00	0.00E+00
4.04E+06	1.19E+07	1.70E+07	5.02E+07	9.49E-04	25		
FARM-DEPENDENT CONDEMNATION COST				0.9505	2.50E+07	4.94E+06	6.61E+07
1.25E+08	2.27E+08	2.52E+08	4.01E+08	2.34E-05	19		
EMERGENCY PHASE COST				0.8026	1.32E+06	1.82E+05	2.58E+06
3.73E+06	3.13E+07	3.33E+07	4.68E+07	1.19E-04	77		
INTERMEDIATE PHASE COST				0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
MILK DISPOSAL COST				1.0000	1.20E+06	1.05E+06	2.33E+06
2.83E+06	3.10E+06	NOT-FOUND	3.13E+06	5.73E-03	9		
CROP DISPOSAL COST				1.0000	7.64E+07	6.90E+07	1.14E+08
1.23E+08	1.46E+08	NOT-FOUND	1.54E+08	6.04E-03	9		
AFFECTED AREA/POPULATION				0-80.5 km			

FARM DECONTAMINATION (HECTARES)	0.9447	1.00E+04	3.34E+03	2.92E+04
4.35E+04 6.72E+04 7.52E+04 9.37E+04	1.08E-03	44		
POP. DECONTAMINATION (INDIVIDUALS)	0.8789	3.55E+04	3.09E+03	8.59E+04
1.79E+05 6.21E+05 7.35E+05 9.03E+05	1.64E-03	19		
FARM INTERDICTION (HECTARES)	0.9999	5.77E+04	5.22E+04	1.02E+05
1.10E+05 1.30E+05 1.40E+05 1.45E+05	3.68E-03	4		
POP. INTERDICTION (INDIVIDUALS)	0.8789	3.55E+04	3.09E+03	8.59E+04
1.79E+05 6.21E+05 7.35E+05 9.03E+05	1.64E-03	19		
FARM CONDEMNATION (HECTARES)	0.9505	3.57E+03	7.11E+02	7.94E+03
2.25E+04 3.80E+04 4.46E+04 6.11E+04	2.11E-05	19		
POP. CONDEMNATION (INDIVIDUALS)	0.0744	4.11E+00	0.00E+00	0.00E+00
2.53E+01 8.37E+01 1.27E+02 3.28E+02	9.49E-04	25		
MILK DISPOSAL AREA (HECTARES)	1.0000	6.50E+04	6.31E+04	1.13E+05
1.32E+05 NOT-FOUND NOT-FOUND 1.45E+05	3.25E-02	1		
CROP DISPOSAL AREA (HECTARES)	1.0000	6.12E+04	5.50E+04	1.08E+05
1.26E+05 NOT-FOUND NOT-FOUND 1.45E+05	2.67E-02	1		

SOURCE TERM 5 OF 6:  
 CI

RESULT NAME = PEAK DOSE FOUND ON SPATIAL GRID (Sv)  
 L-EDEWBODY 0-1.6 km

PEOPLE FRACTION =		0.9500		0.0500		
OVERALL		EMER. RESP. # 1		EMER. RESP. # 2		CHRONC
RESULTS						
-----		-----		-----		-----
X	PROB>=X	X	PROB>=X	X	PROB>=X	X
PROB>=X						
1.00E-06	1.00E+00	1.00E-06	1.00E+00	1.00E-05	1.00E+00	1.00E-07
9.30E-01						
2.00E-06	1.00E+00	2.00E-06	1.00E+00	2.00E-05	1.00E+00	2.00E-07
9.30E-01						
3.00E-06	1.00E+00	3.00E-06	1.00E+00	3.00E-05	1.00E+00	3.00E-07
9.30E-01						
5.00E-06	1.00E+00	5.00E-06	1.00E+00	5.00E-05	1.00E+00	5.00E-07
9.30E-01						
7.00E-06	1.00E+00	7.00E-06	1.00E+00	7.00E-05	1.00E+00	7.00E-07
9.29E-01						
1.00E-05	1.00E+00	1.00E-05	1.00E+00	1.00E-04	1.00E+00	1.00E-06
9.29E-01						
2.00E-05	1.00E+00	2.00E-05	1.00E+00	2.00E-04	1.00E+00	2.00E-06
9.28E-01						
3.00E-05	1.00E+00	3.00E-05	1.00E+00	3.00E-04	1.00E+00	3.00E-06
9.28E-01						
5.00E-05	1.00E+00	5.00E-05	1.00E+00	5.00E-04	1.00E+00	5.00E-06
9.28E-01						
7.00E-05	1.00E+00	7.00E-05	1.00E+00	7.00E-04	1.00E+00	7.00E-06
9.28E-01						
1.00E-04	1.00E+00	1.00E-04	1.00E+00	1.00E-03	1.00E+00	1.00E-05
9.28E-01						
2.00E-04	1.00E+00	2.00E-04	1.00E+00	2.00E-03	1.00E+00	2.00E-05
9.16E-01						
3.00E-04	1.00E+00	3.00E-04	1.00E+00	3.00E-03	1.00E+00	3.00E-05
9.16E-01						
5.00E-04	1.00E+00	5.00E-04	1.00E+00	5.00E-03	1.00E+00	5.00E-05
9.13E-01						
7.00E-04	1.00E+00	7.00E-04	1.00E+00	7.00E-03	1.00E+00	7.00E-05
9.13E-01						
1.00E-03	1.00E+00	1.00E-03	1.00E+00	1.00E-02	1.00E+00	1.00E-04
9.13E-01						
2.00E-03	1.00E+00	2.00E-03	1.00E+00	2.00E-02	1.00E+00	2.00E-04
9.13E-01						
3.00E-03	1.00E+00	3.00E-03	1.00E+00	3.00E-02	1.00E+00	3.00E-04
9.13E-01						
5.00E-03	1.00E+00	5.00E-03	1.00E+00	5.00E-02	1.00E+00	5.00E-04
9.13E-01						
7.00E-03	1.00E+00	7.00E-03	1.00E+00	7.00E-02	1.00E+00	7.00E-04
9.13E-01						

[illegible]



[illegible]

[illegible]

[illegible]

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last  
revised 1/8/04, K. McFadden  
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation  
"CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 6 OF 6:  
CFL

OVERALL RESULTS OBTAINED BY COMBINING 2 EMERGENCY RESPONSE COHORTS FROM "EARLY"  
WITH THE WEIGHTING FRACTIONS BELOW APPLIED TO THEM:

FRACTION OF THE PEOPLE

-----  
COHORT 1 = 95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION  
0.950

COHORT 2 = NO EVACUATION  
0.050

AND THEN MERGING THE 2 RESULTS ABOVE WITH THE SINGLE SET OF RESULTS FROM  
"CHRONC" DESCRIBED BELOW:

COHORT 3 = SNC AP1000 CHRONC FILE

RESULTS WHICH ARE PRODUCED ONLY BY "EARLY" OR ONLY BY "CHRONC" ARE PRESENTED IN  
LATER SECTIONS.

06-AUG-07 19:50:04 PAGE 31				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL			0-80.5 km	1.0000	1.05E+03	4.20E+02	2.68E+03
4.23E+03	7.72E+03	9.32E+03	1.53E+04	2.28E-04	137		
CAN FAT/TOTAL			0-16.1 km	1.0000	8.45E+00	4.81E+00	1.99E+01
2.81E+01	4.98E+01	5.89E+01	1.09E+02	1.08E-05	97		
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			1.6-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF			0-16.1 km	1.0000	1.41E+02	8.02E+01	3.26E+02
4.67E+02	8.52E+02	1.00E+03	1.82E+03	1.08E-05	97		
L-EDEWBODY TOT LIF			0-80.5 km	1.0000	1.59E+04	6.63E+03	4.13E+04
6.93E+04	1.05E+05	1.13E+05	1.57E+05	2.28E-04	137		

POPULATION WEIGHTED RISK

ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
CAN FAT/TOTAL			0-80.5 km	1.0000	7.44E-04	3.10E-04	1.83E-03
3.05E-03	6.18E-03	7.31E-03	1.20E-02	2.28E-04	137		
CAN FAT/TOTAL			0-16.1 km	0.9681	3.18E-04	2.83E-04	7.00E-04
7.75E-04	9.82E-04	1.05E-03	1.36E-03	2.28E-04	137		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY			0-1.6 km	1.0000	5.42E-02	5.16E-02	5.97E-02
6.36E-02	NOT-FOUND	NOT-FOUND	7.23E-02	1.73E-02	69		

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last  
revised 1/8/04, K. McFadden  
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation

SOURCE TERM 6 OF 6:  
CFL

RESULTS FOR A SINGLE EMERGENCY RESPONSE COHORT WITHOUT ANY WEIGHTING FRACTIONS  
BEING APPLIED

COHORT 1 = 95% EVACUATION WITHIN 10 MILES- 24-HOUR RELOCATION

06-AUG-07 19:50:04 PAGE 32				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
HEALTH EFFECTS CASES							
CAN FAT/TOTAL			0-80.5 km	1.0000	6.79E+02	2.54E+02	1.62E+03
3.01E+03	7.08E+03	7.86E+03	1.42E+04	2.28E-04	137		
CAN FAT/TOTAL			0-16.1 km	0.7982	9.91E-04	1.55E-04	2.99E-03
5.35E-03	9.68E-03	1.10E-02	1.95E-02	1.27E-04	2		
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
AVERAGE INDIVIDUAL RISK							
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			1.6-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
POPULATION DOSE (Sv)							
L-EDEWBODY TOT LIF			0-16.1 km	0.7982	1.65E-02	2.57E-03	4.98E-02
8.89E-02	1.36E-01	1.57E-01	3.24E-01	1.27E-04	2		
L-EDEWBODY TOT LIF			0-80.5 km	1.0000	9.81E+03	3.68E+03	2.38E+04
4.68E+04	8.35E+04	9.48E+04	1.39E+05	2.28E-04	137		
POPULATION WEIGHTED RISK							
ERL FAT/TOTAL			0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
ERL FAT/TOTAL			3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
CAN FAT/TOTAL			0-80.5 km	1.0000	5.34E-04	2.02E-04	1.28E-03
2.38E-03	5.16E-03	6.16E-03	1.12E-02	2.28E-04	137		
CAN FAT/TOTAL			0-16.1 km	0.7982	2.09E-07	3.25E-08	6.53E-07
1.13E-06	2.12E-06	2.42E-06	4.11E-06	1.27E-04	2		

PEAK DOSE FOUND ON SPATIAL GRID (Sv)

L-EDEWBODY		0-1.6 km	1.0000	3.88E-03	2.29E-03	9.00E-03
1.11E-02	NOT-FOUND	NOT-FOUND	1.48E-02	1.73E-02	69	

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last  
revised 1/8/04, K. McFadden  
"ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
"EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation

SOURCE TERM 6 OF 6:  
CFL

RESULTS FOR A SINGLE EMERGENCY RESPONSE COHORT WITHOUT ANY WEIGHTING FRACTIONS  
BEING APPLIED

COHORT 2 = NO EVACUATION

06-AUG-07 19:50:04 PAGE 33				PROB				
QUANTILES				PEAK	PEAK	PEAK		
				NON-ZERO	MEAN	50TH	90TH	
95TH	99TH	99.5TH	CONS	PROB	TRIAL			
HEALTH EFFECTS CASES								
CAN FAT/TOTAL				0-80.5 km	1.0000	6.79E+02	2.54E+02	1.62E+03
3.01E+03	7.08E+03	7.86E+03	1.43E+04	2.28E-04	137			
CAN FAT/TOTAL				0-16.1 km	0.9669	6.04E-01	3.07E-02	1.62E+00
3.25E+00	9.26E+00	1.32E+01	2.32E+01	1.94E-03	42			
ERL FAT/TOTAL				0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
AVERAGE INDIVIDUAL RISK								
ERL FAT/TOTAL				0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				1.6-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
POPULATION DOSE (Sv)								
L-EDEWBODY TOT LIF				0-16.1 km	0.9669	9.10E+00	5.10E-01	2.65E+01
5.20E+01	1.29E+02	1.72E+02	2.79E+02	1.94E-03	42			
L-EDEWBODY TOT LIF				0-80.5 km	1.0000	9.82E+03	3.69E+03	2.38E+04
4.68E+04	8.35E+04	9.48E+04	1.39E+05	2.28E-04	137			
POPULATION WEIGHTED RISK								
ERL FAT/TOTAL				0-80.5 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				0-3.2 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				0-1.6 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
ERL FAT/TOTAL				3.2-4.8 km	0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0			
CAN FAT/TOTAL				0-80.5 km	1.0000	5.34E-04	2.02E-04	1.28E-03
2.38E-03	5.16E-03	6.16E-03	1.12E-02	2.28E-04	137			
CAN FAT/TOTAL				0-16.1 km	0.9669	1.27E-04	6.36E-06	3.59E-04
7.03E-04	1.96E-03	2.57E-03	4.91E-03	1.94E-03	42			

PEAK DOSE FOUND ON SPATIAL GRID (Sv)



L-EDEWBODY		0-1.6 km	1.0000	5.86E-02	4.74E-02	1.03E-01
1.36E-01	NOT-FOUND	NOT-FOUND	2.27E-01	1.86E-02	107	

DATE AND TIME OF RUN = MACCS2 06-AUG-07 19:50:04 VERSION 1.13.1: last revised 1/8/04, K. McFadden  
 "ATMOS" DESCRIPTION = ATMOS INPUT FOR VOGTLE ESP SAMA CALCULATIONS - AP1000  
 "EARLY" DESCRIPTION = SNC AP1000 EARLY FILE - 95% Evacuation  
 "CHRONC" DESCRIPTION = SNC AP1000 CHRONC FILE

SOURCE TERM 6 OF 6:  
 CFL

RESULTS FROM THE "CHRONC" MODULE ALONE

COHORT 3 = SNC AP1000 CHRONC FILE

06-AUG-07 19:50:04 PAGE 34				PROB				
QUANTILES				PEAK	PEAK	PEAK		
				NON-ZERO	MEAN	50TH	90TH	
95TH	99TH	99.5TH	CONS	PROB	TRIAL			
HEALTH EFFECTS CASES								
CAN FAT/TOTAL				0-80.5 km	1.0000	3.67E+02	1.43E+02	1.01E+03
1.35E+03	2.96E+03	3.32E+03	7.06E+03	8.42E-05	29			
CAN FAT/TOTAL				0-16.1 km	1.0000	8.42E+00	4.75E+00	1.99E+01
2.81E+01	4.98E+01	5.89E+01	1.09E+02	1.08E-05	97			
POPULATION DOSE (Sv)								
L-EDEWBODY TOT LIF				0-16.1 km	1.0000	1.40E+02	7.94E+01	3.26E+02
4.67E+02	8.52E+02	1.00E+03	1.82E+03	1.08E-05	97			
L-EDEWBODY TOT LIF				0-80.5 km	1.0000	6.11E+03	2.32E+03	1.49E+04
2.22E+04	4.94E+04	6.78E+04	1.18E+05	8.42E-05	29			
POPULATION WEIGHTED RISK								
CAN FAT/TOTAL				0-80.5 km	1.0000	2.11E-04	8.18E-05	6.20E-04
8.05E-04	1.12E-03	1.22E-03	1.65E-03	4.85E-04	51			
CAN FAT/TOTAL				0-16.1 km	0.9324	3.11E-04	2.78E-04	6.70E-04
7.63E-04	9.78E-04	1.05E-03	1.20E-03	1.28E-03	47			
PEAK DOSE FOUND ON SPATIAL GRID (Sv)								
L-EDEWBODY				0-1.6 km	0.9977	4.75E-02	4.20E-02	5.13E-02
5.21E-02	5.39E-02	5.47E-02	5.61E-02	1.46E-03	60			
L-EDEWBODY POP. DOSE (Sv) 0-16.1 km								
TOTAL LONG-TERM PATHWAYS DOSE					1.0000	1.40E+02	7.94E+01	3.26E+02
4.67E+02	8.52E+02	1.00E+03	1.82E+03	1.08E-05	97			
LONG-TERM DIRECT EXPOSURE PATHWAYS					0.9324	2.46E+01	2.15E+01	5.25E+01
6.01E+01	7.65E+01	8.23E+01	9.51E+01	1.28E-03	47			
TOTAL INGESTION PATHWAYS DOSE					1.0000	1.57E+01	1.16E+01	2.93E+01
4.02E+01	8.03E+01	9.78E+01	1.92E+02	2.34E-05	31			
LONG-TERM GROUNDSHINE DOSE					0.9324	3.72E+00	2.80E+00	8.31E+00
1.07E+01	1.54E+01	1.80E+01	3.07E+01	2.28E-04	137			
LONG-TERM RESUSPENSION DOSE					0.9324	2.08E+01	1.75E+01	4.39E+01
5.26E+01	6.75E+01	7.17E+01	8.92E+01	8.34E-05	45			
WATER INGESTION DOSE					1.0000	1.24E+01	7.97E+00	2.72E+01
3.79E+01	7.73E+01	9.23E+01	1.92E+02	2.34E-05	31			
POP.-DEPENDENT DECONTAMINATION DOSE					0.9322	9.68E+01	3.50E+01	2.59E+02
3.97E+02	7.55E+02	9.03E+02	1.69E+03	1.08E-05	97			
FARM-DEPENDENT DECONTAMINATION DOSE					0.8947	3.13E+00	2.15E+00	7.45E+00
1.00E+01	1.45E+01	1.70E+01	2.57E+01	1.79E-04	85			

INGESTION OF GRAINS				0.8968	1.43E-01	6.01E-02	3.57E-01
4.30E-01	5.42E-01	5.73E-01	1.11E+00	1.08E-05	17		
INGESTION OF LEAF VEG				0.8968	1.16E+00	6.22E-01	3.04E+00
3.45E+00	4.63E+00	5.13E+00	8.68E+00	1.08E-05	17		
INGESTION OF ROOT CROPS				0.8968	3.13E-01	2.49E-01	6.99E-01
7.86E-01	1.02E+00	1.08E+00	1.88E+00	1.08E-05	17		
INGESTION OF FRUITS				0.8968	2.86E-01	1.25E-01	7.57E-01
8.74E-01	1.10E+00	1.18E+00	2.18E+00	1.08E-05	17		
INGESTION OF LEGUMES				0.8968	4.19E-01	3.31E-01	8.56E-01
1.05E+00	1.96E+00	2.09E+00	2.80E+00	6.06E-05	122		
INGESTION OF BEEF				0.8968	1.44E-01	6.27E-02	3.66E-01
4.63E-01	7.35E-01	9.22E-01	1.39E+00	6.06E-05	122		
INGESTION OF MILK				0.8968	7.88E-01	4.68E-01	2.02E+00
2.34E+00	3.11E+00	3.30E+00	3.98E+00	5.71E-04	9		
INGESTION OF POULTRY				0.8968	1.69E-02	1.11E-02	3.61E-02
4.97E-02	1.01E-01	1.08E-01	1.35E-01	5.71E-04	9		
INGESTION OF OTHER MEAT CROPS				0.8968	3.80E-02	2.69E-02	8.72E-02
1.18E-01	2.05E-01	2.30E-01	3.07E-01	1.79E-04	85		
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km							
TOTAL LONG-TERM PATHWAYS DOSE				1.0000	6.11E+03	2.32E+03	1.49E+04
2.22E+04	4.94E+04	6.78E+04	1.18E+05	8.42E-05	29		
LONG-TERM DIRECT EXPOSURE PATHWAYS				1.0000	4.47E+03	1.72E+03	1.18E+04
1.56E+04	2.43E+04	2.79E+04	3.50E+04	4.85E-04	51		
TOTAL INGESTION PATHWAYS DOSE				1.0000	8.43E+01	5.42E+01	1.84E+02
2.37E+02	3.56E+02	4.07E+02	6.36E+02	8.06E-05	33		
LONG-TERM GROUNDSHINE DOSE				1.0000	1.34E+03	5.46E+02	3.71E+03
5.09E+03	7.03E+03	7.84E+03	9.95E+03	1.08E-03	69		
LONG-TERM RESUSPENSION DOSE				1.0000	3.13E+03	1.24E+03	9.09E+03
1.19E+04	1.97E+04	2.16E+04	2.87E+04	4.85E-04	51		
WATER INGESTION DOSE				1.0000	1.70E+01	1.13E+01	3.68E+01
4.89E+01	9.91E+01	1.10E+02	2.02E+02	6.93E-05	30		

06-AUG-07 19:50:04 PAGE 35  
QUANTILES

06-AUG-07 19:50:04 PAGE 35				PROB			
QUANTILES				PEAK	PEAK	PEAK	
				NON-ZERO	MEAN	50TH	90TH
95TH	99TH	99.5TH	CONS	PROB	TRIAL		
L-EDEWBODY POP. DOSE (Sv) 0-80.5 km							
POP.-DEPENDENT DECONTAMINATION DOSE				1.0000	1.53E+03	2.85E+02	2.94E+03
5.84E+03	2.61E+04	3.40E+04	8.74E+04	8.42E-05	29		
FARM-DEPENDENT DECONTAMINATION DOSE				1.0000	2.98E+01	1.49E+01	7.12E+01
1.04E+02	1.90E+02	2.26E+02	6.12E+02	1.03E-04	119		
INGESTION OF GRAINS				1.0000	3.43E+00	1.58E+00	9.00E+00
1.10E+01	1.60E+01	1.88E+01	2.82E+01	2.40E-04	15		
INGESTION OF LEAF VEG				1.0000	2.98E+01	1.14E+01	8.12E+01
1.02E+02	1.35E+02	1.52E+02	2.48E+02	8.63E-05	33		
INGESTION OF ROOT CROPS				1.0000	6.02E+00	3.71E+00	1.30E+01
1.67E+01	2.96E+01	3.28E+01	4.92E+01	2.40E-04	15		
INGESTION OF FRUITS				1.0000	6.75E+00	3.35E+00	1.69E+01
2.21E+01	3.32E+01	3.74E+01	5.57E+01	2.40E-04	15		
INGESTION OF LEGUMES				1.0000	6.90E+00	5.13E+00	1.39E+01
1.92E+01	3.25E+01	3.80E+01	6.38E+01	1.03E-04	119		
INGESTION OF BEEF				1.0000	2.20E+00	1.34E+00	4.93E+00
6.89E+00	1.17E+01	1.40E+01	3.15E+01	1.03E-04	119		
INGESTION OF MILK				1.0000	1.15E+01	6.67E+00	2.60E+01
3.80E+01	7.83E+01	9.25E+01	1.54E+02	1.81E-05	19		
INGESTION OF POULTRY				1.0000	2.37E-01	1.67E-01	4.27E-01
6.31E-01	1.26E+00	1.66E+00	2.47E+00	1.03E-04	119		
INGESTION OF OTHER MEAT CROPS				1.0000	4.93E-01	3.65E-01	9.05E-01
1.21E+00	2.20E+00	2.59E+00	6.89E+00	1.03E-04	119		
ECONOMIC COST MEASURES (\$)				0-80.5 km			
TOTAL ECONOMIC COSTS				1.0000	3.09E+09	1.00E+09	8.48E+09
1.46E+10	2.96E+10	3.11E+10	3.91E+10	8.42E-05	29		
POP.-DEPENDENT COSTS				1.0000	2.97E+09	9.30E+08	8.34E+09
1.46E+10	2.96E+10	3.11E+10	3.87E+10	8.42E-05	29		
FARM-DEPENDENT COSTS				1.0000	1.23E+08	7.53E+07	2.89E+08
4.08E+08	7.07E+08	7.59E+08	8.87E+08	1.06E-03	44		
POP.-DEPENDENT DECONTAMINATION COST				1.0000	1.02E+09	3.08E+08	2.70E+09
4.97E+09	1.03E+10	1.09E+10	1.35E+10	4.85E-04	51		
FARM-DEPENDENT DECONTAMINATION COST				1.0000	5.75E+07	4.92E+07	1.09E+08
1.35E+08	2.11E+08	2.37E+08	3.30E+08	1.03E-04	119		
POP.-DEPENDENT INTERDICTION COST				1.0000	1.92E+09	6.11E+08	4.90E+09
9.45E+09	1.68E+10	2.03E+10	2.70E+10	8.42E-05	29		
FARM-DEPENDENT INTERDICTION COST				1.0000	8.13E+06	4.76E+06	2.06E+07
2.66E+07	3.93E+07	4.54E+07	6.11E+07	5.71E-05	57		
POP.-DEPENDENT CONDEMNATION COST				0.0009	4.45E+03	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	7.65E+06	2.89E-04	27		
FARM-DEPENDENT CONDEMNATION COST				0.9672	3.36E+07	5.80E+06	8.40E+07
1.56E+08	4.04E+08	5.04E+08	6.21E+08	1.06E-03	44		
EMERGENCY PHASE COST				0.9990	2.90E+07	8.75E+06	7.97E+07
1.55E+08	2.11E+08	2.17E+08	2.81E+08	8.06E-06	79		
INTERMEDIATE PHASE COST				0.0000	0.00E+00	0.00E+00	0.00E+00
0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0		
MILK DISPOSAL COST				0.9889	8.43E+04	1.59E+03	1.66E+05
5.33E+05	1.52E+06	2.04E+06	3.12E+06	2.85E-04	51		
CROP DISPOSAL COST				0.9887	2.39E+07	5.49E+06	8.15E+07
1.04E+08	1.23E+08	1.32E+08	2.11E+08	8.18E-05	45		
AFFECTED AREA/POPULATION				0-80.5 km			

FARM DECONTAMINATION (HECTARES)	1.0000	3.82E+04	3.33E+04	6.59E+04
8.09E+04 1.10E+05 1.19E+05 1.77E+05	1.19E-04	2		
POP. DECONTAMINATION (INDIVIDUALS)	1.0000	1.05E+05	3.44E+04	2.89E+05
5.58E+05 7.53E+05 7.94E+05 9.48E+05	4.85E-04	51		
FARM INTERDICTION (HECTARES)	1.0000	4.00E+04	3.47E+04	7.05E+04
8.56E+04 1.12E+05 1.20E+05 1.77E+05	1.19E-04	2		
POP. INTERDICTION (INDIVIDUALS)	1.0000	1.05E+05	3.44E+04	2.89E+05
5.58E+05 7.53E+05 7.94E+05 9.48E+05	4.85E-04	51		
FARM CONDEMNATION (HECTARES)	0.9672	4.96E+03	7.99E+02	1.28E+04
2.41E+04 7.49E+04 8.88E+04 1.32E+05	4.85E-04	51		
POP. CONDEMNATION (INDIVIDUALS)	0.0009	3.81E-02	0.00E+00	0.00E+00
0.00E+00 0.00E+00 0.00E+00 6.90E+01	3.14E-04	27		
MILK DISPOSAL AREA (HECTARES)	0.9889	5.12E+03	9.03E+02	1.32E+04
2.48E+04 7.49E+04 8.88E+04 1.32E+05	4.85E-04	51		
CROP DISPOSAL AREA (HECTARES)	0.9887	1.67E+04	1.56E+03	6.53E+04
8.87E+04 1.19E+05 1.30E+05 1.77E+05	4.85E-04	51		

SOURCE TERM 6 OF 6:  
 CFL

RESULT NAME = PEAK DOSE FOUND ON SPATIAL GRID (Sv)  
 L-EDEWBODY 0-1.6 km

PEOPLE FRACTION =		0.9500		0.0500		
OVERALL		EMER. RESP. # 1		EMER. RESP. # 2		CHRONC
RESULTS						
-----		-----		-----		-----
X	PROB>=X	X	PROB>=X	X	PROB>=X	X
PROB>=X						
1.00E-08	1.00E+00	1.00E-10	1.00E+00	1.00E-08	1.00E+00	1.00E-08
9.98E-01						
2.00E-08	1.00E+00	2.00E-10	1.00E+00	2.00E-08	1.00E+00	2.00E-08
9.98E-01						
3.00E-08	1.00E+00	3.00E-10	1.00E+00	3.00E-08	1.00E+00	3.00E-08
9.98E-01						
5.00E-08	1.00E+00	5.00E-10	1.00E+00	5.00E-08	1.00E+00	5.00E-08
9.98E-01						
7.00E-08	1.00E+00	7.00E-10	1.00E+00	7.00E-08	1.00E+00	7.00E-08
9.98E-01						
1.00E-07	1.00E+00	1.00E-09	1.00E+00	1.00E-07	1.00E+00	1.00E-07
9.98E-01						
2.00E-07	1.00E+00	2.00E-09	1.00E+00	2.00E-07	1.00E+00	2.00E-07
9.98E-01						
3.00E-07	1.00E+00	3.00E-09	1.00E+00	3.00E-07	1.00E+00	3.00E-07
9.98E-01						
5.00E-07	1.00E+00	5.00E-09	1.00E+00	5.00E-07	1.00E+00	5.00E-07
9.98E-01						
7.00E-07	1.00E+00	7.00E-09	1.00E+00	7.00E-07	1.00E+00	7.00E-07
9.98E-01						
1.00E-06	1.00E+00	1.00E-08	1.00E+00	1.00E-06	1.00E+00	1.00E-06
9.98E-01						
2.00E-06	1.00E+00	2.00E-08	1.00E+00	2.00E-06	1.00E+00	2.00E-06
9.98E-01						
3.00E-06	1.00E+00	3.00E-08	1.00E+00	3.00E-06	1.00E+00	3.00E-06
9.98E-01						
5.00E-06	1.00E+00	5.00E-08	1.00E+00	5.00E-06	1.00E+00	5.00E-06
9.98E-01						
7.00E-06	1.00E+00	7.00E-08	1.00E+00	7.00E-06	1.00E+00	7.00E-06
9.98E-01						
1.00E-05	1.00E+00	1.00E-07	1.00E+00	1.00E-05	1.00E+00	1.00E-05
9.98E-01						
2.00E-05	1.00E+00	2.00E-07	1.00E+00	2.00E-05	1.00E+00	2.00E-05
9.98E-01						
3.00E-05	1.00E+00	3.00E-07	1.00E+00	3.00E-05	1.00E+00	3.00E-05
9.98E-01						
5.00E-05	1.00E+00	5.00E-07	1.00E+00	5.00E-05	1.00E+00	5.00E-05
9.98E-01						
7.00E-05	1.00E+00	7.00E-07	1.00E+00	7.00E-05	1.00E+00	7.00E-05
9.98E-01						

1.00E-04	1.00E+00	1.00E-06	1.00E+00	1.00E-04	1.00E+00	1.00E-04
9.98E-01						
2.00E-04	1.00E+00	2.00E-06	1.00E+00	2.00E-04	1.00E+00	2.00E-04
9.98E-01						
3.00E-04	1.00E+00	3.00E-06	1.00E+00	3.00E-04	1.00E+00	3.00E-04
9.98E-01						
5.00E-04	1.00E+00	5.00E-06	1.00E+00	5.00E-04	1.00E+00	5.00E-04
9.98E-01						
7.00E-04	1.00E+00	7.00E-06	1.00E+00	7.00E-04	1.00E+00	7.00E-04
9.98E-01						
1.00E-03	1.00E+00	1.00E-05	1.00E+00	1.00E-03	1.00E+00	1.00E-03
9.98E-01						
2.00E-03	1.00E+00	2.00E-05	9.86E-01	2.00E-03	1.00E+00	2.00E-03
9.98E-01						
3.00E-03	9.98E-01	3.00E-05	9.31E-01	3.00E-03	1.00E+00	3.00E-03
9.98E-01						
5.00E-03	9.98E-01	5.00E-05	9.29E-01	5.00E-03	9.86E-01	5.00E-03
9.98E-01						
7.00E-03	9.98E-01	7.00E-05	9.29E-01	7.00E-03	9.86E-01	7.00E-03
9.98E-01						
1.00E-02	9.98E-01	1.00E-04	9.29E-01	1.00E-02	9.48E-01	1.00E-02
9.98E-01						
2.00E-02	9.98E-01	2.00E-04	8.54E-01	2.00E-02	8.12E-01	2.00E-02
9.98E-01						
3.00E-02	9.98E-01	3.00E-04	8.13E-01	3.00E-02	7.22E-01	3.00E-02
9.98E-01						
5.00E-02	7.04E-01	5.00E-04	7.98E-01	5.00E-02	4.79E-01	5.00E-02
3.51E-01						
7.00E-02	1.76E-02	7.00E-04	7.56E-01	7.00E-02	3.37E-01	5.61E-02
1.46E-03						
7.23E-02	1.73E-02	1.00E-03	7.49E-01	1.00E-01	1.09E-01	N.D.
N.D.						
N.D.	N.D.	2.00E-03	5.40E-01	2.00E-01	1.86E-02	N.D.
N.D.						
N.D.	N.D.	3.00E-03	4.29E-01	2.27E-01	1.86E-02	N.D.
N.D.						
N.D.	N.D.	5.00E-03	3.88E-01	N.D.	N.D.	N.D.
N.D.						
N.D.	N.D.	7.00E-03	2.05E-01	N.D.	N.D.	N.D.
N.D.						
N.D.	N.D.	1.00E-02	7.42E-02	N.D.	N.D.	N.D.
N.D.						
N.D.	N.D.	1.48E-02	1.73E-02	N.D.	N.D.	N.D.
N.D.						
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.						
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.						
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.						
N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
N.D.						

Successful completion of MACCS2 was achieved!  
This job required a total of 37.594 CPU seconds

Input processing required 0.109 CPU seconds

Simulation required	36.812 CPU seconds
Output processing required	0.672 CPU seconds