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CALCULATED NUCLIDE COMPOSITIONS AND
GAMMA-RAY EXPOSURE RATES FOR FALLOUT
FROM THE HARRY, SMOKY, AND ANNIE EVENTS

Harry G. Hicks

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Lawrence
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CALCULATED NUCLIDE COMPOSITIONS AND GAMMA-RAY EXPOSURE RATES FOR FALLOUT FROM THE HARRY, SMOKY AND ANNIE EVENTS

Harry G. Hicks

The purpose of the report is to document the results of computer calculations of the nuclide composition and associated external gamma-ray exposure rates for fallout from the HARRY, SMOKY and ANNIE Events.

The following data are put into the calculation via cards:

Shot name
Fission yield (kt)¹
Fission split²
Neutron-induced nuclides, atoms per fission²

The following data are put into the calculation via teletype:

Fraction of refractories present
Relaxation length*
mR/hr at H + 12 hrs

The ²³³U, ²³⁵U, ²³⁸U, and ^{239,240}Pu data are omitted primarily to keep the output unclassified. Furthermore, the natural uranium content of the soil is about one million times that received from fallout, and at least half of the plutonium in Nevada and Utah soils comes from worldwide fallout.⁴

The fission product distribution is calculated for each event with the appropriate neutron spectrum and the fractions of fissions due to each fissionable material.⁵ Some of the calculations are made with specified fractions of the refractory nuclides deleted to simulate fractionation effects. Surface roughness effects on the gamma-ray exposure rates one meter above ground level are simulated by using the values⁶ of (mR/hr)/(μCi/m²) for a relaxation length of 0.16 gm/cm².

The total number of microcuries per square meter and the gamma-ray exposure rates (mR/hr, 1 meter above ground level) are calculated for 152 fission products and 25 neutron-induced nuclides. The decay of each nuclide is followed from zero time to 50 years postshot and the sum of μCi/m² and mR/hr calculated at each decay interval. Each value is then divided by the value of the total mR/hr at H+12 hours, normalizing each value and sum to values consistent with a gamma-ray exposure rate of 1 mR/hr at H+12 hours. The data in the Appendices are these normalized values. For actual exposure or deposition calculations, these normalized values can be scaled by multiplying by the exposure rate taken from the fallout pattern, mR/hr at H+12 hours.

*According to Beck,³ the concentration of fallout varies exponentially with soil depth, z; $C = C_0 e^{-\alpha z}$. He defines relaxation length as $1/\alpha$.

Since fallout patterns are produced from gamma-ray exposure rates at H+12 hours, gamma-ray exposure rates and the composition and concentration of fallout from arrival time to 50 years postshot can be calculated with an assumption about fractionation behavior (fraction of refractory nuclides present).

The appended output has 30 decay intervals, 10 from 1 to 21 hours, 10 from 1 to 300 days, and 10 from 1 to 50 years. For each of these intervals and for zero time, there are values of $\mu\text{Ci}/\text{m}^2$ (Appendices 1, 4, and 7) and mR/hr (Appendices 2, 5, and 8) for each nuclide present, and the total.

The computer code also generates an input file for a second code that fits by the method of least squares the total $\mu\text{Ci}/\text{m}^2$ and mR/hr values to the following expression:

$$\sum_{i=1}^{11} a_i e^{-\lambda_i t}$$

The program uses a set of input values of λ_i to give a least squares fit for the 11 a_i 's. The output appears in Appendices 3, 6, and 9.

REFERENCES

1. Announced United States Nuclear Tests, July, 1945, through December, 1979. NVO-209, January, 1980.
2. H. G. Hicks, Radiochemical Data Collected on Events Releasing Radioactivity from the Nevada Testing Complex, UCRL-52934, in publication.
3. H. L. Beck, private communication.
4. E. Hardy, Plutonium in Soil Northeast of the Nevada Test Site, HASL-306, pg. I-51, July 1, 1976.
5. D. R. Nethaway and G. W. Barton, A Compilation of Fission Product Yields in Use at the Lawrence Livermore Laboratory, UCRL-51458, October, 1973.
6. H. L. Beck, Exposure Rate Conversion Factors for Radionuclides Deposited on the Ground, EML-378, July, 1980.

APPENDIX 1

HARRY EVENT

Microcuries per Square Meter

	<u>Page</u>
Fraction of refractories present = 1.0	
Total mR/hr and Total $\mu\text{Ci}/\text{m}^2$	1-1
Individual nuclide $\mu\text{Ci}/\text{m}^2$	1-2
Fraction of refractories present = 0.5	
Total mR/hr and Total $\mu\text{Ci}/\text{m}^2$	1-12
Individual nuclide $\mu\text{Ci}/\text{m}^2$	1-13
Fraction of refractories present = 0.1	
Total mR/hr and Total $\mu\text{Ci}/\text{m}^2$	1-23
Individual nuclide $\mu\text{Ci}/\text{m}^2$	1-24

1
 HARRY
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.03E+02	1.22E+04
1.00E+00	3.11E+01	2.54E+03
2.00E+00	1.25E+01	9.17E+02
3.00E+00	6.85E+00	5.46E+02
4.00E+00	4.38E+00	4.04E+02
6.00E+00	2.35E+00	2.80E+02
9.00E+00	1.38E+00	1.98E+02
1.20E+01	1.00E+00	1.55E+02
1.50E+01	7.85E-01	1.26E+02
1.80E+01	6.45E-01	1.06E+02
2.10E+01	5.44E-01	9.18E+01
1.00E+00 DAYS	4.62E-01	7.98E+01
2.00E+00	2.12E-01	3.97E+01
5.00E+00	7.80E-02	1.45E+01
1.00E+01	3.47E-02	5.51E+00
2.00E+01	1.40E-02	1.98E+00
3.00E+01	8.32E-03	1.22E+00
5.00E+01	4.10E-03	6.88E-01
1.00E+02	1.63E-03	3.10E-01
2.00E+02	5.98E-04	1.17E-01
3.00E+02	2.30E-04	5.87E-02
1.00E+00 YEARS	1.30E-04	4.25E-02
1.50E+00	3.58E-05	2.36E-02
2.00E+00	1.91E-05	1.62E-02
3.50E+00	1.07E-05	7.37E-03
5.00E+00	8.28E-06	4.53E-03
7.00E+00	7.02E-06	3.24E-03
1.00E+01	6.17E-06	2.57E-03
2.00E+01	4.61E-06	1.78E-03
3.50E+01	3.22E-06	1.22E-03
5.00E+01	2.27E-06	8.50E-04

1 HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BE 7	2.97E-06	2.96E-06	2.96E-06	2.96E-06	2.96E-06	2.96E-06	2.96E-06	2.95E-06	2.94E-06	2.94E-06	2.93E-06	2.93E-06
NA 24	4.47E-03	4.27E-03	4.08E-03	3.89E-03	3.71E-03	3.39E-03	2.95E-03	2.57E-03	2.24E-03	1.95E-03	1.69E-03	1.69E-03
MN 54	1.42E-05	1.42E-05	1.42E-05	1.42E-05	1.42E-05	1.42E-05	1.42E-05	1.42E-05	1.41E-05	1.41E-05	1.41E-05	1.41E-05
FE 55	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05	3.24E-05
FE 59	3.29E-05	3.28E-05	3.28E-05	3.28E-05	3.28E-05	3.28E-05	3.27E-05	3.27E-05	3.26E-05	3.25E-05	3.25E-05	3.25E-05
CO 57	6.67E-05	6.67E-05	6.67E-05	6.67E-05	6.67E-05	6.67E-05	6.67E-05	6.67E-05	6.67E-05	6.67E-05	6.67E-05	6.67E-05
CO 58	2.11E-04	2.11E-04	2.11E-04	2.11E-04	2.11E-04	2.11E-04	2.10E-04	2.10E-04	2.10E-04	2.10E-04	2.10E-04	2.09E-04
CO 60	3.11E-05	3.11E-05	3.11E-05	3.11E-05	3.11E-05	3.11E-05	3.11E-05	3.11E-05	3.11E-05	3.11E-05	3.11E-05	3.11E-05
CU 64	4.40E+00	4.16E+00	3.94E+00	3.74E+00	3.54E+00	3.18E+00	2.70E+00	2.30E+00	1.95E+00	1.66E+00	1.41E+00	1.41E+00
CU 67	6.89E-04	6.83E-04	6.71E-04	6.65E-04	6.59E-04	6.42E-04	6.18E-04	6.00E-04	5.82E-04	5.59E-04	5.43E-04	5.43E-04
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.28E-01	1.28E-01	1.27E-01	1.27E-01	1.26E-01	1.25E-01	1.23E-01	1.22E-01	1.20E-01	1.19E-01	1.17E-01	1.17E-01
U239	3.59E+03	6.12E+02	1.04E+02	1.78E+01	3.02E+00	8.80E-02	4.36E-04	2.15E-06	1.06E-08	5.27E-11	2.60E-13	2.60E-13
U240	1.37E+00	1.31E+00	1.25E+00	1.19E+00	1.13E+00	1.02E+00	8.83E-01	7.61E-01	6.57E-01	5.66E-01	4.88E-01	4.88E-01
NP239	1.23E-02	2.06E+01	2.38E+01	2.42E+01	2.40E+01	2.34E+01	2.25E+01	2.17E+01	2.10E+01	2.02E+01	1.94E+01	1.94E+01
NP240M	2.17E-03	1.31E+00	1.26E+00	1.20E+00	1.14E+00	1.03E+00	8.91E-01	7.69E-01	6.62E-01	5.71E-01	4.94E-01	4.94E-01
NP240	5.51E-11	2.83E-11	1.47E-11	7.58E-12	3.92E-12	1.05E-12	1.45E-13	2.00E-14	2.75E-15	3.79E-16	5.25E-17	5.25E-17
AM241	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09
CM242	3.56E-07	3.56E-07	3.56E-07	3.56E-07	3.56E-07	3.56E-07	3.54E-07	3.54E-07	3.54E-07	3.54E-07	3.54E-07	3.54E-07
GE 75	5.94E-06	2.88E-02	1.74E-02	1.04E-02	6.29E-03	2.28E-03	4.98E-04	1.09E-04	2.38E-05	5.19E-06	1.14E-06	1.14E-06
GE 77	3.89E-03	1.00E-02	9.43E-03	8.87E-03	8.35E-03	7.39E-03	6.15E-03	5.11E-03	4.26E-03	3.53E-03	2.94E-03	2.94E-03
AS 77	4.02E-05	6.36E-03	6.43E-03	6.48E-03	6.52E-03	6.56E-03	6.56E-03	6.52E-03	6.42E-03	6.29E-03	6.13E-03	6.13E-03
SE 77M	1.59E-09	1.90E-05	1.93E-05	1.95E-05	1.95E-05	1.96E-05	1.98E-05	1.96E-05	1.93E-05	1.89E-05	1.83E-05	1.83E-05
GE 78	6.00E-01	3.75E-01	2.33E-01	1.46E-01	9.11E-02	3.54E-02	8.61E-03	2.08E-03	5.09E-04	1.24E-04	3.00E-05	3.00E-05
AS 78	1.08E-02	1.79E-01	2.21E-01	2.07E-01	1.73E-01	1.02E-01	3.79E-02	1.26E-02	3.90E-03	1.17E-03	3.38E-04	3.38E-04
AS 79	1.19E+01	1.17E-01	1.16E-03	1.14E-05	1.12E-07	1.08E-11	1.03E-17	9.87E-24	9.42E-30	8.99E-36	8.59E-42	8.59E-42
SE 79M	1.76E-02	2.07E-01	2.04E-03	2.01E-05	1.98E-07	1.91E-11	1.83E-17	1.74E-23	1.66E-29	1.59E-35	1.51E-41	1.51E-41
BR 80	7.47E-02	7.05E-03	6.63E-04	6.23E-05	5.87E-06	5.20E-08	4.36E-11	3.63E-14	3.03E-17	2.53E-20	2.11E-23	2.11E-23
SE 81M	6.17E-02	2.88E+00	1.39E+00	6.68E-01	3.21E-01	7.51E-02	8.40E-03	9.41E-04	1.06E-04	1.18E-05	1.33E-06	1.33E-06
SE 81	7.54E-01	3.40E+00	1.97E+00	9.83E-01	4.77E-01	1.11E-01	1.25E-02	1.40E-03	1.56E-04	1.76E-05	1.97E-06	1.97E-06
BR 82	3.76E-04	3.69E-04	3.62E-04	3.55E-04	3.48E-04	3.35E-04	3.16E-04	2.97E-04	2.81E-04	2.64E-04	2.49E-04	2.49E-04
SE 83	3.46E+01	6.56E+00	1.24E+00	2.36E-01	4.46E-02	1.60E-03	1.09E-05	7.41E-08	5.06E-10	3.43E-12	2.18E-14	2.18E-14
BR 83	2.88E-01	4.29E+00	3.97E+00	3.13E+00	2.37E+00	1.34E+00	5.67E-01	2.39E-01	1.01E-01	4.25E-02	1.79E-02	1.79E-02
KR 83M	1.49E-05	9.72E-01	1.98E+00	2.47E+00	2.54E+00	2.12E+00	1.25E+00	6.44E-01	3.10E-01	1.43E-01	6.44E-02	6.44E-02

1
HARRY MICROCURIES/SQ METER
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BR 84	7.29E-02	1.26E+01	3.40E+00	9.21E-01	2.49E-01	1.82E-02	3.60E-04	7.10E-06	1.40E-07	2.78E-09	5.49E-11	
KR 85M	3.49E-03	7.48E+00	6.37E+00	5.44E+00	4.65E+00	3.39E+00	2.11E+00	1.32E+00	8.23E-01	5.11E-01	3.19E-01	
KR 87	5.83E+01	3.37E+01	1.95E+01	1.13E+01	6.49E+00	2.18E+00	4.22E-01	8.18E-02	1.59E-02	3.07E-03	5.93E-04	
KR 88	3.33E+01	2.60E+01	2.03E+01	1.58E+01	1.24E+01	7.51E+00	3.58E+00	1.71E+00	8.11E-01	3.86E-01	1.84E-01	
RB 88	8.46E+00	2.63E+01	2.24E+01	1.77E+01	1.38E+01	8.41E+00	4.01E+00	1.91E+00	9.11E-01	4.33E-01	2.06E-01	
RB 89	4.04E+01	3.80E+01	2.55E+00	1.72E-01	1.15E-02	5.21E-05	1.58E-08	4.75E-12	1.45E-15	4.39E-19	1.33E-22	
SR 89	3.10E-06	1.09E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.16E-01	1.15E-01	1.15E-01	1.15E-01	1.15E-01	
SR 90	6.23E-06	6.40E-04	6.40E-04	6.40E-04	6.40E-04	6.40E-04	6.40E-04	6.40E-04	6.40E-04	6.40E-04	6.40E-04	
SR 91	8.37E-01	1.56E+01	1.45E+01	1.35E+01	1.26E+01	1.09E+01	8.80E+00	7.11E+00	5.74E+00	4.61E+00	3.72E+00	
Y 91M	5.64E-05	5.37E+00	7.32E+00	7.85E+00	7.74E+00	6.95E+00	5.69E+00	4.58E+00	3.69E+00	2.98E+00	2.40E+00	
Y 91	2.31E-08	4.78E-03	1.10E-02	1.76E-02	2.40E-02	3.60E-02	5.11E-02	6.32E-02	7.32E-02	8.11E-02	8.74E-02	
SR 92	1.07E+01	4.77E+01	3.70E+01	2.86E+01	2.22E+01	1.33E+01	6.16E+00	2.86E+00	1.33E+00	6.16E-01	2.87E-01	
Y 92	4.93E-01	1.00E+01	1.58E+01	1.87E+01	1.99E+01	1.89E+01	1.45E+01	9.89E+00	6.36E+00	3.92E+00	2.36E+00	
SR 93	4.30E+02	7.41E+00	4.09E-02	2.26E-04	1.25E-06	3.81E-11	6.43E-18	1.08E-24	1.83E-31	3.09E-38	5.20E-45	
Y 93	5.25E-01	1.70E+01	1.59E+01	1.49E+01	1.39E+01	1.22E+01	9.91E+00	8.09E+00	6.57E+00	5.40E+00	4.38E+00	
Y 94	6.26E+01	8.55E+01	1.10E+01	1.42E+00	1.83E-01	3.40E-03	6.52E-06	1.40E-08	2.99E-11	6.52E-14	3.61E-15	
Y 95	2.70E+02	2.54E+01	5.61E-01	1.24E-02	2.72E-04	1.32E-07	1.41E-12	1.51E-17	1.61E-22	1.73E-27	1.85E-32	
ZR 95	1.01E-03	1.33E-01	1.35E-01	1.35E-01	1.35E-01	1.35E-01	1.35E-01	1.35E-01	1.35E-01	1.34E-01	1.34E-01	
NB 95	1.13E-10	8.19E-05	1.91E-04	3.00E-04	4.09E-04	6.27E-04	9.52E-04	1.28E-03	1.60E-03	1.93E-03	2.25E-03	
ZR 97	2.44E+00	1.06E+01	1.02E+01	9.80E+00	9.38E+00	8.66E+00	7.65E+00	6.77E+00	6.01E+00	5.30E+00	4.71E+00	
NB 97M	1.26E-02	1.02E+01	9.80E+00	9.42E+00	9.04E+00	8.32E+00	7.36E+00	6.52E+00	5.76E+00	5.09E+00	4.50E+00	
NB 97	1.22E+00	5.34E+00	7.53E+00	8.58E+00	9.00E+00	8.96E+00	8.16E+00	7.27E+00	6.43E+00	5.68E+00	5.05E+00	
NB 98	1.38E+01	6.13E+00	2.71E+00	1.20E+00	5.31E-01	1.04E-01	8.99E-03	7.76E-04	6.76E-05	5.86E-06	5.04E-07	
MO 99	7.32E-03	3.02E+00	2.99E+00	2.96E+00	2.93E+00	2.87E+00	2.78E+00	2.70E+00	2.62E+00	2.54E+00	2.46E+00	
TC 99M	6.81E-08	2.88E-01	5.41E-01	7.65E-01	9.61E-01	1.28E+00	1.63E+00	1.85E+00	1.98E+00	2.06E+00	2.09E+00	
MO101	1.05E+02	4.73E+01	2.75E+00	1.59E-01	9.24E-03	3.09E-05	6.01E-09	1.17E-12	2.28E-16	4.42E-20	8.62E-24	
TC101	4.42E+00	1.33E+02	1.45E+01	1.19E+00	8.67E-02	3.91E-04	9.77E-08	2.19E-11	4.64E-15	9.55E-19	1.93E-22	
MO102	8.67E+02	1.98E+01	4.50E-01	1.03E-02	2.35E-04	1.22E-07	1.45E-12	1.72E-17	2.04E-22	2.42E-27	2.87E-32	
TC102M	5.57E-01	1.67E+01	3.83E-01	8.75E-03	1.99E-04	1.03E-07	1.23E-12	1.45E-17	1.72E-22	2.04E-27	2.43E-32	
TC102	2.61E+03	9.95E+00	2.27E-01	5.16E-03	1.18E-04	6.15E-08	7.31E-13	8.67E-18	1.03E-22	1.22E-27	1.45E-32	
RU103	6.21E-05	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.43E-01	1.43E-01	1.43E-01	1.42E-01	1.42E-01	1.42E-01	
RH103M	4.14E-09	7.44E-02	1.10E-01	1.28E-01	1.36E-01	1.42E-01	1.43E-01	1.43E-01	1.42E-01	1.42E-01	1.42E-01	
TC104	5.33E+01	3.83E+01	3.83E+00	3.79E-01	3.75E-02	3.70E-04	3.61E-07	3.53E-10	3.44E-13	3.37E-16	3.29E-19	
RU105	4.26E-01	1.47E+01	1.26E+01	1.08E+01	9.23E+00	6.74E+00	4.23E+00	2.64E+00	1.65E+00	1.03E+00	6.49E-01	
RH105M	2.80E-03	1.48E+01	1.26E+01	1.08E+01	9.23E+00	6.77E+00	4.23E+00	2.65E+00	1.66E+00	1.04E+00	6.49E-01	
RH105	4.60E-09	3.00E-01	5.56E-01	7.67E-01	9.45E-01	1.21E+00	1.44E+00	1.55E+00	1.58E+00	1.57E+00	1.53E+00	
RU106	3.65E-04	6.92E-03	6.92E-03	6.92E-03	6.92E-03	6.92E-03	6.92E-03	6.92E-03	6.92E-03	6.92E-03	6.92E-03	
RH106	3.95E-06	6.92E-03	6.92E-03	6.92E-03	6.92E-03	6.92E-03	6.92E-03	6.92E-03	6.92E-03	6.92E-03	6.92E-03	
RH107	8.67E-02	1.18E+01	1.79E+00	2.69E-01	4.05E-02	9.25E-04	3.19E-06	1.10E-08	3.78E-11	1.29E-14	1.29E-17	
PD107M	1.80E-04	2.40E+00	3.62E-01	5.47E-02	8.25E-03	1.88E-04	6.48E-07	2.24E-09	7.69E-12	2.65E-14	9.06E-17	

1
HARRY MICROCURIES/SQ METER
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	5.07E-03	4.21E-01	4.00E-01	3.79E-01	3.60E-01	3.25E-01	2.79E-01	2.39E-01	2.05E-01	1.76E-01	1.51E-01
AG109M	2.93E-05	4.21E-01	4.00E-01	3.80E-01	3.61E-01	3.26E-01	2.79E-01	2.39E-01	2.05E-01	1.76E-01	1.51E-01
PD111M	6.21E-01	5.47E-01	4.82E-01	4.26E-01	3.75E-01	2.92E-01	2.00E-01	1.37E-01	9.38E-02	6.42E-02	4.40E-02
PD111	2.21E-01	3.98E-01	3.82E-01	3.40E-01	3.01E-01	2.34E-01	1.61E-01	1.10E-01	7.53E-02	5.17E-02	3.54E-02
AG111M	1.76E-03	5.37E-01	5.05E-01	4.52E-01	3.98E-01	3.08E-01	2.11E-01	1.44E-01	9.89E-02	6.79E-02	4.63E-02
AG111	6.25E-10	1.85E-03	3.89E-03	5.72E-03	7.34E-03	1.00E-02	1.29E-02	1.47E-02	1.60E-02	1.67E-02	1.72E-02
PD112	1.20E-01	1.17E-01	1.13E-01	1.09E-01	1.06E-01	9.87E-02	8.95E-02	8.11E-02	7.34E-02	6.64E-02	6.02E-02
AG112	3.62E-06	2.31E-02	4.07E-02	5.46E-02	6.49E-02	7.78E-02	8.55E-02	8.51E-02	8.11E-02	7.56E-02	6.97E-02
AG113	1.13E-03	2.43E-01	2.13E-01	1.87E-01	1.64E-01	1.26E-01	8.53E-02	5.76E-02	3.89E-02	2.62E-02	1.77E-02
AG115	4.07E-01	4.36E-01	5.42E-02	6.78E-03	8.49E-04	1.33E-05	2.59E-08	5.07E-11	9.82E-14	9.75E-163	9.04E-17
CD115M	3.33E-09	8.85E-05	9.95E-05	1.01E-04	1.01E-04	1.01E-04	1.00E-04	1.00E-04	1.00E-04	9.98E-05	9.98E-05
CD115	1.29E-06	2.42E-02	2.61E-02	2.60E-02	2.57E-02	2.50E-02	2.41E-02	2.32E-02	2.23E-02	2.14E-02	2.06E-02
IN115M	1.60E-11	2.67E-03	5.94E-03	8.82E-03	1.12E-02	1.50E-02	1.85E-02	2.04E-02	2.12E-02	2.14E-02	2.13E-02
CD117	2.86E-02	4.76E-01	3.59E-01	2.68E-01	2.01E-01	1.13E-01	4.73E-02	1.99E-02	8.38E-03	3.52E-03	1.48E-03
IN117M	1.38E-06	1.66E-01	2.40E-01	2.60E-01	2.52E-01	1.98E-01	1.13E-01	5.80E-02	2.79E-02	1.29E-02	5.84E-03
IN117	5.53E-11	3.02E-02	7.31E-02	1.02E-01	1.13E-01	1.04E-01	6.64E-02	3.56E-02	1.77E-02	8.32E-03	3.82E-03
CD118	1.89E+00	8.12E-01	3.48E-01	1.48E-01	6.36E-02	1.16E-02	9.13E-04	7.14E-05	5.61E-06	4.40E-07	3.45E-08
IN118	1.25E-01	8.12E-01	3.48E-01	1.49E-01	6.36E-02	1.17E-02	9.13E-04	7.17E-05	5.61E-06	4.40E-07	3.45E-08
CD119	4.72E+00	7.36E-02	1.15E-03	1.80E-05	2.81E-07	6.87E-11	2.62E-16	1.00E-21	3.80E-27	1.45E-32	5.56E-38
IN119M	7.11E-03	7.96E-01	8.66E-02	8.73E-03	8.70E-04	8.56E-06	8.34E-09	8.17E-12	7.96E-15	7.78E-18	7.60E-21
IN119	3.51E-01	4.19E-02	4.86E-03	4.93E-04	4.93E-05	4.82E-07	4.72E-10	4.61E-13	4.51E-16	4.40E-19	4.30E-22
SN121	5.82E-04	5.99E-02	5.82E-02	5.68E-02	5.55E-02	5.27E-02	4.86E-02	4.52E-02	4.18E-02	3.87E-02	3.59E-02
SN123M	3.31E-01	6.19E-01	2.19E-01	7.76E-02	2.74E-02	3.42E-03	1.51E-04	6.70E-06	2.97E-07	1.31E-08	5.79E-10
SN123	3.11E-06	3.25E-04	3.25E-04	3.25E-04	3.25E-04	3.25E-04	3.25E-04	3.25E-04	3.25E-04	3.25E-04	3.25E-04
SN125	8.80E-03	8.77E-03	8.75E-03	8.73E-03	8.68E-03	8.64E-03	8.57E-03	8.47E-03	8.41E-03	8.31E-03	8.25E-03
SB125	5.28E-05	5.31E-05	5.33E-05	5.35E-05	5.37E-05	5.42E-05	5.51E-05	5.58E-05	5.65E-05	5.72E-05	5.79E-05
SB126	1.65E-03	1.65E-03	1.65E-03	1.64E-03	1.64E-03	1.63E-03	1.62E-03	1.61E-03	1.60E-03	1.59E-03	1.58E-03
SN127	2.44E+00	1.75E+00	1.26E+00	9.08E-01	6.53E-01	3.37E-01	1.25E-01	4.66E-02	1.73E-02	6.42E-03	2.38E-03
SB127	2.85E-02	9.82E-02	1.09E-01	1.16E-01	1.21E-01	1.26E-01	1.28E-01	1.27E-01	1.25E-01	1.22E-01	1.20E-01
TE127	1.61E-02	2.00E-02	2.43E-02	2.89E-02	3.34E-02	4.19E-02	5.36E-02	6.26E-02	6.96E-02	7.51E-02	7.86E-02
SN128	1.64E+01	8.09E+00	4.00E+00	1.98E+00	9.78E-01	2.39E-01	2.88E-02	3.48E-03	4.19E-04	5.09E-05	6.13E-06
SB128M	8.35E-03	9.22E+00	4.78E+00	2.36E+00	1.16E+00	2.85E-01	3.43E-02	4.15E-03	5.00E-04	6.04E-05	7.30E-06
SB128	6.91E-01	6.65E-01	6.26E-01	5.87E-01	5.48E-01	4.69E-01	3.75E-01	2.97E-01	2.36E-01	1.87E-01	1.49E-01
SN129M	1.06E+01	5.26E+00	2.64E+00	1.32E+00	6.59E-01	1.65E-01	2.06E-02	2.58E-03	3.22E-04	4.03E-05	5.03E-06
SN129	7.04E+01	6.90E-01	6.81E-03	6.73E-05	6.59E-07	6.41E-11	6.10E-17	5.83E-23	5.57E-29	5.30E-35	5.08E-41
SB129	3.96E+00	6.64E+00	6.24E+00	5.57E+00	4.90E+00	3.64E+00	2.27E+00	1.40E+00	8.64E-01	5.34E-01	3.29E-01
TE129M	7.48E-08	8.28E-04	1.71E-03	2.51E-03	3.22E-03	4.36E-03	5.52E-03	6.24E-03	6.68E-03	6.95E-03	7.13E-03
TE129	2.85E+00	3.92E+00	4.59E+00	4.77E+00	4.59E+00	3.80E+00	2.53E+00	1.59E+00	9.93E-01	6.15E-01	3.81E-01
SB130M	3.99E-01	7.53E-01	1.98E-03	5.19E-06	1.37E-08	9.43E-14	1.37E-21	3.12E-29	5.67E-37	1.03E-44	1.87E-52
SB130	6.84E+01	2.07E+01	5.89E+00	1.67E+00	4.72E-01	3.80E-02	8.66E-04	1.97E-05	4.50E-07	1.03E-08	2.34E-10

1

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	1.90E-02	1.80E-02	1.71E-02	1.61E-02	1.52E-02	1.36E-02	1.15E-02	9.74E-03	8.22E-03	6.97E-03	5.89E-03
SB131	1.59E+02	4.15E+01	6.78E+00	1.11E+00	1.83E-01	4.92E-03	2.17E-05	9.57E-08	4.21E-10	1.86E-12	9.26E-15
TE131M	7.64E-05	4.00E-01	4.56E-01	4.57E-01	4.48E-01	4.28E-01	3.99E-01	3.73E-01	3.48E-01	3.24E-01	3.03E-01
TE131	7.04E+01	7.64E+01	2.49E+01	6.48E+00	1.57E+00	1.48E-01	7.34E-02	6.78E-02	6.33E-02	5.92E-02	5.52E-02
I131	1.02E-02	3.54E-01	5.21E-01	5.72E-01	5.82E-01	5.87E-01	5.87E-01	5.82E-01	5.82E-01	5.77E-01	5.77E-01
TE132	8.19E-01	1.99E+00	1.97E+00	1.96E+00	1.94E+00	1.90E+00	1.85E+00	1.80E+00	1.76E+00	1.71E+00	1.66E+00
I132	2.01E+00	2.01E+00	2.00E+00	1.99E+00	1.98E+00	1.95E+00	1.91E+00	1.86E+00	1.81E+00	1.76E+00	1.72E+00
TE133M	9.95E-02	3.45E+01	1.50E+01	6.54E+00	2.84E+00	5.40E-01	4.44E-02	3.67E-03	3.02E-04	2.49E-05	2.06E-06
TE133	5.59E+02	3.17E+01	3.52E+00	1.17E+00	4.93E-01	9.33E-02	7.72E-03	6.35E-04	5.26E-05	4.32E-06	3.57E-07
I133	8.67E-01	9.33E+00	1.01E+01	1.01E+01	9.90E+00	9.38E+00	8.52E+00	7.72E+00	6.96E+00	6.35E+00	5.73E+00
XE133M	3.69E-08	2.10E-03	5.07E-03	8.10E-03	1.10E-02	1.66E-02	2.40E-02	3.05E-02	3.59E-02	4.06E-02	4.45E-02
XE133	6.44E-07	3.67E-02	8.90E-02	1.42E-01	1.95E-01	2.96E-01	4.33E-01	5.54E-01	6.63E-01	7.58E-01	8.43E-01
TE134	1.76E+02	8.15E+01	3.04E+01	1.13E+01	4.19E+00	5.80E-01	2.97E-02	1.52E-03	7.78E-05	4.00E-06	2.05E-07
I134	8.06E+01	1.08E+02	7.55E+01	4.43E+01	2.38E+01	6.03E+00	6.63E-01	6.77E-02	6.63E-03	6.36E-04	6.03E-05
I135	1.47E+01	2.59E+01	2.33E+01	2.10E+01	1.90E+01	1.54E+01	1.13E+01	8.27E+00	6.08E+00	4.47E+00	3.27E+00
XE135M	1.62E-03	7.47E+00	7.26E+00	6.58E+00	5.91E+00	4.81E+00	3.53E+00	2.59E+00	1.90E+00	1.39E+00	1.02E+00
XE135	1.69E+00	3.35E+00	4.90E+00	6.16E+00	7.18E+00	8.61E+00	9.54E+00	9.58E+00	9.12E+00	8.31E+00	7.43E+00
CS136	4.35E-03	4.34E-03	4.33E-03	4.32E-03	4.31E-03	4.29E-03	4.26E-03	4.23E-03	4.20E-03	4.18E-03	4.15E-03
CS137	7.19E-05	7.74E-04	7.74E-04	7.74E-04	7.74E-04	7.74E-04	7.74E-04	7.74E-04	7.74E-04	7.74E-04	7.74E-04
BA137M	1.51E-07	7.23E-04	7.23E-04	7.23E-04	7.23E-04	7.23E-04	7.23E-04	7.23E-04	7.23E-04	7.23E-04	7.23E-04
XE138	5.61E+02	4.83E+01	4.20E+00	3.64E-01	3.15E-02	2.36E-04	1.54E-07	9.96E-11	6.48E-14	4.21E-17	2.74E-20
CS138	8.35E+01	1.40E+02	4.87E+01	1.43E+01	4.01E+00	3.05E-01	6.35E-03	1.32E-04	2.74E-06	5.70E-08	1.18E-09
CS139	5.26E+02	1.68E+01	2.11E-01	2.65E-03	3.32E-05	5.21E-09	1.04E-14	2.05E-20	4.06E-26	8.05E-32	1.59E-37
BA139	9.72E+00	1.08E+02	6.68E+01	4.06E+01	2.46E+01	9.01E+00	2.00E+00	4.44E-01	9.87E-02	2.19E-02	4.86E-03
BA140	1.02E-01	6.36E-01	6.36E-01	6.31E-01	6.31E-01	6.26E-01	6.26E-01	6.21E-01	6.16E-01	6.11E-01	6.06E-01
LA140	2.42E-07	1.09E-02	2.15E-02	3.20E-02	4.22E-02	6.21E-02	9.07E-02	1.17E-01	1.43E-01	1.66E-01	1.89E-01
BA141	1.95E+02	5.89E+01	5.84E+00	5.79E-01	5.75E-02	5.70E-04	5.56E-07	5.42E-10	5.28E-13	5.19E-16	5.05E-19
LA141	1.80E+00	3.81E+01	3.55E+01	3.01E+01	2.53E+01	1.77E+01	1.04E+01	6.07E+00	3.57E+00	2.09E+00	1.23E+00
CE141	2.22E-07	2.47E-02	5.79E-02	8.71E-02	1.12E-01	1.50E-01	1.86E-01	2.07E-01	2.19E-01	2.26E-01	2.29E-01
BA142	5.18E+02	2.06E+01	4.69E-01	1.07E-02	2.44E-04	1.27E-07	1.50E-12	1.78E-17	2.12E-22	2.51E-27	2.98E-32
LA142	1.19E+01	8.25E+01	5.44E+01	3.46E+01	2.20E+01	8.90E+00	2.30E+00	5.92E-01	1.53E-01	3.93E-02	1.01E-02
LA143	1.96E+02	3.83E+01	1.96E+00	1.01E-01	5.18E-03	1.36E-05	1.83E-09	2.47E-13	3.32E-17	4.49E-21	6.05E-25
CE143	7.84E-02	5.00E+00	5.18E+00	5.04E+00	4.95E+00	4.77E+00	4.47E+00	4.20E+00	3.94E+00	3.70E+00	3.47E+00
PR143	2.29E-08	7.66E-03	1.85E-02	2.92E-02	3.97E-02	6.01E-02	8.85E-02	1.16E-01	1.40E-01	1.64E-01	1.85E-01
CE144	3.15E-03	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02
PR144	8.63E-07	2.05E-02	2.24E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02
PR145	1.26E-01	1.85E+01	1.64E+01	1.46E+01	1.30E+01	1.03E+01	7.28E+00	5.14E+00	3.64E+00	2.57E+00	1.82E+00
CE146	3.66E+02	1.88E+01	9.62E-01	4.92E-02	2.53E-03	6.67E-06	8.98E-10	1.21E-13	1.63E-17	2.20E-21	2.96E-25
PR146	7.57E+00	6.58E+01	1.49E+01	2.80E+00	5.05E-01	1.59E-02	8.77E-05	4.83E-07	2.68E-09	1.48E-11	8.08E-14
PR147	4.25E+01	1.23E+01	3.84E-01	1.20E-02	3.75E-04	3.66E-07	1.12E-11	3.42E-16	1.04E-20	3.18E-25	9.70E-30

1

HARRY
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	1.52E-05	2.86E-01	2.94E-01	2.93E-01	2.92E-01	2.91E-01	2.89E-01	2.86E-01	2.84E-01	2.82E-01	2.80E-01
ND149	2.15E+01	1.47E+01	9.98E+00	6.80E+00	4.60E+00	2.14E+00	6.72E-01	2.12E-01	6.68E-02	2.10E-02	6.64E-03
PM149	3.00E-03	2.35E-01	3.89E-01	4.93E-01	5.58E-01	6.27E-01	6.52E-01	6.39E-01	6.23E-01	5.99E-01	5.78E-01
PM150	2.46E-01	1.90E-01	1.47E-01	1.14E-01	8.79E-02	5.28E-02	2.44E-02	1.13E-02	5.24E-03	2.42E-03	1.12E-03
ND151	8.24E+01	2.58E+00	8.06E-02	2.52E-03	7.88E-05	7.69E-08	2.35E-12	7.18E-17	2.19E-21	6.66E-26	2.04E-30
PM151	5.23E-02	6.11E-01	6.15E-01	6.00E-01	5.85E-01	5.56E-01	5.15E-01	4.78E-01	4.45E-01	4.12E-01	3.83E-01
PM152	1.32E+02	1.29E-01	1.26E-04	1.23E-07	1.20E-10	1.15E-16	1.07E-25	9.97E-35	9.28E-44	8.67E-53	8.06E-62
SM153	1.75E-01	1.73E-01	1.70E-01	1.68E-01	1.66E-01	1.61E-01	1.54E-01	1.47E-01	1.41E-01	1.35E-01	1.29E-01
SM155	9.34E+00	1.53E+00	2.51E-01	4.11E-02	6.74E-03	1.82E-04	8.01E-07	3.53E-09	1.56E-11	6.93E-14	1.70E-16
EU155	6.87E-06	1.96E-04	2.27E-04	2.32E-04	2.33E-04	2.33E-04	2.33E-04	2.33E-04	2.33E-04	2.33E-04	2.33E-04
SM156	1.56E-01	1.45E-01	1.34E-01	1.25E-01	1.16E-01	9.99E-02	8.01E-02	6.42E-02	5.15E-02	4.13E-02	3.30E-02
EU156	4.55E-04	7.43E-04	1.01E-03	1.26E-03	1.49E-03	1.89E-03	2.41E-03	2.79E-03	3.12E-03	3.37E-03	3.55E-03
EU157	2.55E-02	8.46E-02	8.07E-02	7.72E-02	7.36E-02	6.72E-02	5.87E-02	5.13E-02	4.46E-02	3.89E-02	3.39E-02
EU158	8.83E-01	3.58E-01	1.45E-01	5.86E-02	2.37E-02	3.88E-03	2.59E-04	1.72E-05	1.14E-06	7.56E-08	5.02E-09
EU159	1.07E+00	1.07E-01	1.06E-02	1.05E-03	1.04E-04	1.03E-06	1.00E-09	9.79E-13	9.55E-16	9.34E-19	9.12E-22
GD159	4.60E-03	2.01E-02	2.09E-02	2.03E-02	1.96E-02	1.81E-02	1.61E-02	1.44E-02	1.28E-02	1.14E-02	1.02E-02
TB161	5.65E-05	4.07E-04	4.04E-04	4.03E-04	4.01E-04	3.97E-04	3.93E-04	3.88E-04	3.83E-04	3.79E-04	3.73E-04
TOTAL	1.22E+04	2.54E+03	9.17E+02	5.46E+02	4.04E+02	2.80E+02	1.98E+02	1.55E+02	1.26E+02	1.06E+02	9.18E+01

1

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	2.97E-06	2.93E-06	2.89E-06	2.78E-06	2.61E-06	2.29E-06	2.01E-06	1.55E-06	8.09E-07	2.20E-07	5.98E-08
NA 24	4.47E-03	1.47E-03	4.86E-04	1.74E-05	6.82E-08	1.04E-12	1.59E-17	3.70E-27	0.	0.	0.
MN 54	1.42E-05	1.41E-05	1.41E-05	1.38E-05	1.37E-05	1.35E-05	1.32E-05	1.26E-05	1.12E-05	8.93E-06	7.12E-06
FE 55	3.24E-05	3.24E-05	3.24E-05	3.22E-05	3.21E-05	3.20E-05	3.16E-05	3.12E-05	3.00E-05	2.80E-05	2.60E-05
FE 59	3.29E-05	3.24E-05	3.19E-05	3.05E-05	2.82E-05	2.42E-05	2.07E-05	1.52E-05	7.07E-06	1.51E-06	3.24E-07
CO 57	6.67E-05	6.67E-05	6.62E-05	6.62E-05	6.53E-05	6.33E-05	6.18E-05	5.88E-05	5.19E-05	4.01E-05	3.10E-05
CO 58	2.11E-04	2.09E-04	2.07E-04	2.01E-04	1.92E-04	1.74E-04	1.58E-04	1.30E-04	8.00E-05	3.02E-05	1.14E-05
CO 60	3.11E-05	3.11E-05	3.11E-05	3.11E-05	3.10E-05	3.10E-05	3.08E-05	3.06E-05	2.98E-05	2.89E-05	2.78E-05
CU 64	4.40E+00	1.20E+00	3.27E-01	6.64E-03	9.97E-06	2.27E-11	5.13E-17	2.64E-28	0.	0.	0.
CU 67	6.89E-04	5.25E-04	4.01E-04	1.78E-04	4.64E-05	3.13E-06	2.11E-07	9.60E-10	1.34E-15	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.28E-01	1.16E-01	1.04E-01	7.69E-02	4.60E-02	1.65E-02	5.91E-03	7.55E-04	4.46E-06	4.79E-10	3.23E-10
U240	1.37E+00	4.23E-01	1.30E-01	3.77E-03	1.03E-05	7.77E-11	5.84E-16	3.30E-26	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	1.23E-02	1.87E+01	1.39E+01	5.76E+00	1.32E+00	6.89E-02	3.60E-03	9.89E-06	3.89E-12	9.29E-22	9.29E-22
NP240M	2.17E-03	4.26E-01	1.31E-01	3.79E-03	1.04E-05	7.84E-11	5.90E-16	3.32E-26	0.	0.	0.
AM241	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09
CM242	3.56E-07	3.54E-07	3.52E-07	3.48E-07	3.41E-07	3.26E-07	3.13E-07	2.87E-07	2.34E-07	1.52E-07	9.95E-08
GE 77	3.89E-03	2.45E-03	5.61E-04	6.78E-06	4.31E-09	1.75E-15	7.04E-22	1.15E-34	0.	0.	0.
AS 77	4.02E-05	5.94E-03	4.30E-03	1.24E-03	1.46E-04	1.98E-06	2.68E-08	4.95E-12	2.29E-21	4.92E-40	1.06E-58
SE 77M	1.59E-09	1.79E-05	1.29E-05	3.74E-06	4.36E-07	5.93E-09	8.05E-11	1.49E-14	6.88E-24	1.47E-42	3.17E-61
AS 78	1.08E-02	9.61E-05	2.81E-09	2.38E-23	0.	0.	0.	0.	0.	0.	0.
BR 82	3.76E-04	2.35E-04	1.47E-04	3.57E-05	3.38E-06	3.04E-08	2.73E-10	2.20E-14	1.28E-24	4.41E-45	1.50E-65
BR 83	2.88E-01	7.57E-03	7.62E-06	7.74E-15	7.90E-30	0.	0.	0.	0.	0.	0.
KR 83M	1.49E-05	3.31E-02	3.76E-05	3.38E-14	3.47E-29	0.	0.	0.	0.	0.	0.
KR 85M	3.49E-03	1.99E-01	4.54E-03	5.39E-08	3.32E-16	1.26E-32	4.79E-49	0.	0.	0.	0.
KR 85	3.61E-06	9.48E-05	9.67E-05	9.67E-05	9.67E-05	9.67E-05	9.67E-05	9.62E-05	9.53E-05	9.34E-05	9.20E-05
KR 87	5.83E+01	1.15E-04	2.28E-10	1.76E-27	0.	0.	0.	0.	0.	0.	0.
KR 88	3.33E+01	8.76E-02	2.30E-04	4.17E-12	5.26E-25	0.	0.	0.	0.	0.	0.
RB 88	8.46E+00	9.76E-02	2.57E-04	4.67E-12	5.86E-25	0.	0.	0.	0.	0.	0.
SR 89	3.10E-06	9.28E-02	9.14E-02	8.78E-02	8.24E-02	7.20E-02	6.29E-02	4.84E-02	2.48E-02	6.52E-03	1.72E-03
SR 90	6.23E-06	6.40E-04	6.40E-04	6.40E-04	6.40E-04	6.40E-04	6.40E-04	6.40E-04	6.34E-04	6.34E-04	6.29E-04
Y 90	9.23E-12	1.47E-04	2.59E-04	4.66E-04	5.95E-04	6.34E-04	6.40E-04	6.40E-04	6.34E-04	6.34E-04	6.29E-04
SR 91	8.37E-01	3.00E+00	5.37E-01	3.08E-03	5.64E-07	1.91E-14	6.48E-22	7.37E-37	0.	0.	0.

1 HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
Y 91M	5.64E-05	1.94E+00	3.47E-01	1.99E-03	3.66E-07	1.23E-14	4.17E-22	4.76E-37	0.	0.	0.	0.
Y 91	2.31E-08	9.22E-02	1.09E-01	1.09E-01	1.03E-01	9.11E-02	8.11E-02	6.43E-02	3.56E-02	1.10E-02	3.37E-03	0.
SR 92	1.07E+01	1.33E-01	2.87E-04	2.89E-12	1.35E-25	0.	0.	0.	0.	0.	0.	0.
Y 92	4.93E-01	1.40E+00	1.55E-02	1.19E-08	6.96E-19	2.38E-39	8.15E-60	0.	0.	0.	0.	0.
Y 93	5.25E-01	3.55E+00	6.92E-01	5.20E-03	1.50E-06	1.24E-13	1.02E-20	6.96E-35	0.	0.	0.	0.
ZR 95	1.01E-03	1.27E-01	1.25E-01	1.21E-01	1.15E-01	1.03E-01	9.30E-02	7.52E-02	4.40E-02	1.52E-02	5.20E-03	0.
NB 95M	2.16E-11	4.29E-04	7.83E-04	1.49E-03	2.02E-03	2.13E-03	1.96E-03	1.59E-03	9.34E-04	3.22E-04	1.11E-04	0.
NB 95	1.13E-10	2.45E-03	4.85E-03	1.16E-02	2.16E-02	3.72E-02	4.80E-02	5.96E-02	5.74E-02	2.76E-02	1.06E-02	0.
ZR 97	2.44E+00	4.16E+00	1.56E+00	8.28E-02	6.22E-04	3.50E-08	1.97E-12	6.22E-21	3.51E-42	0.	0.	0.
NB 97M	1.26E-02	3.99E+00	1.50E+00	7.99E-02	5.97E-04	3.36E-08	1.89E-12	5.97E-21	3.38E-42	0.	0.	0.
NB 97	1.22E+00	4.18E+00	1.57E+00	8.32E-02	6.26E-04	3.77E-08	2.12E-12	6.73E-21	3.78E-42	0.	0.	0.
MO 99	7.32E-03	2.38E+00	1.86E+00	8.82E-01	2.55E-01	2.13E-02	1.78E-03	1.24E-05	5.04E-11	8.30E-22	1.37E-32	0.
TC 99M	6.81E-08	2.09E+00	1.76E+00	8.44E-01	2.43E-01	2.03E-02	1.70E-03	1.18E-05	4.80E-11	7.93E-22	1.31E-32	0.
RU103	6.21E-05	1.42E-01	1.39E-01	1.32E-01	1.21E-01	1.01E-01	8.52E-02	6.01E-02	2.50E-02	4.34E-03	7.56E-04	0.
RH103M	4.14E-09	1.42E-01	1.39E-01	1.32E-01	1.21E-01	1.01E-01	8.52E-02	6.01E-02	2.50E-02	4.34E-03	7.56E-04	0.
RU105	4.26E-01	4.07E-01	9.57E-03	1.26E-07	9.20E-16	4.91E-32	2.63E-48	0.	0.	0.	0.	0.
RH105M	2.80E-03	4.07E-01	9.60E-03	1.26E-07	9.23E-16	4.94E-32	2.64E-48	0.	0.	0.	0.	0.
RH105	4.60E-09	1.47E+00	9.60E-01	2.39E-01	2.36E-02	2.29E-04	2.23E-06	2.10E-10	1.82E-20	1.37E-40	1.03E-60	0.
RU106	3.65E-04	6.92E-03	6.89E-03	6.86E-03	6.80E-03	6.68E-03	6.53E-03	6.29E-03	5.72E-03	4.73E-03	3.92E-03	0.
RH106	3.95E-06	6.92E-03	6.89E-03	6.86E-03	6.80E-03	6.68E-03	6.53E-03	6.29E-03	5.72E-03	4.73E-03	3.92E-03	0.
PD109	5.07E-03	1.29E-01	3.76E-02	9.34E-04	1.97E-06	8.77E-12	3.90E-17	7.72E-28	0.	0.	0.	0.
AG109M	2.93E-05	1.29E-01	3.77E-02	9.35E-04	1.98E-06	8.78E-12	3.90E-17	7.73E-28	0.	0.	0.	0.
PD111M	6.21E-01	3.01E-02	1.46E-03	1.68E-07	4.54E-14	3.31E-27	2.43E-40	0.	0.	0.	0.	0.
PD111	2.21E-01	2.43E-02	1.18E-03	1.35E-07	3.66E-14	2.66E-27	1.95E-40	0.	0.	0.	0.	0.
AG111M	1.76E-03	3.17E-02	1.54E-03	1.78E-07	4.79E-14	3.52E-27	2.57E-40	0.	0.	0.	0.	0.
AG111	6.25E-10	1.73E-02	1.66E-02	1.26E-02	7.94E-03	3.15E-03	1.25E-03	1.97E-04	1.94E-06	1.88E-10	1.82E-14	0.
PD112	1.20E-01	5.46E-02	2.47E-02	2.30E-03	4.36E-05	1.58E-08	5.76E-12	7.56E-19	4.77E-36	0.	0.	0.
AG112	3.62E-06	6.35E-02	2.92E-02	2.71E-03	5.17E-05	1.87E-08	6.79E-12	8.95E-19	5.61E-36	0.	0.	0.
AG113	1.13E-03	1.20E-02	5.18E-04	4.21E-08	6.44E-15	1.51E-28	3.52E-42	0.	0.	0.	0.	0.
CD115M	3.33E-09	9.62E-05	9.46E-05	9.01E-05	8.33E-05	7.07E-05	6.04E-05	4.36E-05	1.95E-05	3.87E-06	7.75E-07	0.
CD115	1.29E-06	1.93E-02	1.42E-02	5.59E-03	1.18E-03	5.26E-05	2.35E-06	4.68E-09	8.27E-16	2.59E-29	8.11E-43	0.
IN115M	1.60E-11	2.04E-02	1.55E-02	6.10E-03	1.29E-03	5.75E-05	2.56E-06	5.10E-09	9.04E-16	2.83E-29	8.85E-43	0.
CD117	2.86E-02	6.24E-04	6.07E-07	5.67E-16	5.03E-31	0.	0.	0.	0.	0.	0.	0.
IN117M	1.38E-06	2.59E-03	3.00E-06	2.89E-15	2.57E-30	0.	0.	0.	0.	0.	0.	0.
IN117	5.53E-11	1.71E-03	2.02E-06	1.96E-15	1.74E-30	0.	0.	0.	0.	0.	0.	0.
SN121	5.82E-04	3.32E-02	1.79E-02	2.82E-03	1.29E-04	2.73E-07	5.75E-10	2.56E-15	1.07E-28	0.	0.	0.
SN123	3.11E-06	3.25E-04	3.22E-04	3.17E-04	3.08E-04	2.91E-04	2.76E-04	2.47E-04	1.87E-04	1.08E-04	6.19E-05	0.
SN125	8.80E-03	8.18E-03	7.60E-03	6.09E-03	4.20E-03	2.01E-03	9.62E-04	2.20E-04	5.51E-06	3.47E-09	2.17E-12	0.
SB125	5.28E-05	5.86E-05	6.41E-05	7.83E-05	9.60E-05	1.16E-04	1.25E-04	1.30E-04	1.28E-04	1.19E-04	1.11E-04	0.
SB126	1.65E-03	1.57E-03	1.48E-03	1.25E-03	9.50E-04	5.44E-04	3.14E-04	1.03E-04	6.46E-06	3.14E-08	6.31E-09	0.

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
SN127	2.44E+00	8.84E-04	3.21E-07	1.53E-17	9.62E-35	0.	0.	0.	0.	0.	0.	0.
SB127	2.85E-02	1.17E-01	9.78E-02	5.71E-02	2.34E-02	3.91E-03	6.53E-04	1.83E-05	2.38E-09	4.07E-17	6.92E-25	
TE127M	2.30E-10	1.78E-04	3.27E-04	6.34E-04	8.76E-04	9.66E-04	9.31E-04	8.25E-04	6.02E-04	3.18E-04	1.68E-04	
TE127	1.61E-02	8.37E-02	8.22E-02	5.01E-02	2.12E-02	4.34E-03	1.49E-03	8.33E-04	5.95E-04	3.15E-04	1.66E-04	
SB128	6.91E-01	1.18E-01	1.86E-02	7.26E-05	7.04E-09	6.61E-17	6.22E-25	5.48E-41	0.	0.	0.	
SB129	3.96E+00	2.03E-01	4.23E-03	3.85E-08	1.53E-16	2.42E-33	3.82E-50	0.	0.	0.	0.	
TE129M	7.48E-08	7.88E-03	7.88E-03	7.44E-03	6.73E-03	5.48E-03	4.45E-03	2.97E-03	1.07E-03	1.39E-04	1.81E-05	
TE129	2.85E+00	2.37E-01	9.89E-03	4.77E-03	4.30E-03	3.51E-03	2.86E-03	1.90E-03	6.86E-04	8.95E-05	1.16E-05	
I130	1.90E-02	4.98E-03	1.30E-03	2.33E-05	2.84E-08	4.24E-14	6.32E-20	1.41E-31	0.	0.	0.	
TE131M	7.64E-05	2.67E-01	1.53E-01	2.91E-02	1.82E-03	7.09E-06	2.77E-08	4.23E-13	3.85E-25	0.	0.	
TE131	7.04E+01	4.87E-02	2.80E-02	5.32E-03	3.32E-04	1.30E-06	5.06E-09	7.75E-14	7.04E-26	0.	0.	
I131	1.02E-02	5.52E-01	5.21E-01	4.19E-01	2.76E-01	1.16E-01	4.93E-02	8.81E-03	1.19E-04	2.17E-08	3.95E-12	
XE131M	2.77E-11	2.56E-04	4.85E-04	1.01E-03	1.45E-03	1.43E-03	1.06E-03	4.39E-04	2.93E-05	8.76E-08	2.47E-10	
TE132	8.19E-01	1.62E+00	1.31E+00	6.90E-01	2.38E-01	2.82E-02	3.34E-03	4.69E-05	1.10E-09	6.01E-19	3.28E-28	
I132	2.01E+00	1.67E+00	1.35E+00	7.10E-01	2.45E-01	2.90E-02	3.44E-03	4.84E-05	1.13E-09	6.16E-19	3.38E-28	
I133	8.67E-01	4.83E+00	2.18E+00	2.02E-01	3.86E-03	1.40E-06	5.07E-10	6.68E-17	4.20E-34	0.	0.	
XE133M	3.69E-08	4.56E-02	5.40E-02	3.17E-02	7.44E-03	3.49E-04	1.62E-05	3.52E-08	7.72E-15	3.69E-28	1.77E-41	
XE133	6.44E-07	8.76E-01	1.17E+00	1.05E+00	5.73E-01	1.55E-01	4.16E-02	3.00E-03	4.18E-06	8.10E-12	1.57E-17	
I135	1.47E+01	2.40E+00	2.00E-01	1.16E-04	4.73E-10	7.81E-21	1.28E-31	3.49E-53	0.	0.	0.	
XE135M	1.62E-03	7.47E-01	6.25E-02	3.63E-05	1.48E-10	2.43E-21	4.01E-32	1.09E-53	0.	0.	0.	
XE135	1.69E+00	6.46E+00	1.58E+00	9.03E-03	1.11E-06	1.55E-14	2.18E-22	4.31E-38	0.	0.	0.	
CS136	4.35E-03	4.12E-03	3.91E-03	3.33E-03	2.55E-03	1.50E-03	8.81E-04	3.02E-04	2.10E-05	1.01E-07	4.91E-10	
CS137	7.19E-05	7.74E-04	7.74E-04	7.74E-04	7.74E-04	7.74E-04	7.74E-04	7.74E-04	7.70E-04	7.66E-04	7.62E-04	
BA137M	1.51E-07	7.23E-04	7.23E-04	7.23E-04	7.23E-04	7.23E-04	7.23E-04	7.23E-04	7.19E-04	7.14E-04	7.10E-04	
BA139	9.72E+00	1.04E-03	6.13E-09	1.26E-24	0.	0.	0.	0.	0.	0.	0.	
BA140	1.02E-01	6.02E-01	5.72E-01	4.85E-01	3.70E-01	2.15E-01	1.25E-01	4.24E-02	2.83E-03	1.26E-05	5.58E-08	
LA140	2.42E-07	2.10E-01	3.37E-01	4.66E-01	4.14E-01	2.48E-01	1.44E-01	4.90E-02	3.26E-03	1.45E-05	6.45E-08	
LA141	1.80E+00	7.14E-01	1.00E-02	2.77E-08	1.52E-17	4.52E-36	1.35E-54	0.	0.	0.	0.	
CE141	2.22E-07	2.47E-01	2.45E-01	2.30E-01	2.06E-01	1.67E-01	1.34E-01	8.76E-02	3.01E-02	3.54E-03	4.17E-04	
LA142	1.19E+01	2.61E-03	5.04E-08	3.71E-22	0.	0.	0.	0.	0.	0.	0.	
CE143	7.84E-02	3.22E+00	1.95E+00	4.29E-01	3.45E-02	2.23E-04	1.44E-06	6.05E-11	6.83E-22	0.	0.	
PR143	2.29E-08	2.06E-01	3.21E-01	4.15E-01	3.55E-01	2.16E-01	1.31E-01	4.72E-02	3.78E-03	2.40E-05	1.52E-07	
CE144	3.15E-03	2.25E-02	2.24E-02	2.23E-02	2.20E-02	2.15E-02	2.09E-02	2.00E-02	1.76E-02	1.38E-02	1.08E-02	
PR144	8.63E-07	2.25E-02	2.24E-02	2.23E-02	2.20E-02	2.15E-02	2.09E-02	2.00E-02	1.76E-02	1.38E-02	1.08E-02	
PR145	1.26E-01	1.29E+00	7.95E-02	1.89E-05	1.72E-11	1.42E-23	1.18E-35	0.	0.	0.	0.	
ND147	1.52E-05	2.55E-01	2.40E-01	1.99E-01	1.45E-01	7.81E-02	4.17E-02	1.20E-02	5.25E-04	1.02E-06	1.98E-09	
PM147	4.21E-14	1.91E-04	3.70E-04	8.44E-04	1.46E-03	2.23E-03	2.63E-03	2.93E-03	2.96E-03	2.76E-03	2.56E-03	
ND149	2.15E+01	2.09E-03	2.02E-07	1.84E-19	1.57E-39	0.	0.	0.	0.	0.	0.	
PM149	3.00E-03	5.54E-01	4.06E-01	1.58E-01	3.31E-02	1.44E-03	6.27E-05	1.19E-07	1.88E-14	4.64E-28	1.16E-41	
PM150	2.46E-01	5.20E-04	1.09E-06	1.03E-14	4.30E-28	0.	0.	0.	0.	0.	0.	

1

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	5.23E-02	3.56E-01	1.97E-01	3.31E-02	1.70E-03	4.45E-06	1.17E-08	8.10E-14	1.02E-26	0.	0.	0.
SM153	1.75E-01	1.23E-01	8.65E-02	2.99E-02	5.08E-03	1.48E-04	4.29E-06	3.61E-09	7.44E-17	3.17E-32	1.35E-47	0.
SM156	1.56E-01	2.65E-02	4.53E-03	2.23E-05	3.21E-09	6.60E-17	1.36E-24	5.80E-40	0.	0.	0.	0.
EU155	6.87E-06	2.33E-04	2.32E-04	2.32E-04	2.32E-04	2.31E-04	2.30E-04	2.28E-04	2.24E-04	2.15E-04	2.06E-04	0.
EU156	4.55E-04	3.70E-03	4.10E-03	3.68E-03	2.92E-03	1.84E-03	1.16E-03	4.59E-04	4.55E-05	4.48E-07	4.42E-09	0.
EU157	2.55E-02	2.95E-02	9.92E-03	3.72E-04	1.56E-06	2.76E-11	4.88E-16	1.52E-25	0.	0.	0.	0.
GD159	4.60E-03	9.05E-03	3.60E-03	2.25E-04	2.21E-06	2.14E-10	2.08E-14	1.95E-22	1.66E-42	0.	0.	0.
TB161	5.65E-05	3.69E-04	3.33E-04	2.47E-04	1.49E-04	5.47E-05	2.00E-05	2.68E-06	1.77E-08	7.67E-13	3.33E-17	0.
TOTAL	2.70E+02	7.98E+01	3.97E+01	1.45E+01	5.51E+00	1.98E+00	1.22E+00	6.88E-01	3.10E-01	1.17E-01	5.87E-02	0.

1

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	2.97E-06	2.56E-08	2.38E-09	2.21E-10	1.78E-13	1.42E-16	1.07E-20	6.83E-27	0.	0.	0.
MN 54	1.42E-05	6.13E-06	4.04E-06	2.65E-06	7.59E-07	2.16E-07	4.08E-08	3.33E-09	7.83E-13	2.83E-18	1.02E-23
FE 59	3.29E-05	1.19E-07	7.12E-09	4.28E-10	9.29E-14	2.01E-17	2.61E-22	1.23E-29	0.	0.	0.
CO 57	6.67E-05	2.63E-05	1.65E-05	1.03E-05	2.55E-06	6.28E-07	9.69E-09	5.88E-09	5.14E-13	4.22E-19	0.
CO 58	2.11E-04	6.07E-06	1.03E-06	1.74E-07	8.49E-10	4.13E-12	3.41E-15	8.09E-20	3.09E-35	0.	0.
CO 60	3.11E-05	2.73E-05	2.54E-05	2.38E-05	1.95E-05	1.60E-05	1.23E-05	8.31E-06	2.23E-06	3.10E-07	4.27E-08
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AM241	1.28E-01	3.20E-10	3.12E-10	3.04E-10	2.84E-10	2.64E-10	2.40E-10	2.08E-10	1.30E-10	6.35E-11	3.12E-11
CM242	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09	5.24E-09
KR 85	3.56E-07	7.54E-08	3.46E-08	1.59E-08	1.55E-09	1.51E-10	6.78E-12	6.41E-14	1.84E-18	1.72E-18	1.60E-18
SR 89	3.61E-06	8.97E-05	8.69E-05	8.41E-05	7.67E-05	6.92E-05	6.09E-05	5.02E-05	2.65E-05	1.01E-05	3.87E-06
SR 90	3.10E-06	7.24E-04	6.34E-05	5.57E-06	3.75E-09	2.53E-12	1.49E-16	6.79E-23	4.93E-44	0.	0.
Y 90	6.23E-06	6.23E-04	6.17E-04	6.12E-04	5.89E-04	5.66E-04	5.39E-04	5.01E-04	3.91E-04	2.70E-04	1.87E-04
Y 91	9.23E-12	6.23E-04	6.17E-04	6.12E-04	5.89E-04	5.66E-04	5.39E-04	5.01E-04	3.91E-04	2.70E-04	1.87E-04
ZR 95	2.31E-08	1.56E-03	1.81E-04	2.11E-05	3.30E-08	5.18E-11	9.48E-15	2.33E-20	4.70E-39	0.	0.
NB 95M	1.01E-03	2.61E-03	3.72E-04	5.29E-05	1.54E-07	4.49E-10	1.86E-13	1.57E-18	1.92E-35	0.	0.
NB 95	2.16E-11	5.52E-05	7.87E-06	1.13E-06	3.27E-09	9.52E-12	3.94E-15	3.33E-20	4.08E-37	0.	0.
RU103	1.13E-10	5.61E-03	8.05E-04	1.15E-04	3.33E-07	9.65E-10	4.03E-13	3.40E-18	4.17E-35	0.	0.
RH103M	6.21E-05	2.41E-04	9.87E-06	4.06E-07	2.77E-11	1.90E-15	5.33E-21	2.51E-29	0.	0.	0.
RU106	4.14E-09	2.42E-04	9.87E-06	4.06E-07	2.77E-11	1.90E-15	5.33E-21	2.51E-29	0.	0.	0.
RH106	3.65E-04	3.47E-03	2.46E-03	1.74E-03	6.20E-04	2.20E-04	5.54E-05	7.01E-06	7.06E-09	2.27E-13	7.30E-18
SN123	3.95E-06	3.47E-03	2.46E-03	1.74E-03	6.20E-04	2.20E-04	5.54E-05	7.01E-06	7.06E-09	2.27E-13	7.30E-18
SB125	3.11E-06	4.31E-05	1.56E-05	5.68E-06	2.72E-07	1.31E-08	2.28E-10	5.25E-13	8.41E-22	5.42E-35	3.48E-48
TE125M	5.28E-05	1.06E-04	9.35E-05	8.22E-05	5.60E-05	3.81E-05	2.28E-05	1.05E-05	8.11E-07	1.72E-08	3.67E-10
TE127M	1.42E-12	4.34E-05	3.86E-05	3.40E-05	2.32E-05	1.58E-05	9.44E-06	4.36E-06	3.35E-07	7.14E-09	1.52E-10
TE127	2.30E-10	1.10E-04	3.45E-05	1.08E-05	3.32E-07	1.02E-08	9.82E-11	9.23E-14	7.59E-24	5.67E-39	4.23E-54
CS137	1.61E-02	1.09E-04	3.41E-05	1.07E-05	3.28E-07	1.01E-08	9.70E-11	9.15E-14	7.51E-24	5.59E-39	4.19E-54
BA137M	7.19E-05	7.57E-04	7.49E-04	7.40E-04	7.14E-04	6.88E-04	6.58E-04	6.15E-04	4.86E-04	3.45E-04	2.44E-04
CE141	1.51E-07	7.10E-04	7.01E-04	6.93E-04	6.67E-04	6.45E-04	6.15E-04	5.77E-04	4.56E-04	3.23E-04	2.28E-04
CE144	2.22E-07	9.59E-05	1.93E-06	3.87E-08	3.16E-13	2.57E-18	4.21E-25	2.79E-35	0.	0.	0.
PR144	3.15E-03	9.25E-03	5.94E-03	3.79E-03	9.95E-04	2.62E-04	4.40E-05	3.04E-06	4.09E-10	6.42E-16	1.00E-21
PM147	8.63E-07	9.25E-03	5.94E-03	3.79E-03	9.95E-04	2.62E-04	4.40E-05	3.04E-06	4.09E-10	6.42E-16	1.00E-21
EU155	4.21E-14	2.45E-03	2.14E-03	1.88E-03	1.26E-03	8.49E-04	4.98E-04	2.26E-04	1.61E-05	3.04E-07	5.75E-09
	6.87E-06	2.01E-04	1.87E-04	1.74E-04	1.40E-04	1.12E-04	8.38E-05	5.41E-05	1.26E-05	1.42E-06	1.60E-07
TOTAL	1.50E-01	4.25E-02	2.36E-02	1.62E-02	7.37E-03	4.53E-03	3.24E-03	2.57E-03	1.78E-03	1.22E-03	8.50E-04

1

HARRY
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.08E+02	1.19E+04
1.00E+00	3.41E+01	2.48E+03
2.00E+00	1.35E+01	9.25E+02
3.00E+00	7.21E+00	5.47E+02
4.00E+00	4.47E+00	3.95E+02
6.00E+00	2.33E+00	2.64E+02
9.00E+00	1.37E+00	1.82E+02
1.20E+01	1.00E+00	1.40E+02
1.50E+01	7.86E-01	1.13E+02
1.80E+01	6.42E-01	9.43E+01
2.10E+01	5.38E-01	8.07E+01
1.00E+00 DAYS	4.54E-01	6.94E+01
2.00E+00	2.05E-01	3.30E+01
5.00E+00	8.05E-02	1.23E+01
1.00E+01	3.72E-02	5.11E+00
2.00E+01	1.48E-02	1.97E+00
3.00E+01	8.41E-03	1.20E+00
5.00E+01	3.79E-03	6.61E-01
1.00E+02	1.25E-03	2.84E-01
2.00E+02	4.21E-04	9.92E-02
3.00E+02	1.65E-04	4.85E-02
1.00E+00 YEARS	9.70E-05	3.53E-02
1.50E+00	3.31E-05	2.03E-02
2.00E+00	2.08E-05	1.45E-02
3.50E+00	1.27E-05	7.25E-03
5.00E+00	1.00E-05	4.84E-03
7.00E+00	8.63E-06	3.71E-03
1.00E+01	7.67E-06	3.10E-03
2.00E+01	5.84E-06	2.26E-03
3.50E+01	4.11E-06	1.56E-03
5.00E+01	2.90E-06	1.09E-03

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BE 7	1.90E-06	1.90E-06	1.90E-06	1.90E-06	1.90E-06	1.89E-06	1.89E-06	1.88E-06	1.88E-06	1.88E-06	1.88E-06
NA 24	2.86E-03	2.73E-03	2.61E-03	2.49E-03	2.38E-03	2.17E-03	1.89E-03	1.65E-03	1.43E-03	1.25E-03	1.08E-03
MN 54	9.10E-06	9.10E-06	9.10E-06	9.10E-06	9.10E-06	9.10E-06	9.10E-06	9.02E-06	9.02E-06	9.02E-06	9.02E-06
FE 55	2.07E-05	2.07E-05	2.07E-05	2.07E-05	2.07E-05	2.07E-05	2.07E-05	2.07E-05	2.07E-05	2.07E-05	2.07E-05
FE 59	2.10E-05	2.10E-05	2.10E-05	2.10E-05	2.10E-05	2.10E-05	2.10E-05	2.09E-05	2.09E-05	2.08E-05	2.08E-05
CO 57	4.27E-05	4.27E-05	4.27E-05	4.27E-05	4.27E-05	4.27E-05	4.27E-05	4.27E-05	4.27E-05	4.27E-05	4.27E-05
CO 58	1.35E-04	1.35E-04	1.35E-04	1.35E-04	1.35E-04	1.35E-04	1.35E-04	1.35E-04	1.34E-04	1.34E-04	1.34E-04
CO 60	1.99E-05	1.99E-05	1.99E-05	1.99E-05	1.99E-05	1.99E-05	1.99E-05	1.99E-05	1.99E-05	1.99E-05	1.99E-05
CU 64	2.82E+00	2.67E+00	2.53E+00	2.40E+00	2.27E+00	2.04E+00	1.73E+00	1.47E+00	1.25E+00	1.06E+00	9.04E-01
CU 67	4.41E-04	4.37E-04	4.30E-04	4.26E-04	4.22E-04	4.11E-04	3.96E-04	3.84E-04	3.72E-04	3.58E-04	3.48E-04
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	8.22E-02	8.19E-02	8.15E-02	8.12E-02	8.08E-02	8.01E-02	7.90E-02	7.81E-02	7.71E-02	7.60E-02	7.51E-02
U239	2.30E+03	3.91E+02	6.68E+01	1.14E+01	1.93E+00	5.63E-02	2.79E-04	1.38E-06	6.81E-09	3.37E-11	1.67E-13
U240	8.80E-01	8.38E-01	7.98E-01	7.60E-01	7.23E-01	6.55E-01	5.65E-01	4.87E-01	4.21E-01	3.63E-01	3.13E-01
NP239	7.85E-03	1.32E+01	1.52E+01	1.55E+01	1.53E+01	1.50E+01	1.44E+01	1.39E+01	1.34E+01	1.29E+01	1.24E+01
NP240M	1.39E-03	8.41E-01	8.05E-01	7.67E-01	7.30E-01	6.60E-01	5.70E-01	4.92E-01	4.24E-01	3.66E-01	3.16E-01
NP240	3.53E-11	1.81E-11	9.41E-12	4.86E-12	2.51E-12	6.72E-13	9.26E-14	1.28E-14	1.76E-15	2.43E-16	3.36E-17
AM241	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09
CM242	2.28E-07	2.28E-07	2.28E-07	2.28E-07	2.28E-07	2.28E-07	2.26E-07	2.26E-07	2.26E-07	2.26E-07	2.26E-07
GE 75	7.61E-06	3.69E-02	2.22E-02	1.34E-02	8.05E-03	2.92E-03	6.37E-04	1.40E-04	3.05E-05	6.64E-06	1.45E-06
GE 77	4.99E-03	1.28E-02	1.21E-02	1.14E-02	1.07E-02	9.46E-03	7.87E-03	6.54E-03	5.45E-03	4.53E-03	3.77E-03
AS 77	5.15E-05	8.15E-03	8.24E-03	8.29E-03	8.35E-03	8.40E-03	8.40E-03	8.35E-03	8.22E-03	8.05E-03	7.85E-03
SE 77M	2.03E-09	2.44E-05	2.48E-05	2.49E-05	2.49E-05	2.51E-05	2.53E-05	2.51E-05	2.48E-05	2.42E-05	2.35E-05
GE 78	7.69E-01	4.80E-01	2.99E-01	1.87E-01	1.17E-01	4.54E-02	1.10E-02	2.67E-03	6.51E-04	1.58E-04	3.84E-05
AS 78	1.38E-02	2.30E-01	2.83E-01	2.65E-01	2.22E-01	1.31E-01	4.86E-02	1.61E-02	4.99E-03	1.49E-03	4.32E-04
AS 79	1.52E+01	1.50E-01	1.48E-03	1.46E-05	1.43E-07	1.39E-11	1.32E-17	1.26E-23	1.21E-29	1.15E-35	1.10E-41
SE 79M	2.26E-02	2.65E-01	2.61E-03	2.58E-05	2.53E-07	2.45E-11	2.34E-17	2.23E-23	2.13E-29	2.03E-35	1.94E-41
BR 80	9.57E-02	9.03E-03	8.48E-04	7.98E-05	7.51E-06	6.66E-08	5.58E-11	4.65E-14	3.87E-17	3.23E-20	2.70E-23
SE 81M	7.90E-02	3.69E+00	1.78E+00	8.55E-01	4.11E-01	9.61E-02	1.08E-02	1.21E-03	1.35E-04	1.51E-05	1.70E-06
SE 81	9.65E-01	4.36E+00	2.52E+00	1.26E+00	6.11E-01	1.43E-01	1.60E-02	1.79E-03	2.00E-04	2.25E-05	2.52E-06
BR 82	4.82E-04	4.73E+00	4.63E+04	4.55E+04	4.45E+04	4.28E+04	4.04E+04	3.81E+04	3.59E+04	3.38E+04	3.19E+04
SE 83	4.43E+01	8.40E+00	1.59E+00	3.02E-01	5.71E-02	2.05E-03	1.40E-05	9.49E-08	6.48E-10	4.39E-12	2.79E-14
BR 83	3.68E-01	5.50E+00	5.09E+00	4.00E+00	3.04E+00	1.72E+00	7.26E-01	3.05E-01	1.29E-01	5.45E-02	2.30E-02
KR 83M	1.90E-05	1.24E+00	2.54E+00	3.16E+00	3.26E+00	2.72E+00	1.60E+00	8.25E-01	3.97E-01	1.84E-01	8.25E-02

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BR 84	9.34E-02	1.61E+01	4.35E+00	1.18E+00	3.18E-01	2.33E-02	4.60E-04	9.09E-06	1.80E-07	3.56E-09	7.03E-11	
KR 85M	4.47E-03	9.58E+00	8.15E+00	6.96E+00	5.95E+00	4.34E+00	2.71E+00	1.69E+00	1.05E+00	6.55E-01	4.09E-01	
KR 87	7.46E+01	4.31E+01	2.49E+01	1.44E+01	8.32E+00	2.79E+00	5.41E-01	1.05E-01	2.03E-02	3.93E-03	7.60E-04	
KR 88	4.26E+01	3.33E+01	2.60E+01	2.03E+01	1.58E+01	9.61E+00	4.59E+00	2.19E+00	1.04E+00	4.95E-01	2.35E-01	
RB 88	1.08E+01	3.36E+01	2.87E+01	2.26E+01	1.77E+01	1.08E+01	5.14E+00	2.45E+00	1.17E+00	5.54E-01	2.63E-01	
RB 89	5.18E+01	4.86E+01	3.27E+00	2.20E+01	1.47E-02	6.67E-05	2.02E-08	6.09E-12	1.85E-15	5.62E-19	1.70E-22	
SR 89	3.96E-06	1.39E-01	1.48E-01	1.48E-01	1.48E-01	1.48E-01	1.48E-01	1.48E-01	1.48E-01	1.47E-01	1.47E-01	
SR 90	7.98E-06	8.19E-04	8.19E-04	8.19E-04	8.19E-04	8.19E-04	8.19E-04	8.19E-04	8.19E-04	8.19E-04	8.19E-04	
SR 91	9.38E-01	1.75E+01	1.63E+01	1.52E+01	1.41E+01	1.22E+01	9.85E+00	7.97E+00	6.43E+00	5.16E+00	4.17E+00	
Y 91M	6.31E-05	6.02E+00	8.20E+00	8.79E+00	8.67E+00	7.79E+00	6.37E+00	5.13E+00	4.14E+00	3.33E+00	2.69E+00	
Y 91	2.58E-08	5.35E-03	1.23E-02	1.97E-02	2.69E-02	4.03E-02	5.72E-02	7.08E-02	8.20E-02	9.09E-02	9.80E-02	
SR 92	6.84E+00	3.06E+01	2.37E+01	1.83E+01	1.42E+01	8.50E+00	3.95E+00	1.83E+00	8.50E-01	3.95E-01	1.84E-01	
Y 92	3.15E-01	6.43E+00	1.01E+01	1.20E+01	1.27E+01	1.21E+01	9.29E+00	6.33E+00	4.07E+00	2.51E+00	1.51E+00	
SR 93	2.75E+02	4.74E+00	2.62E-02	1.45E-04	7.98E-07	2.44E-11	4.11E-18	6.94E-25	1.17E-31	1.98E-38	3.33E-45	
Y 93	3.36E-01	1.09E+01	1.02E+01	9.55E+00	8.92E+00	7.79E+00	6.34E+00	5.18E+00	4.21E+00	3.45E+00	2.81E+00	
Y 94	4.01E+01	5.47E+01	7.04E+00	9.08E-01	1.17E-01	1.95E-03	4.17E-06	8.95E-09	1.91E-11	4.17E-14	2.31E-15	
Y 95	1.73E+02	1.63E+01	3.59E-01	7.92E-03	1.74E-04	8.46E-08	9.06E-13	9.68E-18	1.03E-22	1.11E-27	1.18E-32	
ZR 95	6.49E-04	8.49E-02	8.66E-02	8.66E-02	8.66E-02	8.66E-02	8.66E-02	8.63E-02	8.63E-02	8.60E-02	8.60E-02	
NB 95	7.23E-11	5.24E-05	1.22E-04	1.92E-04	2.62E-04	4.02E-04	6.09E-04	8.20E-04	1.03E-03	1.23E-03	1.44E-03	
ZR 97	1.56E+00	6.81E+00	6.51E+00	6.27E+00	6.00E+00	5.54E+00	4.90E+00	4.33E+00	3.85E+00	3.39E+00	3.01E+00	
NB 97M	8.05E-03	6.54E+00	6.27E+00	6.03E+00	5.79E+00	5.33E+00	4.71E+00	4.17E+00	3.69E+00	3.26E+00	2.88E+00	
NB 97	7.83E-01	3.42E+00	4.82E+00	5.49E+00	5.76E+00	5.73E+00	5.22E+00	4.66E+00	4.12E+00	3.63E+00	3.23E+00	
NB 98	8.86E+00	3.92E+00	1.73E+00	7.67E-01	3.40E-01	6.65E-02	5.75E-03	4.97E-04	4.33E-05	3.75E-06	3.23E-07	
MO 99	4.69E-03	1.93E+00	1.91E+00	1.90E+00	1.88E+00	1.84E+00	1.78E+00	1.73E+00	1.68E+00	1.62E+00	1.57E+00	
TC 99M	4.36E-08	1.85E-01	3.46E-01	4.90E-01	6.15E-01	8.21E-01	1.04E+00	1.18E+00	1.27E+00	1.32E+00	1.34E+00	
MO101	1.34E+02	6.06E+01	3.52E+00	2.04E-01	1.18E-02	3.96E-05	7.70E-09	1.50E-12	2.92E-16	5.66E-20	1.10E-23	
TC101	5.66E+00	1.70E+02	1.86E+01	1.52E+00	1.11E-01	5.00E-04	1.25E-07	2.80E-11	5.94E-15	1.22E-18	2.47E-22	
MO102	1.11E+03	2.53E+01	5.76E-01	1.32E-02	3.00E-04	1.56E-07	1.86E-12	2.20E-17	2.61E-22	3.09E-27	3.67E-32	
TC102M	7.14E-01	2.14E+01	4.91E-01	1.12E-02	2.55E-04	1.32E-07	1.57E-12	1.86E-17	2.20E-22	2.62E-27	3.11E-32	
TC102	3.34E+03	1.27E+01	2.91E-01	6.61E-03	1.51E-04	7.88E-08	9.36E-13	1.11E-17	1.32E-22	1.56E-27	1.85E-32	
RU103	7.95E-05	1.84E-01	1.84E-01	1.84E-01	1.84E-01	1.83E-01	1.83E-01	1.83E-01	1.82E-01	1.82E-01	1.81E-01	
RH103M	5.30E-09	9.53E-02	1.41E-01	1.64E-01	1.74E-01	1.81E-01	1.83E-01	1.83E-01	1.82E-01	1.82E-01	1.82E-01	
TC104	6.83E+01	4.90E+01	4.90E+00	4.86E-01	4.80E-02	4.73E-04	4.62E-07	4.52E-10	4.41E-13	4.31E-16	4.21E-19	
RU105	5.45E-01	1.89E+01	1.61E+01	1.38E+01	1.18E+01	8.63E+00	5.41E+00	3.38E+00	2.12E+00	1.32E+00	8.31E-01	
RH105M	3.58E-03	1.89E+01	1.62E+01	1.38E+01	1.18E+01	8.67E+00	5.41E+00	3.39E+00	2.12E+00	1.33E+00	8.31E-01	
RH105	5.89E-09	3.84E-01	7.12E-01	9.83E-01	1.21E+00	1.55E+00	1.85E+00	1.99E+00	2.03E+00	2.01E+00	1.96E+00	
RU106	4.68E-04	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	
RH106	5.06E-06	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	8.85E-03	
RH107	1.11E-01	1.51E+01	2.29E+00	3.44E-01	5.19E-02	1.18E-03	4.08E-06	1.41E-08	4.84E-11	1.66E-146	1.65E-17	
PD107M	2.31E-04	3.07E+00	4.63E-01	7.00E-02	1.06E-02	2.41E-04	8.30E-07	2.86E-09	9.85E-12	3.40E-14	1.16E-16	

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	6.49E-03	5.39E-01	5.12E-01	4.85E-01	4.61E-01	4.16E-01	3.58E-01	3.06E-01	2.63E-01	2.25E-01	1.93E-01
AG109M	3.75E-05	5.39E-01	5.12E-01	4.85E-01	4.62E-01	4.17E-01	3.58E-01	3.06E-01	2.63E-01	2.25E-01	1.93E-01
PD111M	7.95E-01	7.00E-01	6.17E-01	5.46E-01	4.80E-01	3.74E-01	2.56E-01	1.75E-01	1.20E-01	8.21E-02	5.63E-02
PD111	2.83E-01	5.10E-01	4.89E-01	4.36E-01	3.86E-01	3.00E-01	2.06E-01	1.41E-01	9.64E-02	6.61E-02	4.54E-02
AG111M	2.25E-03	6.88E-01	6.46E-01	5.78E-01	5.10E-01	3.94E-01	2.70E-01	1.85E-01	1.27E-01	8.69E-02	5.93E-02
AG111	8.01E-10	2.37E-03	4.98E-03	7.32E-03	9.40E-03	1.28E-02	1.65E-02	1.89E-02	2.04E-02	2.14E-02	2.20E-02
PD112	1.54E-01	1.49E-01	1.44E-01	1.39E-01	1.35E-01	1.26E-01	1.15E-01	1.04E-01	9.39E-02	8.50E-02	7.70E-02
AG112	4.64E-06	2.95E-02	5.21E-02	7.00E-02	8.31E-02	9.96E-02	1.09E-01	1.09E-01	1.04E-01	9.67E-02	8.92E-02
AG113	1.45E-03	3.11E-01	2.72E-01	2.39E-01	2.10E-01	1.61E-01	1.09E-01	7.37E-02	4.98E-02	3.36E-02	2.27E-02
AG115	5.21E-01	5.58E-01	6.95E-02	8.68E-03	1.09E-03	1.70E-05	3.32E-08	6.49E-11	1.26E-13	1.25E-162	1.16E-16
CD115M	4.26E-09	1.13E-04	1.27E-04	1.29E-04	1.29E-04	1.29E-04	1.29E-04	1.29E-04	1.29E-04	1.29E-04	1.28E-04
CD115	1.65E-06	3.10E-02	3.34E-02	3.33E-02	3.29E-02	3.20E-02	3.08E-02	2.96E-02	2.85E-02	2.75E-02	2.64E-02
IN115M	2.05E-11	3.42E-03	7.61E-03	1.13E-02	1.44E-02	1.92E-02	2.37E-02	2.61E-02	2.72E-02	2.75E-02	2.72E-02
CD117	3.66E-02	6.10E-01	4.59E-01	3.43E-01	2.57E-01	1.44E-01	6.05E-02	2.55E-02	1.07E-02	4.51E-03	1.90E-03
IN117M	1.76E-06	2.12E-01	3.07E-01	3.33E-01	3.22E-01	2.54E-01	1.45E-01	7.43E-02	3.57E-02	1.65E-02	7.47E-03
IN117	7.09E-11	3.87E-02	9.36E-02	1.30E-01	1.45E-01	1.34E-01	8.50E-02	4.55E-02	2.26E-02	1.06E-02	4.90E-03
CD118	2.42E+00	1.04E+00	4.46E-01	1.90E-01	8.14E-02	1.49E-02	1.17E-03	9.14E-05	7.19E-06	5.63E-07	4.42E-08
IN118	1.61E-01	1.04E+00	4.46E-01	1.91E-01	8.14E-02	1.49E-02	1.17E-03	9.18E-05	7.19E-06	5.63E-07	4.42E-08
CD119	6.04E+00	9.42E-02	1.47E-03	2.30E-05	3.59E-07	8.79E-11	3.35E-16	1.28E-21	4.87E-27	1.86E-32	7.12E-38
IN119M	9.11E-03	1.02E+00	1.11E-01	1.12E-02	1.11E-03	1.10E-05	1.07E-08	1.05E-11	1.02E-14	9.96E-18	9.74E-21
IN119	4.49E-01	5.36E-02	6.22E-03	6.31E-04	6.31E-05	6.18E-07	6.04E-10	5.91E-13	5.77E-16	5.63E-19	5.50E-22
SN121	7.45E-04	7.67E-02	7.45E-02	7.28E-02	7.10E-02	6.75E-02	6.22E-02	5.79E-02	5.35E-02	4.95E-02	4.60E-02
SN123M	4.24E-01	7.92E-01	2.81E-01	9.93E-02	3.51E-02	4.38E-03	1.94E-04	8.58E-06	3.80E-07	1.68E-08	7.41E-10
SN123	3.98E-06	4.16E-04	4.16E-04	4.16E-04	4.16E-04	4.16E-04	4.16E-04	4.16E-04	4.16E-04	4.16E-04	4.16E-04
SN125	1.13E-02	1.12E-02	1.12E-02	1.12E-02	1.11E-02	1.11E-02	1.10E-02	1.09E-02	1.08E-02	1.06E-02	1.06E-02
SB125	6.76E-05	6.79E-05	6.82E-05	6.85E-05	6.88E-05	6.94E-05	7.06E-05	7.15E-05	7.23E-05	7.32E-05	7.41E-05
SB126	2.12E-03	2.11E-03	2.11E-03	2.10E-03	2.10E-03	2.09E-03	2.07E-03	2.06E-03	2.04E-03	2.03E-03	2.02E-03
SN127	3.13E+00	2.24E+00	1.61E+00	1.16E+00	8.37E-01	4.31E-01	1.60E-01	5.96E-02	2.21E-02	8.22E-03	3.05E-03
SB127	3.65E-02	1.26E-01	1.39E-01	1.48E-01	1.55E-01	1.61E-01	1.64E-01	1.62E-01	1.60E-01	1.56E-01	1.53E-01
TE127	2.06E-02	2.56E-02	3.12E-02	3.70E-02	4.27E-02	5.36E-02	6.86E-02	8.01E-02	8.92E-02	9.62E-02	1.01E-01
SN128	2.10E+01	1.04E+01	5.13E+00	2.53E+00	1.25E+00	3.06E-01	3.69E-02	4.45E-03	5.37E-04	6.51E-05	7.85E-06
SB128M	1.07E-02	1.18E+01	6.12E+00	3.02E+00	1.49E+00	3.65E-01	4.40E-02	5.31E-03	6.40E-04	7.74E-05	9.35E-06
SB128	8.85E-01	8.52E-01	8.01E-01	7.51E-01	7.01E-01	6.01E-01	4.80E-01	3.81E-01	3.02E-01	2.40E-01	1.90E-01
SN129M	1.35E+01	6.73E+00	3.38E+00	1.69E+00	8.44E-01	2.11E-01	2.64E-02	3.30E-03	4.12E-04	5.16E-05	6.44E-06
SN129	9.01E+01	8.84E-01	8.73E-03	8.61E-05	8.44E-07	8.21E-11	7.81E-17	7.47E-23	7.13E-29	6.79E-35	6.50E-41
SB129	5.07E+00	8.50E+00	7.98E+00	7.13E+00	6.27E+00	4.66E+00	2.90E+00	1.80E+00	1.11E+00	6.84E-01	4.21E-01
TE129M	9.58E-08	1.06E-03	2.18E-03	3.21E-03	4.12E-03	5.59E-03	7.07E-03	7.98E-03	8.55E-03	8.90E-03	9.12E-03
TE129	3.65E+00	5.02E+00	5.87E+00	6.10E+00	5.87E+00	4.86E+00	3.24E+00	2.04E+00	1.27E+00	7.87E-01	4.88E-01
SB130M	5.11E-01	9.64E-01	2.53E-03	6.65E-06	1.75E-08	1.21E-13	2.20E-21	4.00E-29	7.26E-37	1.32E-44	2.40E-52
SB130	8.75E+01	2.65E+01	7.54E+00	2.13E+00	6.04E-01	4.86E-02	1.11E-03	2.53E-05	5.76E-07	1.31E-08	3.00E-10

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	2.44E-02	2.31E-02	2.18E-02	2.06E-02	1.95E-02	1.75E-02	1.47E-02	1.25E-02	1.05E-02	8.92E-03	7.54E-03	
SB131	2.04E+02	5.31E+01	8.69E+00	1.43E+00	2.34E-01	6.30E-03	2.77E-05	1.23E-07	5.39E-10	2.38E-12	1.19E-14	
TE131M	9.79E-05	5.12E-01	5.84E-01	5.85E-01	5.74E-01	5.48E-01	5.11E-01	4.77E-01	4.45E-01	4.15E-01	3.88E-01	
TE131	9.01E+01	9.79E+01	3.19E+01	8.30E+00	2.02E+00	1.89E-01	9.40E-02	8.69E-02	8.10E-02	7.58E-02	7.06E-02	
I131	1.31E-02	4.54E-01	6.68E-01	7.32E-01	7.45E-01	7.52E-01	7.52E-01	7.45E-01	7.45E-01	7.39E-01	7.39E-01	
TE132	1.05E+00	2.55E+00	2.52E+00	2.50E+00	2.48E+00	2.44E+00	2.37E+00	2.31E+00	2.25E+00	2.19E+00	2.13E+00	
I132	2.57E+00	2.57E+00	2.56E+00	2.55E+00	2.53E+00	2.50E+00	2.44E+00	2.38E+00	2.31E+00	2.26E+00	2.20E+00	
TE133M	1.27E-01	4.41E+01	1.92E+01	8.37E+00	3.64E+00	6.91E-01	5.69E-02	4.69E-03	3.87E-04	3.19E-05	2.63E-06	
TE133	7.16E+02	4.06E+01	4.51E+00	1.49E+00	6.31E-01	1.19E-01	9.88E-03	8.13E-04	6.73E-05	5.54E-06	4.57E-07	
I133	1.11E+00	1.19E+01	1.29E+01	1.29E+01	1.27E+01	1.20E+01	1.09E+01	9.88E+00	8.91E+00	8.13E+00	7.34E+00	
XE133M	4.72E-08	2.69E-03	6.49E-03	1.04E-02	1.41E-02	2.12E-02	3.07E-02	3.90E-02	4.60E-02	5.20E-02	5.69E-02	
XE133	8.25E-07	4.69E-02	1.14E-01	1.82E-01	2.50E-01	3.78E-01	5.55E-01	7.09E-01	8.49E-01	9.70E-01	1.08E+00	
TE134	2.25E+02	1.04E+02	3.89E+01	1.44E+01	5.36E+00	7.43E-01	3.80E-02	1.95E-03	9.97E-05	5.12E-06	2.62E-07	
I134	1.03E+02	1.38E+02	9.67E+01	5.67E+01	3.04E+01	7.73E+00	8.49E-01	8.67E-02	8.49E-03	8.14E-04	7.73E-05	
I135	1.88E+01	3.31E+01	2.99E+01	2.69E+01	2.43E+01	1.97E+01	1.45E+01	1.06E+01	7.78E+00	5.73E+00	4.18E+00	
XE135M	2.08E-03	9.57E+00	9.30E+00	8.43E+00	7.57E+00	6.16E+00	4.52E+00	3.31E+00	2.43E+00	1.78E+00	1.31E+00	
XE135	2.17E+00	4.29E+00	6.27E+00	7.89E+00	9.19E+00	1.10E+01	1.22E+01	1.23E+01	1.17E+01	1.06E+01	9.51E+00	
CS136	5.57E-03	5.55E-03	5.54E-03	5.53E-03	5.52E-03	5.49E-03	5.45E-03	5.42E-03	5.38E-03	5.35E-03	5.31E-03	
CS137	9.20E-05	9.92E-04	9.92E-04	9.92E-04	9.92E-04	9.92E-04	9.92E-04	9.92E-04	9.92E-04	9.92E-04	9.92E-04	
BA137M	1.94E-07	9.25E-04	9.25E-04	9.25E-04	9.25E-04	9.25E-04	9.25E-04	9.25E-04	9.25E-04	9.25E-04	9.25E-04	
XE138	7.18E+02	6.18E+01	5.37E+00	4.66E-01	4.03E-02	3.02E-04	1.97E-07	1.28E-10	8.30E-14	5.39E-17	3.50E-20	
CS138	1.07E+02	1.80E+02	6.24E+01	1.83E+01	5.13E+00	3.91E-01	8.13E-03	1.69E-04	3.50E-06	7.29E-08	1.51E-09	
CS139	6.74E+02	2.15E+01	2.70E+01	3.39E-03	4.25E-05	6.68E-09	1.33E-14	2.63E-20	5.20E-26	1.03E-31	2.04E-37	
BA139	1.24E+01	1.39E+02	8.56E+01	5.20E+01	3.14E+01	1.15E+01	2.56E+00	5.68E-01	1.26E-01	2.80E-02	6.22E-03	
BA140	1.11E-01	6.92E-01	6.92E-01	6.86E-01	6.86E-01	6.81E-01	6.81E-01	6.76E-01	6.71E-01	6.65E-01	6.60E-01	
LA140	2.63E-07	1.18E-02	2.34E-02	3.48E-02	4.59E-02	6.76E-02	9.87E-02	1.28E-01	1.55E-01	1.81E-01	2.05E-01	
BA141	1.66E+02	5.01E+01	4.97E+00	4.93E-01	4.89E-02	4.85E-04	4.74E-07	4.62E-10	4.50E-13	4.42E-16	4.30E-19	
LA141	1.53E+00	3.24E+01	3.03E+01	2.56E+01	2.15E+01	1.51E+01	8.84E+00	5.17E+00	3.04E+00	1.78E+00	1.05E+00	
CE141	1.89E-07	2.11E-02	4.93E-02	7.42E-02	9.51E-02	1.27E-01	1.58E-01	1.76E-01	1.86E-01	1.92E-01	1.95E-01	
BA142	3.31E+02	1.32E+01	3.00E-01	6.85E-03	1.56E-04	8.11E-08	9.63E-13	1.14E-17	1.36E-22	1.61E-27	1.91E-32	
LA142	7.61E+00	5.28E+01	3.48E+01	2.22E+01	1.41E+01	5.70E+00	1.47E+00	3.79E-01	9.77E-02	2.52E-02	6.49E-03	
LA143	1.26E+02	2.45E+01	1.26E+00	6.46E-02	3.32E-03	8.69E-06	1.17E-09	1.58E-13	2.13E-17	2.87E-21	3.88E-25	
CE143	5.02E-02	3.20E+00	3.32E+00	3.23E+00	3.17E+00	3.05E+00	2.86E+00	2.69E+00	2.52E+00	2.37E+00	2.22E+00	
PR143	1.47E-08	4.90E-03	1.18E-02	1.87E-02	2.54E-02	3.85E-02	5.67E-02	7.40E-02	8.98E-02	1.05E-01	1.19E-01	
CE144	2.01E-03	1.44E-02	1.44E-02	1.44E-02	1.44E-02	1.44E-02	1.44E-02	1.44E-02	1.44E-02	1.44E-02	1.44E-02	
PR144	5.53E-07	1.31E-02	1.43E-02	1.44E-02	1.44E-02	1.44E-02	1.44E-02	1.44E-02	1.44E-02	1.44E-02	1.44E-02	
PR145	8.05E-02	1.18E+01	1.05E+01	9.36E+00	8.35E+00	6.61E+00	4.66E+00	3.29E+00	2.33E+00	1.65E+00	1.16E+00	
CE146	2.34E+02	1.20E+01	6.16E-01	3.15E-02	1.62E-03	4.27E-06	5.75E-10	7.75E-14	1.04E-17	1.41E-21	1.90E-25	
PR146	4.84E+00	4.22E+01	9.55E+00	1.80E+00	3.23E-01	1.02E-02	5.61E-05	3.09E-07	1.71E-09	9.47E-12	5.17E-14	
PR147	2.72E+01	7.88E+00	2.46E-01	7.68E-03	2.40E-04	2.35E-07	7.16E-12	2.19E-16	6.67E-21	2.04E-25	6.21E-30	

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	9.72E-06	1.83E-01	1.88E-01	1.88E-01	1.87E-01	1.86E-01	1.85E-01	1.83E-01	1.82E-01	1.81E-01	1.79E-01	
ND149	1.38E+01	9.39E+00	6.39E+00	4.35E+00	2.95E+00	1.37E+00	4.30E-01	1.36E-01	4.28E-02	1.35E-02	4.25E-03	
PM149	1.92E-03	1.50E-01	2.49E-01	3.16E-01	3.57E-01	4.02E-01	4.17E-01	4.09E-01	3.99E-01	3.83E-01	3.70E-01	
PM150	1.58E-01	1.22E-01	9.43E-02	7.28E-02	5.63E-02	3.38E-02	1.56E-02	7.23E-03	3.35E-03	1.55E-03	7.18E-04	
ND151	5.28E+01	1.65E+00	5.16E-02	1.61E-03	5.04E-05	4.92E-08	1.50E-12	4.59E-17	1.40E-21	4.26E-26	1.31E-30	
PM151	3.35E-02	3.91E-01	3.94E-01	3.84E-01	3.75E-01	3.56E-01	3.30E-01	3.06E-01	2.85E-01	2.64E-01	2.45E-01	
PM152	8.45E+01	8.27E-02	8.06E-05	7.88E-08	7.69E-11	7.35E-17	6.84E-26	6.38E-35	5.94E-44	5.55E-53	5.16E-62	
SM153	1.12E-01	1.11E-01	1.09E-01	1.07E-01	1.06E-01	1.03E-01	9.84E-02	9.40E-02	9.00E-02	8.63E-02	8.25E-02	
SM155	5.98E+00	9.82E-01	1.61E-01	2.63E-02	4.32E-03	1.16E-04	5.13E-07	2.26E-09	9.96E-12	4.44E-14	1.09E-16	
EU155	4.40E-06	1.25E-04	1.45E-04	1.48E-04	1.49E-04	1.49E-04	1.49E-04	1.49E-04	1.49E-04	1.49E-04	1.49E-04	
SM156	9.97E-02	9.25E-02	8.60E-02	7.98E-02	7.41E-02	6.40E-02	5.13E-02	4.11E-02	3.30E-02	2.64E-02	2.11E-02	
EU156	2.91E-04	4.75E-04	6.45E-04	8.04E-04	9.51E-04	1.21E-03	1.54E-03	1.78E-03	2.00E-03	2.16E-03	2.27E-03	
EU157	1.63E-02	5.42E-02	5.17E-02	4.94E-02	4.71E-02	4.30E-02	3.76E-02	3.28E-02	2.86E-02	2.49E-02	2.17E-02	
EU158	5.65E-01	2.29E-01	9.26E-02	3.75E-02	1.52E-02	2.49E-03	1.66E-04	1.10E-05	7.29E-07	4.84E-08	3.22E-09	
EU159	6.87E-01	6.83E-02	6.77E-03	6.72E-04	6.66E-05	6.57E-07	6.42E-10	6.27E-13	6.11E-16	5.98E-19	5.84E-22	
GD159	2.94E-03	1.29E-02	1.34E-02	1.30E-02	1.25E-02	1.16E-02	1.03E-02	9.21E-03	8.19E-03	7.30E-03	6.51E-03	
TB161	3.62E-05	2.60E-04	2.59E-04	2.58E-04	2.57E-04	2.54E-04	2.52E-04	2.48E-04	2.45E-04	2.42E-04	2.39E-04	
TOTAL	1.19E+04	2.48E+03	9.25E+02	5.47E+02	3.95E+02	2.64E+02	1.82E+02	1.40E+02	1.13E+02	9.43E+01	8.07E+01	

1

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	1.90E-06	1.88E-06	1.85E-06	1.78E-06	1.67E-06	1.46E-06	1.29E-06	9.90E-07	5.18E-07	1.41E-07	3.83E-08	
NA 24	2.86E-03	9.44E-04	3.11E-04	1.12E-05	4.37E-08	6.67E-13	1.02E-17	2.37E-27	0.	0.	0.	0.
MN 54	9.10E-06	9.02E-06	9.02E-06	8.86E-06	8.78E-06	8.62E-06	8.46E-06	8.06E-06	7.19E-06	5.72E-06	4.56E-06	
FE 55	2.07E-05	2.07E-05	2.07E-05	2.06E-05	2.06E-05	2.05E-05	2.02E-05	2.00E-05	1.92E-05	1.79E-05	1.66E-05	
FE 59	2.10E-05	2.07E-05	2.04E-05	1.95E-05	1.80E-05	1.55E-05	1.33E-05	9.75E-06	4.53E-06	9.65E-07	2.07E-07	
CO 57	4.27E-05	4.27E-05	4.24E-05	4.24E-05	4.18E-05	4.05E-05	3.96E-05	3.77E-05	3.32E-05	2.57E-05	1.99E-05	
CO 58	1.35E-04	1.34E-04	1.33E-04	1.29E-04	1.23E-04	1.11E-04	1.01E-04	8.31E-05	5.12E-05	1.94E-05	7.31E-06	
CO 60	1.99E-05	1.99E-05	1.99E-05	1.99E-05	1.98E-05	1.98E-05	1.97E-05	1.96E-05	1.91E-05	1.85E-05	1.78E-05	
CU 64	2.82E+00	7.67E-01	2.09E-01	4.25E-03	6.38E-06	1.45E-11	3.28E-17	1.69E-28	0.	0.	0.	
CU 67	4.41E-04	3.36E-04	2.57E-04	1.14E-04	2.97E-05	2.01E-06	1.35E-07	6.14E-10	8.59E-16	0.	0.	
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
U237	8.22E-02	7.42E-02	6.69E-02	4.92E-02	2.94E-02	1.05E-02	3.78E-03	4.83E-04	2.85E-06	3.07E-10	2.07E-10	
U240	8.80E-01	2.71E-01	8.31E-02	2.41E-03	6.62E-06	4.97E-11	3.74E-16	2.11E-26	0.	0.	0.	
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
NP239	7.85E-03	1.20E+01	8.93E+00	3.69E+00	8.43E-01	4.41E-02	2.31E-03	6.33E-06	2.49E-12	5.94E-22	5.94E-22	
NP240M	1.39E-03	2.73E-01	8.38E-02	2.43E-03	6.67E-06	5.02E-11	3.77E-16	2.13E-26	0.	0.	0.	
AM241	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.35E-09	
CM242	2.28E-07	2.26E-07	2.25E-07	2.23E-07	2.18E-07	2.09E-07	2.01E-07	1.84E-07	1.50E-07	9.74E-08	6.37E-08	
GE 77	4.99E-03	3.14E-03	7.18E-04	8.68E-06	5.52E-09	2.23E-15	9.01E-22	1.47E-34	0.	0.	0.	
AS 77	5.15E-05	7.61E-03	5.50E-03	1.59E-03	1.87E-04	2.53E-06	3.44E-08	6.34E-12	2.94E-21	6.30E-40	1.35E-58	
SE 77M	2.03E-09	2.29E-05	1.65E-05	4.78E-06	5.58E-07	7.59E-09	1.03E-10	1.90E-14	8.81E-24	1.88E-42	4.06E-61	
AS 78	1.38E-02	1.23E-04	3.60E-09	3.04E-23	0.	0.	0.	0.	0.	0.	0.	
BR 82	4.82E-04	3.01E-04	1.88E-04	4.57E-05	4.33E-06	3.89E-08	3.49E-10	2.82E-14	1.65E-24	5.65E-45	1.92E-65	
BR 83	3.68E-01	9.70E-03	9.75E-06	9.91E-15	1.01E-29	0.	0.	0.	0.	0.	0.	
KR 83M	1.90E-05	4.24E-02	4.82E-05	4.33E-14	4.44E-29	0.	0.	0.	0.	0.	0.	
KR 85M	4.47E-03	2.55E-01	5.81E-03	6.90E-08	4.25E-16	1.62E-32	6.13E-49	0.	0.	0.	0.	
KR 85	4.62E-06	1.21E-04	1.24E-04	1.24E-04	1.24E-04	1.24E-04	1.24E-04	1.23E-04	1.22E-04	1.20E-04	1.18E-04	
KR 87	7.46E+01	1.47E-04	2.91E-10	2.26E-27	0.	0.	0.	0.	0.	0.	0.	
KR 88	4.26E+01	1.12E-01	2.94E-04	5.34E-12	6.73E-25	0.	0.	0.	0.	0.	0.	
RB 88	1.08E+01	1.25E-01	3.29E-04	5.98E-12	7.50E-25	0.	0.	0.	0.	0.	0.	
SR 89	3.96E-06	1.19E-01	1.17E-01	1.12E-01	1.05E-01	9.22E-02	8.06E-02	6.20E-02	3.17E-02	8.35E-03	2.20E-03	
SR 90	7.98E-06	8.19E-04	8.19E-04	8.19E-04	8.19E-04	8.19E-04	8.19E-04	8.19E-04	8.12E-04	8.12E-04	8.05E-04	
Y 90	1.18E-11	1.88E-04	3.32E-04	5.97E-04	7.61E-04	8.12E-04	8.19E-04	8.19E-04	8.12E-04	8.12E-04	8.05E-04	
SR 91	9.38E-01	3.36E+00	6.02E-01	3.45E-03	6.31E-07	2.14E-14	7.26E-22	8.26E-37	0.	0.	0.	

1

HARRY
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRATORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
Y 91M	6.31E-05	2.17E+00	3.88E-01	2.23E-03	4.10E-07	1.38E-14	4.67E-22	5.33E-37	0.	0.	0.	0.
Y 91	2.58E-08	1.03E-01	1.22E-01	1.22E-01	1.15E-01	1.02E-01	9.09E-02	7.20E-02	3.98E-02	1.23E-02	3.77E-03	0.
SR 92	6.84E+00	8.53E-02	1.84E-04	1.85E-12	8.66E-26	0.	0.	0.	0.	0.	0.	0.
Y 92	3.15E-01	8.94E-01	9.93E-03	7.64E-09	4.46E-19	1.52E-39	5.22E-60	0.	0.	0.	0.	0.
Y 93	3.36E-01	2.27E+00	4.43E-01	3.33E-03	9.58E-07	7.91E-14	6.53E-21	4.46E-35	0.	0.	0.	0.
ZR 95	6.49E-04	8.12E-02	8.03E-02	7.77E-02	7.38E-02	6.61E-02	5.95E-02	4.81E-02	2.82E-02	9.71E-03	3.33E-03	0.
NB 95M	1.38E-11	2.75E-04	5.01E-04	9.57E-04	1.29E-03	1.36E-03	1.26E-03	1.02E-03	5.98E-04	2.06E-04	7.09E-05	0.
NB 95	7.23E-11	1.57E-03	3.10E-03	7.43E-03	1.38E-02	2.38E-02	3.08E-02	3.82E-02	3.67E-02	1.77E-02	6.78E-03	0.
ZR 97	1.56E+00	2.66E+00	1.00E+00	5.30E-02	3.98E-04	2.24E-08	1.26E-12	3.98E-21	2.25E-42	0.	0.	0.
NB 97M	8.05E-03	2.56E+00	9.61E-01	5.11E-02	3.82E-04	2.15E-08	1.21E-12	3.82E-21	2.16E-42	0.	0.	0.
NB 97	7.83E-01	2.67E+00	1.00E+00	5.33E-02	4.01E-04	2.41E-08	1.36E-12	4.31E-21	2.42E-42	0.	0.	0.
MO 99	4.69E-03	1.53E+00	1.19E+00	5.64E-01	1.63E-01	1.36E-02	1.14E-03	7.94E-06	3.22E-11	5.32E-22	8.75E-33	0.
TC 99M	4.36E-08	1.34E+00	1.13E+00	5.40E-01	1.56E-01	1.30E-02	1.09E-03	7.58E-06	3.08E-11	5.08E-22	8.36E-33	0.
RU103	7.95E-05	1.81E-01	1.78E-01	1.69E-01	1.55E-01	1.30E-01	1.09E-01	7.70E-02	3.20E-02	5.55E-03	9.68E-04	0.
RH103M	5.30E-09	1.81E-01	1.78E-01	1.69E-01	1.55E-01	1.30E-01	1.09E-01	7.70E-02	3.21E-02	5.55E-03	9.68E-04	0.
RU105	5.45E-01	5.21E-01	1.23E-02	1.61E-07	1.18E-15	6.29E-32	3.37E-48	0.	0.	0.	0.	0.
RH105M	3.58E-03	5.21E-01	1.23E-02	1.62E-07	1.18E-15	6.33E-32	3.38E-48	0.	0.	0.	0.	0.
RH105	5.89E-09	1.88E+00	1.23E+00	3.06E-01	3.02E-02	2.94E-04	2.85E-06	2.69E-10	2.34E-20	1.75E-40	1.32E-60	0.
RU106	4.68E-04	8.85E-03	8.82E-03	8.78E-03	8.70E-03	8.55E-03	8.36E-03	8.05E-03	7.32E-03	6.06E-03	5.02E-03	0.
RH106	5.06E-06	8.85E-03	8.82E-03	8.78E-03	8.70E-03	8.55E-03	8.36E-03	8.05E-03	7.32E-03	6.06E-03	5.02E-03	0.
PD109	6.49E-03	1.65E-01	4.82E-02	1.20E-03	2.52E-06	1.12E-11	5.00E-17	9.89E-28	0.	0.	0.	0.
AG109M	3.75E-05	1.65E-01	4.83E-02	1.20E-03	2.53E-06	1.12E-11	5.00E-17	9.90E-28	0.	0.	0.	0.
PD111M	7.95E-01	3.86E-02	1.87E-03	2.15E-07	5.81E-14	4.24E-27	3.11E-40	0.	0.	0.	0.	0.
PD111	2.83E-01	3.11E-02	1.51E-03	1.73E-07	4.69E-14	3.41E-27	2.50E-40	0.	0.	0.	0.	0.
AG111M	2.25E-03	4.06E-02	1.98E-03	2.27E-07	6.14E-14	4.51E-27	3.29E-40	0.	0.	0.	0.	0.
AG111	8.01E-10	2.21E-02	2.12E-02	1.62E-02	1.02E-02	4.03E-03	1.60E-03	2.52E-04	2.48E-06	2.41E-10	2.33E-14	0.
PD112	1.54E-01	7.00E-02	3.17E-02	2.94E-03	5.59E-05	2.03E-08	7.37E-12	9.67E-19	6.11E-36	0.	0.	0.
AG112	4.64E-06	8.12E-02	3.73E-02	3.47E-03	6.62E-05	2.40E-08	8.69E-12	1.15E-18	7.19E-36	0.	0.	0.
AG113	1.45E-03	1.53E-02	6.64E-04	5.39E-08	8.25E-15	1.93E-28	4.51E-42	0.	0.	0.	0.	0.
CD115M	4.26E-09	1.23E-04	1.21E-04	1.15E-04	1.07E-04	9.05E-05	7.73E-05	5.58E-05	2.50E-05	4.96E-06	9.92E-07	0.
CD115	1.65E-06	2.48E-02	1.82E-02	7.15E-03	1.51E-03	6.74E-05	3.01E-06	6.00E-09	1.06E-15	3.32E-29	1.04E-42	0.
IN115M	2.05E-11	2.61E-02	1.98E-02	7.81E-03	1.65E-03	7.36E-05	3.28E-06	6.53E-09	1.16E-15	3.62E-29	1.13E-42	0.
CD117	3.66E-02	7.99E-04	7.77E-07	7.26E-16	6.44E-31	0.	0.	0.	0.	0.	0.	0.
IN117M	1.76E-06	3.32E-03	3.84E-06	3.70E-15	3.29E-30	0.	0.	0.	0.	0.	0.	0.
IN117	7.09E-11	2.19E-03	2.59E-06	2.51E-15	2.22E-30	0.	0.	0.	0.	0.	0.	0.
SN121	7.45E-04	4.25E-02	2.29E-02	3.61E-03	1.66E-04	3.50E-07	7.36E-10	3.28E-15	1.37E-28	0.	0.	0.
SN123	3.98E-06	4.16E-04	4.13E-04	4.05E-04	3.94E-04	3.72E-04	3.53E-04	3.16E-04	2.40E-04	1.38E-04	7.92E-05	0.
SN125	1.13E-02	1.05E-02	9.73E-03	7.79E-03	5.38E-03	2.58E-03	1.23E-03	2.82E-04	7.06E-06	4.44E-09	2.78E-12	0.
SB125	6.76E-05	7.50E-05	8.20E-05	1.00E-04	1.23E-04	1.49E-04	1.60E-04	1.67E-04	1.64E-04	1.53E-04	1.43E-04	0.
SB126	2.12E-03	2.00E-03	1.90E-03	1.61E-03	1.22E-03	6.97E-04	4.02E-04	1.32E-04	8.28E-06	4.02E-08	8.08E-09	0.

HARRY
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.500
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
SN127	3.13E+00	1.13E-03	4.11E-07	1.96E-17	1.23E-34	0.	0.	0.	0.	0.	0.	0.
SB127	3.65E-02	1.50E-01	1.25E-01	7.31E-02	3.00E-02	5.00E-03	8.37E-04	2.34E-05	3.05E-09	5.21E-17	8.87E-25	0.
TE127M	2.95E-10	2.28E-04	4.18E-04	8.11E-04	1.12E-03	1.24E-03	1.19E-03	1.06E-03	7.71E-04	4.07E-04	2.15E-04	0.
TE127	2.06E-02	1.07E-01	1.05E-01	6.41E-02	2.71E-02	5.56E-03	1.90E-03	1.07E-03	7.61E-04	4.03E-04	2.13E-04	0.
SB128	8.85E-01	1.51E-01	2.38E-02	9.29E-05	9.02E-09	8.46E-17	7.96E-25	7.01E-41	0.	0.	0.	0.
SB129	5.07E+00	2.59E-01	5.42E-03	4.93E-08	1.96E-16	3.10E-33	4.89E-50	0.	0.	0.	0.	0.
TE129M	9.58E-08	1.01E-02	1.01E-02	9.52E-03	8.61E-03	7.01E-03	5.70E-03	3.80E-03	1.37E-03	1.79E-04	2.32E-05	0.
TE129	3.65E+00	3.04E-01	1.27E-02	6.10E-03	5.50E-03	4.49E-03	3.66E-03	2.44E-03	8.78E-04	1.15E-04	1.49E-05	0.
I130	2.44E-02	6.37E-03	1.67E-03	2.98E-05	3.64E-08	5.42E-14	8.09E-20	1.80E-31	0.	0.	0.	0.
TE131M	9.79E-05	3.42E-01	1.96E-01	3.72E-02	2.33E-03	9.07E-06	3.55E-08	5.42E-13	4.93E-25	0.	0.	0.
TE131	9.01E+01	6.24E-02	3.58E-02	6.81E-03	4.25E-04	1.66E-06	6.48E-09	9.92E-14	9.01E-26	0.	0.	0.
I131	1.31E-02	7.06E-01	6.68E-01	5.37E-01	3.53E-01	1.49E-01	6.31E-02	1.13E-02	1.52E-04	2.77E-08	5.06E-12	0.
XE131M	3.55E-11	3.27E-04	6.22E-04	1.30E-03	1.85E-03	1.83E-03	1.36E-03	5.62E-04	3.75E-05	1.12E-07	3.16E-10	0.
TE132	1.05E+00	2.08E+00	1.68E+00	8.84E-01	3.05E-01	3.61E-02	4.28E-03	6.01E-05	1.41E-09	7.69E-19	4.20E-28	0.
I132	2.57E+00	2.14E+00	1.73E+00	9.09E-01	3.14E-01	3.72E-02	4.41E-03	6.19E-05	1.45E-09	7.88E-19	4.32E-28	0.
I133	1.11E+00	6.19E+00	2.79E+00	2.59E-01	4.94E-03	1.79E-06	6.49E-10	8.55E-17	5.37E-34	0.	0.	0.
XE133M	4.72E-08	5.84E-02	6.91E-02	4.06E-02	9.52E-03	4.47E-04	2.08E-05	4.51E-08	9.88E-15	4.72E-28	2.26E-41	0.
XE133	8.25E-07	1.12E+00	1.50E+00	1.35E+00	7.34E-01	1.98E-01	5.33E-02	3.84E-03	5.35E-06	1.04E-11	2.01E-17	0.
I135	1.88E+01	3.07E+00	2.56E-01	1.49E-04	6.05E-10	1.00E-20	1.64E-31	4.46E-53	0.	0.	0.	0.
XE135M	2.08E-03	9.57E-01	8.00E-02	4.65E-05	1.89E-10	3.11E-21	5.13E-32	1.39E-53	0.	0.	0.	0.
XE135	2.17E+00	8.27E+00	2.02E+00	1.16E-02	1.42E-06	1.99E-14	2.79E-22	5.51E-38	0.	0.	0.	0.
CS136	5.57E-03	5.28E-03	5.00E-03	4.26E-03	3.27E-03	1.92E-03	1.13E-03	3.87E-04	2.69E-05	1.30E-07	6.29E-10	0.
CS137	9.20E-05	9.92E-04	9.92E-04	9.92E-04	9.92E-04	9.92E-04	9.92E-04	9.92E-04	9.86E-04	9.81E-04	9.75E-04	0.
BA137M	1.94E-07	9.25E-04	9.25E-04	9.25E-04	9.25E-04	9.25E-04	9.25E-04	9.25E-04	9.20E-04	9.14E-04	9.09E-04	0.
BA139	1.24E+01	1.33E-03	7.84E-09	1.61E-24	0.	0.	0.	0.	0.	0.	0.	0.
BA140	1.11E-01	6.55E-01	6.23E-01	5.28E-01	4.03E-01	2.34E-01	1.36E-01	4.62E-02	3.08E-03	1.37E-05	6.07E-08	0.
LA140	2.63E-07	2.28E-01	3.67E-01	5.07E-01	4.51E-01	2.70E-01	1.57E-01	5.33E-02	3.54E-03	1.58E-05	7.02E-08	0.
LA141	1.53E+00	6.08E-01	8.52E-03	2.36E-08	1.29E-17	3.85E-36	1.15E-54	0.	0.	0.	0.	0.
CE141	1.89E-07	2.10E-01	2.08E-01	1.96E-01	1.76E-01	1.42E-01	1.14E-01	7.46E-02	2.56E-02	3.01E-03	3.55E-04	0.
LA142	7.61E+00	1.67E-03	3.23E-08	2.38E-22	0.	0.	0.	0.	0.	0.	0.	0.
CE143	5.02E-02	2.06E+00	1.25E+00	2.75E-01	2.21E-02	1.43E-04	9.25E-07	3.88E-11	4.37E-22	0.	0.	0.
PR143	1.47E-08	1.32E-01	2.06E-01	2.65E-01	2.28E-01	1.39E-01	8.37E-02	3.02E-02	2.42E-03	1.54E-05	9.75E-08	0.
CE144	2.01E-03	1.44E-02	1.43E-02	1.43E-02	1.41E-02	1.37E-02	1.34E-02	1.28E-02	1.13E-02	8.85E-03	6.95E-03	0.
PR144	5.53E-07	1.44E-02	1.43E-02	1.43E-02	1.41E-02	1.37E-02	1.34E-02	1.28E-02	1.13E-02	8.85E-03	6.95E-03	0.
PR145	8.05E-02	8.23E-01	5.09E-02	1.21E-05	1.10E-11	9.11E-24	7.56E-36	0.	0.	0.	0.	0.
ND147	9.72E-06	1.63E-01	1.54E-01	1.27E-01	9.31E-02	5.00E-02	2.67E-02	7.68E-03	3.36E-04	6.55E-07	1.27E-09	0.
PM147	2.70E-14	1.22E-04	2.37E-04	5.40E-04	9.34E-04	1.43E-03	1.68E-03	1.88E-03	1.89E-03	1.77E-03	1.64E-03	0.
ND149	1.38E+01	1.34E-03	1.29E-07	1.18E-19	1.01E-39	0.	0.	0.	0.	0.	0.	0.
PM149	1.92E-03	3.55E-01	2.60E-01	1.01E-01	2.12E-02	9.23E-04	4.02E-05	7.64E-08	1.20E-14	2.97E-28	7.41E-42	0.
PM150	1.58E-01	3.33E-04	7.00E-07	6.58E-15	2.75E-28	0.	0.	0.	0.	0.	0.	0.

1

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	3.35E-02	2.28E-01	1.26E-01	2.12E-02	1.09E-03	2.85E-06	7.52E-09	5.18E-14	6.50E-27	0.	0.	0.
SM153	1.12E-01	7.89E-02	5.54E-02	1.91E-02	3.25E-03	9.47E-05	2.75E-06	2.31E-09	4.76E-17	2.03E-32	8.63E-48	0.
SM156	9.97E-02	1.70E-02	2.90E-03	1.43E-05	2.06E-09	4.23E-17	8.72E-25	3.71E-40	0.	0.	0.	0.
EU155	4.40E-06	1.49E-04	1.49E-04	1.49E-04	1.48E-04	1.48E-04	1.47E-04	1.46E-04	1.43E-04	1.37E-04	1.32E-04	0.
EU156	2.91E-04	2.37E-03	2.63E-03	2.36E-03	1.87E-03	1.18E-03	7.41E-04	2.94E-04	2.91E-05	2.87E-07	2.83E-09	0.
EU157	1.63E-02	1.89E-02	6.35E-03	2.38E-04	1.00E-06	1.76E-11	3.12E-16	9.72E-26	0.	0.	0.	0.
GD159	2.94E-03	5.80E-03	2.31E-03	1.44E-04	1.42E-06	1.37E-10	1.33E-14	1.25E-22	1.06E-42	0.	0.	0.
TB161	3.62E-05	2.36E-04	2.13E-04	1.58E-04	9.56E-05	3.50E-05	1.28E-05	1.72E-06	1.14E-08	4.91E-13	2.13E-17	0.
TOTAL	3.10E+02	6.94E+01	3.30E+01	1.23E+01	5.11E+00	1.97E+00	1.20E+00	6.61E-01	2.84E-01	9.92E-02	4.85E-02	0.

1

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	1.90E-06	1.64E-08	1.52E-09	1.42E-10	1.14E-13	9.12E-17	6.82E-21	4.37E-27	0.	0.	0.	0.
MN 54	9.10E-06	3.92E-06	2.59E-06	1.70E-06	4.86E-07	1.39E-07	2.61E-08	2.13E-09	5.01E-13	1.81E-18	6.56E-24	0.
FE 59	2.10E-05	7.60E-08	4.56E-09	2.74E-10	5.95E-14	1.28E-17	1.67E-22	7.85E-30	0.	0.	0.	0.
CO 57	4.27E-05	1.68E-05	1.05E-05	6.61E-06	1.63E-06	4.02E-07	6.20E-09	3.77E-09	3.29E-13	2.70E-19	0.	0.
CO 58	1.35E-04	3.88E-06	6.59E-07	1.12E-07	5.44E-10	2.65E-12	2.18E-15	5.18E-20	1.98E-35	0.	0.	0.
CO 60	1.99E-05	1.75E-05	1.63E-05	1.52E-05	1.25E-05	1.03E-05	7.89E-06	5.32E-06	1.43E-06	1.98E-07	2.74E-08	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	8.22E-02	2.05E-10	2.00E-10	1.94E-10	1.82E-10	1.69E-10	1.54E-10	1.33E-10	8.29E-11	4.07E-11	2.00E-11	0.
AM241	3.35E-09	3.35E-09	3.35E-09	3.35E-09	3.37E-09	3.39E-09	3.39E-09	3.40E-09	3.42E-09	3.39E-09	3.34E-09	0.
CM242	2.28E-07	4.82E-08	2.22E-08	1.02E-08	9.94E-10	9.68E-11	4.34E-12	4.10E-14	1.18E-18	1.10E-18	1.03E-18	0.
KR 85	4.62E-06	1.15E-04	1.11E-04	1.08E-04	9.82E-05	8.87E-05	7.79E-05	6.43E-05	3.40E-05	1.30E-05	4.96E-06	0.
SR 89	3.96E-06	9.27E-04	8.11E-05	7.13E-06	4.80E-09	3.24E-12	1.91E-16	8.69E-23	6.32E-44	0.	0.	0.
SR 90	7.98E-06	7.98E-04	7.90E-04	7.83E-04	7.54E-04	7.25E-04	6.90E-04	6.41E-04	5.01E-04	3.46E-04	2.39E-04	0.
Y 90	1.18E-11	7.98E-04	7.90E-04	7.83E-04	7.54E-04	7.25E-04	6.90E-04	6.41E-04	5.01E-04	3.46E-04	2.39E-04	0.
Y 91	2.58E-08	1.75E-03	2.03E-04	2.36E-05	3.70E-08	5.81E-11	1.06E-14	2.61E-20	5.27E-39	0.	0.	0.
ZR 95	6.49E-04	1.67E-03	2.38E-04	3.39E-05	9.88E-08	2.88E-10	1.19E-13	1.01E-18	1.23E-35	0.	0.	0.
NB 95M	1.38E-11	3.53E-05	5.04E-06	7.21E-07	2.09E-09	6.09E-12	2.52E-15	2.13E-20	2.61E-37	0.	0.	0.
NB 95	7.23E-11	3.59E-03	5.15E-04	7.35E-05	2.13E-07	6.18E-10	2.58E-13	2.18E-18	2.67E-35	0.	0.	0.
RU103	7.95E-05	3.09E-04	1.26E-05	5.20E-07	3.55E-11	2.43E-15	6.83E-21	3.21E-29	0.	0.	0.	0.
RH103M	5.30E-09	3.09E-04	1.26E-05	5.20E-07	3.55E-11	2.44E-15	6.83E-21	3.22E-29	0.	0.	0.	0.
RU106	4.68E-04	4.45E-03	3.15E-03	2.23E-03	7.93E-04	2.82E-04	7.09E-05	8.97E-06	9.05E-09	2.91E-13	9.35E-18	0.
RH106	5.06E-06	4.45E-03	3.15E-03	2.23E-03	7.93E-04	2.82E-04	7.09E-05	8.97E-06	9.05E-09	2.91E-13	9.35E-18	0.
SN123	3.98E-06	5.51E-05	2.00E-05	7.27E-06	3.49E-07	1.67E-08	2.91E-10	6.72E-13	1.08E-21	6.94E-35	4.45E-48	0.
SB125	6.76E-05	1.36E-04	1.20E-04	1.05E-04	7.18E-05	4.88E-05	2.92E-05	1.35E-05	1.04E-06	2.21E-08	4.71E-10	0.
TE125M	1.82E-12	5.56E-05	4.94E-05	4.35E-05	2.97E-05	2.02E-05	1.21E-05	5.59E-06	4.29E-07	9.15E-09	1.95E-10	0.
TE127M	2.95E-10	1.41E-04	4.42E-05	1.38E-05	4.25E-07	1.31E-08	1.26E-10	1.18E-13	9.72E-24	7.26E-39	5.41E-54	0.
TE127	2.06E-02	1.40E-04	4.37E-05	1.37E-05	4.20E-07	1.29E-08	1.24E-10	1.17E-13	9.62E-24	7.16E-39	5.36E-54	0.
CS137	9.20E-05	9.70E-04	9.59E-04	9.48E-04	9.14E-04	8.81E-04	8.43E-04	7.88E-04	6.22E-04	4.42E-04	3.12E-04	0.
BA137M	1.94E-07	9.09E-04	8.98E-04	8.87E-04	8.54E-04	8.26E-04	7.88E-04	7.38E-04	5.84E-04	4.13E-04	2.93E-04	0.
CE141	1.89E-07	8.17E-05	1.64E-06	3.30E-08	2.69E-13	2.19E-18	3.59E-25	2.38E-35	0.	0.	0.	0.
CE144	2.01E-03	5.92E-03	3.81E-03	2.43E-03	6.37E-04	1.68E-04	2.82E-05	1.94E-06	2.62E-10	4.11E-16	6.40E-22	0.
PR144	5.53E-07	5.92E-03	3.81E-03	2.43E-03	6.37E-04	1.68E-04	2.82E-05	1.94E-06	2.62E-10	4.11E-16	6.40E-22	0.
PM147	2.70E-14	1.57E-03	1.37E-03	1.20E-03	8.08E-04	5.43E-04	3.19E-04	1.45E-04	1.03E-05	1.95E-07	3.68E-09	0.
EU155	4.40E-06	1.29E-04	1.20E-04	1.11E-04	8.95E-05	7.19E-05	5.37E-05	3.47E-05	8.10E-06	9.11E-07	1.03E-07	0.
TOTAL	1.06E-01	3.53E-02	2.03E-02	1.45E-02	7.25E-03	4.84E-03	3.71E-03	3.10E-03	2.26E-03	1.56E-03	1.09E-03	0.

HARRY
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.14E+02	1.14E+04
1.00E+00	3.82E+01	2.39E+03
2.00E+00	1.50E+01	9.35E+02
3.00E+00	7.70E+00	5.48E+02
4.00E+00	4.60E+00	3.84E+02
6.00E+00	2.30E+00	2.42E+02
9.00E+00	1.36E+00	1.60E+02
1.20E+01	1.00E+00	1.20E+02
1.50E+01	7.86E-01	9.51E+01
1.80E+01	6.39E-01	7.82E+01
2.10E+01	5.30E-01	6.59E+01
1.00E+00 DAYS	4.43E-01	5.57E+01
2.00E+00	1.96E-01	2.42E+01
5.00E+00	8.38E-02	9.45E+00
1.00E+01	4.04E-02	4.59E+00
2.00E+01	1.57E-02	1.95E+00
3.00E+01	8.52E-03	1.18E+00
5.00E+01	3.38E-03	6.27E-01
1.00E+02	7.41E-04	2.49E-01
2.00E+02	1.87E-04	7.57E-02
3.00E+02	7.84E-05	3.51E-02
1.00E+00 YEARS	5.33E-05	2.57E-02
1.50E+00	2.96E-05	1.60E-02
2.00E+00	2.29E-05	1.22E-02
3.50E+00	1.53E-05	7.09E-03
5.00E+00	1.24E-05	5.25E-03
7.00E+00	1.07E-05	4.33E-03
1.00E+01	9.64E-06	3.80E-03
2.00E+01	7.47E-06	2.90E-03
3.50E+01	5.29E-06	2.01E-03
5.00E+01	3.74E-06	1.40E-03

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BE 7	4.90E-07	4.89E-07	4.89E-07	4.89E-07	4.89E-07	4.89E-07	4.88E-07	4.87E-07	4.86E-07	4.85E-07	4.84E-07	4.84E-07
NA 24	7.37E-04	7.05E-04	6.74E-04	6.42E-04	6.13E-04	5.89E-04	5.59E-04	4.87E-04	4.24E-04	3.69E-04	3.22E-04	2.79E-04
MN 54	2.35E-06	2.35E-06	2.35E-06	2.35E-06	2.35E-06	2.35E-06	2.35E-06	2.35E-06	2.33E-06	2.33E-06	2.33E-06	2.33E-06
FE 55	5.34E-06	5.34E-06	5.34E-06	5.34E-06	5.34E-06	5.34E-06	5.34E-06	5.34E-06	5.34E-06	5.34E-06	5.34E-06	5.34E-06
FE 59	5.43E-06	5.42E-06	5.42E-06	5.42E-06	5.42E-06	5.42E-06	5.41E-06	5.40E-06	5.39E-06	5.38E-06	5.37E-06	5.36E-06
CO 57	1.10E-05	1.10E-05	1.10E-05	1.10E-05	1.10E-05	1.10E-05	1.10E-05	1.10E-05	1.10E-05	1.10E-05	1.10E-05	1.10E-05
CO 58	3.49E-05	3.49E-05	3.49E-05	3.49E-05	3.48E-05	3.48E-05	3.47E-05	3.47E-05	3.46E-05	3.46E-05	3.46E-05	3.46E-05
CO 60	5.14E-06	5.14E-06	5.14E-06	5.14E-06	5.14E-06	5.14E-06	5.14E-06	5.14E-06	5.14E-06	5.14E-06	5.14E-06	5.14E-06
CU 64	7.27E-01	6.87E-01	6.51E-01	6.18E-01	5.85E-01	5.25E-01	4.46E-01	3.79E-01	3.22E-01	2.74E-01	2.33E-01	2.33E-01
CU 67	1.14E-04	1.13E-04	1.11E-04	1.10E-04	1.09E-04	1.06E-04	1.02E-04	9.91E-05	9.60E-05	9.23E-05	8.97E-05	8.97E-05
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	2.12E-02	2.11E-02	2.10E-02	2.09E-02	2.08E-02	2.06E-02	2.04E-02	2.01E-02	1.99E-02	1.96E-02	1.94E-02	1.94E-02
U239	5.92E+02	1.01E+02	1.72E+01	2.93E+00	4.98E-01	1.45E-02	7.20E-05	3.55E-07	1.76E-09	8.69E-12	4.30E-14	4.30E-14
U240	2.27E-01	2.16E-01	2.06E-01	1.96E-01	1.87E-01	1.69E-01	1.46E-01	1.26E-01	1.08E-01	9.35E-02	8.06E-02	8.06E-02
NP239	2.03E-03	3.40E+00	3.93E+00	3.99E+00	3.96E+00	3.86E+00	3.71E+00	3.58E+00	3.46E+00	3.33E+00	3.21E+00	3.21E+00
NP240M	3.59E-04	2.17E-01	2.08E-01	1.98E-01	1.88E-01	1.70E-01	1.47E-01	1.27E-01	1.09E-01	9.43E-02	8.15E-02	8.15E-02
NP240	9.09E-12	4.67E-12	2.43E-12	1.25E-12	6.47E-13	1.73E-13	2.39E-14	3.30E-15	4.54E-16	6.26E-17	8.66E-18	8.66E-18
AM241	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10
CM242	5.87E-08	5.87E-08	5.87E-08	5.87E-08	5.87E-08	5.87E-08	5.84E-08	5.84E-08	5.84E-08	5.84E-08	5.84E-08	5.84E-08
GE 75	9.81E-06	4.75E-02	2.86E-02	1.72E-02	1.04E-02	3.76E-03	8.22E-04	1.80E-04	3.93E-05	8.56E-06	1.87E-06	1.87E-06
GE 77	6.43E-03	1.65E-02	1.56E-02	1.46E-02	1.38E-02	1.22E-02	1.01E-02	8.43E-03	7.02E-03	5.83E-03	4.86E-03	4.86E-03
AS 77	6.64E-05	1.05E-02	1.06E-02	1.07E-02	1.08E-02	1.08E-02	1.08E-02	1.08E-02	1.08E-02	1.06E-02	1.04E-02	1.01E-02
SE 77M	2.62E-09	3.14E-05	3.19E-05	3.21E-05	3.21E-05	3.24E-05	3.26E-05	3.24E-05	3.19E-05	3.12E-05	3.02E-05	3.02E-05
GE 78	9.91E-01	6.19E-01	3.85E-01	2.41E-01	1.50E-01	5.85E-02	1.42E-02	3.44E-03	8.40E-04	2.04E-04	4.95E-05	4.95E-05
AS 78	1.78E-02	2.96E-01	3.65E-01	3.42E-01	2.86E-01	1.69E-01	6.26E-02	2.08E-02	6.43E-03	1.92E-03	5.57E-04	5.57E-04
AS 79	1.96E+01	1.94E-01	1.91E-03	1.88E-05	1.85E-07	1.79E-11	1.71E-17	1.63E-23	1.55E-29	1.48E-35	1.42E-41	1.42E-41
SE 79M	2.91E-02	3.42E-01	3.37E-03	3.32E-05	3.27E-07	3.16E-11	3.01E-17	2.88E-23	2.74E-29	2.62E-35	2.50E-41	2.50E-41
BR 80	1.23E-01	1.16E-02	1.09E-03	1.03E-04	9.69E-06	8.59E-08	7.19E-11	5.99E-14	4.99E-17	4.17E-20	3.48E-23	3.48E-23
SE 81M	1.02E-01	4.75E+00	2.29E+00	1.10E+00	5.30E-01	1.24E-01	1.39E-02	1.55E-03	1.74E-04	1.95E-05	2.19E-06	2.19E-06
SE 81	1.24E+00	5.62E+00	3.25E+00	1.62E+00	7.87E-01	1.84E-01	2.06E-02	2.30E-03	2.58E-04	2.90E-05	3.24E-06	3.24E-06
BR 82	6.21E-04	6.09E-04	5.97E-04	5.86E-04	5.74E-04	5.52E-04	5.21E-04	4.91E-04	4.63E-04	4.36E-04	4.12E-04	4.12E-04
SE 83	5.72E+01	1.08E+01	2.05E+00	3.89E-01	7.36E-02	2.65E-03	1.80E-05	1.22E-07	8.36E-10	5.66E-12	3.60E-14	3.60E-14
BR 83	4.75E-01	7.09E+00	6.56E+00	5.16E+00	3.92E+00	2.21E+00	9.36E-01	3.94E-01	1.66E-01	7.02E-02	2.96E-02	2.96E-02
KR 83M	2.45E-05	1.60E+00	3.28E+00	4.07E+00	4.20E+00	3.50E+00	2.07E+00	1.06E+00	5.12E-01	2.37E-01	1.06E-01	1.06E-01

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BR 84	1.20E-01	2.08E+01	5.61E+00	1.52E+00	4.10E-01	3.00E-02	5.94E-04	1.17E-05	2.32E-07	4.59E-09	9.06E-11	
KR 85M	5.76E-03	1.24E+01	1.05E+01	8.98E+00	7.67E+00	5.60E+00	3.49E+00	2.18E+00	1.36E+00	8.44E-01	5.27E-01	
KR 87	9.62E+01	5.55E+01	3.22E+01	1.86E+01	1.07E+01	3.60E+00	6.97E-01	1.35E-01	2.62E-02	5.07E-03	9.79E-04	
RB 88	5.49E+01	4.29E+01	3.35E+01	2.61E+01	2.04E+01	1.24E+01	5.92E+00	2.82E+00	1.34E+00	6.38E-01	3.03E-01	
RB 88	1.40E+01	4.34E+01	3.70E+01	2.92E+01	2.28E+01	1.39E+01	6.63E+00	3.16E+00	1.50E+00	7.15E-01	3.40E-01	
RB 89	6.67E+01	6.27E+01	4.21E+00	2.83E-01	1.90E-02	8.59E-05	2.60E-08	7.85E-12	2.39E-15	7.24E-19	2.20E-22	
SR 89	5.11E-06	1.79E-01	1.91E-01	1.91E-01	1.91E-01	1.91E-01	1.91E-01	1.91E-01	1.91E-01	1.90E-01	1.90E-01	
SR 90	1.03E-05	1.06E-03	1.06E-03	1.06E-03	1.06E-03	1.06E-03	1.06E-03	1.06E-03	1.06E-03	1.06E-03	1.06E-03	
SR 91	1.07E+00	1.99E+01	1.86E+01	1.73E+01	1.61E+01	1.39E+01	1.13E+01	9.10E+00	7.34E+00	5.90E+00	4.76E+00	
Y 91M	7.21E-05	6.87E+00	9.37E+00	1.00E+01	9.90E+00	8.89E+00	7.28E+00	5.86E+00	4.72E+00	3.81E+00	3.07E+00	
Y 91	2.95E-08	6.11E-03	1.41E-02	2.25E-02	3.07E-02	4.60E-02	6.54E-02	8.09E-02	9.37E-02	1.04E-01	1.12E-01	
SR 92	1.76E+00	7.88E+00	6.11E+00	4.73E+00	3.66E+00	2.19E+00	1.02E+00	4.73E-01	2.19E-01	1.02E-01	4.73E-02	
Y 92	8.13E-02	1.66E+00	2.60E+00	3.09E+00	3.28E+00	3.13E+00	2.40E+00	1.63E+00	1.05E+00	6.47E-01	3.90E-01	
SR 93	7.10E+01	1.22E+00	6.75E-03	3.73E-05	2.06E-07	6.29E-12	1.06E-18	1.79E-25	3.02E-32	5.09E-39	8.58E-46	
Y 93	8.66E-02	2.80E+00	2.63E+00	2.46E+00	2.30E+00	2.01E+00	1.64E+00	1.34E+00	1.08E+00	8.91E-01	7.24E-01	
Y 94	1.03E+01	1.41E+01	1.82E+00	2.34E-01	3.02E-02	5.02E-04	1.08E-06	2.31E-09	4.93E-12	1.08E-14	5.96E-16	
Y 95	4.46E+01	4.20E+00	9.25E-02	2.04E-03	4.49E-05	2.18E-08	2.34E-13	2.50E-18	2.67E-23	2.85E-28	3.05E-33	
ZR 95	1.67E-04	2.19E-02	2.23E-02	2.23E-02	2.23E-02	2.23E-02	2.23E-02	2.22E-02	2.22E-02	2.22E-02	2.22E-02	
NB 95	1.87E-11	1.35E-05	3.15E-05	4.95E-05	6.76E-05	1.04E-04	1.57E-04	2.11E-04	2.64E-04	3.18E-04	3.71E-04	
ZR 97	4.03E-01	1.76E+00	1.68E+00	1.62E+00	1.55E+00	1.43E+00	1.26E+00	1.12E+00	9.92E-01	8.74E-01	7.77E-01	
NB 97M	2.08E-03	1.69E+00	1.62E+00	1.55E+00	1.49E+00	1.37E+00	1.21E+00	1.08E+00	9.51E-01	8.40E-01	7.43E-01	
NB 98	2.02E-01	8.81E-01	1.24E+00	1.42E+00	1.49E+00	1.48E+00	1.35E+00	1.20E+00	1.06E+00	9.37E-01	8.33E-01	
MO 99	2.29E+00	1.01E+00	4.47E-01	1.98E-01	8.77E-02	1.72E-02	1.48E-03	1.28E-04	1.12E-05	9.66E-07	8.32E-08	
TC 99M	1.21E-03	4.99E-01	4.94E-01	4.89E-01	4.84E-01	4.74E-01	4.60E-01	4.45E-01	4.32E-01	4.19E-01	4.06E-01	
MO101	1.12E-08	4.76E-02	8.93E-02	1.26E-01	1.59E-01	2.12E-01	2.69E-01	3.05E-01	3.27E-01	3.40E-01	3.45E-01	
TC101	1.73E+02	7.81E+01	4.53E+00	2.63E-01	1.53E-02	5.11E-05	9.93E-09	1.93E-12	3.76E-16	7.30E-20	1.42E-23	
MO102	7.30E+00	2.19E+02	2.39E+01	1.96E+00	1.43E-01	6.45E-04	1.61E-07	3.61E-11	7.66E-15	1.58E-18	3.19E-22	
TC102M	1.43E+03	3.26E+01	7.43E-01	1.70E-02	3.87E-04	2.01E-07	2.39E-12	2.84E-17	3.36E-22	3.99E-27	4.74E-32	
RU103	9.20E-01	2.76E+01	6.32E-01	1.44E-02	3.29E-04	1.70E-07	2.02E-12	2.40E-17	2.84E-22	3.37E-27	4.01E-32	
RU103M	4.31E+03	1.64E+01	3.75E-01	8.52E-03	1.95E-04	1.02E-07	1.21E-12	1.43E-17	1.70E-22	2.01E-27	2.39E-32	
TC104	1.02E-04	2.38E-01	2.37E-01	2.37E-01	2.37E-01	2.37E-01	2.36E-01	2.36E-01	2.35E-01	2.35E-01	2.34E-01	
RU105	6.83E-09	1.23E-01	1.82E-01	2.11E-01	2.25E-01	2.34E-01	2.36E-01	2.36E-01	2.35E-01	2.35E-01	2.35E-01	
RU105M	8.80E+01	6.32E+01	6.32E+00	6.26E-01	6.19E-02	6.10E-04	5.96E-07	5.82E-10	5.68E-13	5.55E-16	5.42E-19	
RU106	7.03E-01	2.43E+01	2.08E+01	1.78E+01	1.52E+01	1.11E+01	6.98E+00	4.36E+00	2.73E+00	1.71E+00	1.07E+00	
RU107	4.62E-03	2.44E+01	2.08E+01	1.78E+01	1.52E+01	1.12E+01	6.98E+00	4.37E+00	2.74E+00	1.71E+00	1.07E+00	
PD107M	6.03E-04	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	
	6.52E-06	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	1.14E-02	
	1.43E-01	1.94E+01	2.95E+00	4.43E-01	6.69E-02	1.53E-03	5.26E-06	1.81E-08	6.24E-11	2.13E-14	2.12E-17	
	2.97E-04	3.96E+00	5.97E-01	9.03E-02	1.36E-02	3.11E-04	1.07E-06	3.69E-09	1.27E-11	4.38E-14	1.50E-16	

1

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

ZERO TIME 1.00E+00 2.00E+00 3.00E+00 4.00E+00 6.00E+00 9.00E+00 1.20E+01 1.50E+01 1.80E+01 2.10E+01

PD109	8.37E-03	6.95E-01	6.60E-01	6.26E-01	5.94E-01	5.36E-01	4.61E-01	3.95E-01	3.39E-01	2.90E-01	2.49E-01
AG109M	4.83E-05	6.95E-01	6.60E-01	6.27E-01	5.96E-01	5.38E-01	4.61E-01	3.95E-01	3.39E-01	2.90E-01	2.49E-01
PD111M	1.02E+00	9.02E-01	7.95E-01	7.03E-01	6.19E-01	4.82E-01	3.30E-01	2.26E-01	1.55E-01	1.06E-01	7.26E-02
PD111	3.65E-01	6.58E-01	6.31E-01	5.62E-01	4.97E-01	3.86E-01	2.65E-01	1.82E-01	1.24E-01	8.53E-02	5.85E-02
AG111M	2.90E-03	8.87E-01	8.33E-01	7.46E-01	6.58E-01	5.08E-01	3.48E-01	2.38E-01	1.63E-01	1.12E-01	7.65E-02
AG111	1.03E-09	3.06E-03	6.42E-03	9.44E-03	1.21E-02	1.65E-02	2.12E-02	2.43E-02	2.63E-02	2.76E-02	2.84E-02
PD112	1.99E-01	1.93E-01	1.86E-01	1.80E-01	1.74E-01	1.63E-01	1.48E-01	1.34E-01	1.21E-01	1.10E-01	9.93E-02
AG112	5.98E-06	3.81E-02	6.72E-02	9.02E-02	1.07E-01	1.28E-01	1.41E-01	1.40E-01	1.34E-01	1.25E-01	1.15E-01
AG113	1.87E-03	4.01E-01	3.51E-01	3.08E-01	2.70E-01	2.08E-01	1.41E-01	9.51E-02	6.42E-02	4.33E-02	2.93E-02
AG115	6.72E-01	7.20E-01	8.95E-02	1.12E-02	1.40E-03	2.19E-05	4.28E-08	8.37E-11	1.62E-13	1.61E-162	1.49E-16
CD115M	5.49E-09	1.46E-04	1.64E-04	1.66E-04	1.66E-04	1.66E-04	1.66E-04	1.66E-04	1.65E-04	1.65E-04	1.65E-04
CD115	2.12E-06	4.00E-02	4.30E-02	4.29E-02	4.24E-02	4.13E-02	3.98E-02	3.82E-02	3.68E-02	3.54E-02	3.40E-02
IN115M	2.64E-11	4.41E-03	9.81E-03	1.46E-02	1.85E-02	2.47E-02	3.05E-02	3.36E-02	3.51E-02	3.54E-02	3.51E-02
CD117	4.72E-02	7.86E-01	5.92E-01	4.42E-01	3.32E-01	1.86E-01	7.81E-02	3.29E-02	1.38E-02	5.81E-03	2.45E-03
IN117M	2.27E-06	2.73E-01	3.96E-01	4.30E-01	4.15E-01	3.27E-01	1.87E-01	9.58E-02	4.60E-02	2.13E-02	9.63E-03
IN117	9.13E-11	4.99E-02	1.21E-01	1.68E-01	1.87E-01	1.72E-01	1.10E-01	5.87E-02	2.92E-02	1.37E-02	6.31E-03
CD118	3.13E+00	1.34E+00	5.75E-01	2.45E-01	1.05E-01	1.92E-02	1.51E-03	1.18E-04	9.27E-06	7.26E-07	5.69E-08
IN118	2.07E-01	1.34E+00	5.75E-01	2.46E-01	1.05E-01	1.93E-02	1.51E-03	1.18E-04	9.27E-06	7.26E-07	5.69E-08
CD119	7.79E+00	1.21E-01	1.89E-03	2.96E-05	4.63E-07	1.13E-10	4.32E-16	1.65E-21	6.28E-27	2.40E-32	9.18E-38
IN119M	1.17E-02	1.31E+00	1.43E-01	1.44E-02	1.44E-03	1.41E-05	1.38E-08	1.35E-11	1.31E-14	1.28E-17	1.26E-20
IN119	5.79E-01	6.92E-02	8.02E-03	8.14E-04	8.14E-05	7.96E-07	7.79E-10	7.61E-13	7.44E-16	7.26E-19	7.09E-22
SN121	9.61E-04	9.89E-02	9.61E-02	9.38E-02	9.15E-02	8.70E-02	8.02E-02	7.46E-02	6.89E-02	6.39E-02	5.93E-02
SN123M	5.46E-01	1.02E+00	3.62E-01	1.28E-01	4.52E-02	5.65E-03	2.50E-04	1.11E-05	4.90E-07	2.16E-08	9.56E-10
SN123	5.13E-06	5.37E-04	5.37E-04	5.37E-04	5.37E-04	5.37E-04	5.37E-04	5.37E-04	5.37E-04	5.37E-04	5.37E-04
SN125	1.45E-02	1.45E-02	1.44E-02	1.44E-02	1.43E-02	1.43E-02	1.41E-02	1.40E-02	1.39E-02	1.37E-02	1.36E-02
SB125	8.72E-05	8.76E-05	8.80E-05	8.83E-05	8.87E-05	8.95E-05	9.10E-05	9.21E-05	9.33E-05	9.44E-05	9.55E-05
SB126	2.73E-03	2.72E-03	2.72E-03	2.71E-03	2.70E-03	2.69E-03	2.67E-03	2.66E-03	2.64E-03	2.62E-03	2.60E-03
SN127	4.03E+00	2.89E+00	2.08E+00	1.50E+00	1.08E+00	5.56E-01	2.07E-01	7.68E-02	2.85E-02	1.06E-02	3.93E-03
SB127	4.70E-02	1.62E-01	1.80E-01	1.91E-01	2.00E-01	2.08E-01	2.11E-01	2.09E-01	2.06E-01	2.01E-01	1.98E-01
TE127	2.65E-02	3.31E-02	4.02E-02	4.77E-02	5.51E-02	6.91E-02	8.85E-02	1.03E-01	1.15E-01	1.24E-01	1.30E-01
SN128	2.71E+01	1.33E+01	6.61E+00	3.26E+00	1.61E+00	3.94E-01	4.76E-02	5.74E-03	6.92E-04	8.39E-05	1.01E-05
SB128M	1.38E-02	1.52E+01	7.89E+00	3.90E+00	1.92E+00	4.71E-01	5.67E-02	6.85E-03	8.25E-04	9.97E-05	1.21E-05
SB128	1.14E+00	1.10E+00	1.03E+00	9.69E-01	9.04E-01	7.75E-01	6.19E-01	4.91E-01	3.90E-01	3.09E-01	2.45E-01
SN129M	1.74E+01	8.68E+00	4.35E+00	2.18E+00	1.09E+00	2.72E-01	3.40E-02	4.26E-03	5.32E-04	6.65E-05	8.31E-06
SN129	1.16E+02	1.14E+00	1.12E-02	1.11E-04	1.09E-06	1.06E-10	1.01E-16	9.63E-23	9.19E-29	8.75E-35	8.38E-41
SB129	6.54E+00	1.10E+01	1.03E+01	9.19E+00	8.09E+00	6.01E+00	3.74E+00	2.32E+00	1.43E+00	8.82E-01	5.43E-01
TE129M	1.24E-07	1.37E-03	2.82E-03	4.14E-03	5.32E-03	7.21E-03	9.12E-03	1.03E-02	1.10E-02	1.15E-02	1.18E-02
TE129	4.71E+00	6.47E+00	7.57E+00	7.87E+00	7.57E+00	6.27E+00	4.18E+00	2.63E+00	1.64E+00	1.01E+00	6.29E-01
SB130M	6.59E-01	1.24E+00	3.26E-03	8.57E-06	2.26E-08	1.56E-13	2.84E-21	5.16E-29	9.36E-37	1.70E-44	3.09E-52
SB130	1.13E+02	3.41E+01	9.72E+00	2.75E+00	7.79E-01	6.26E-02	1.43E-03	3.26E-05	7.43E-07	1.69E-08	3.86E-10

HARRY
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.100
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	3.14E-02	2.97E-02	2.81E-02	2.66E-02	2.51E-02	2.25E-02	1.90E-02	1.61E-02	1.36E-02	1.15E-02	9.72E-03	
SB131	2.62E+02	6.85E+01	1.12E+01	1.84E+00	3.02E-01	8.12E-03	3.58E-05	1.58E-07	6.95E-10	3.07E-12	1.53E-14	
TE131M	1.26E-04	6.60E-01	7.53E-01	7.54E-01	7.40E-01	7.07E-01	6.59E-01	6.15E-01	5.74E-01	5.36E-01	5.00E-01	
TE131	1.16E+02	1.26E+02	4.11E+01	1.07E+01	2.60E+00	2.44E-01	1.21E-01	1.12E-01	1.04E-01	9.78E-02	9.11E-02	
I131	1.69E-02	5.85E-01	8.61E-01	9.44E-01	9.61E-01	9.69E-01	9.69E-01	9.61E-01	9.61E-01	9.53E-01	9.53E-01	
TE132	1.35E+00	3.29E+00	3.25E+00	3.23E+00	3.20E+00	3.14E+00	3.06E+00	2.98E+00	2.90E+00	2.82E+00	2.75E+00	
I132	3.32E+00	3.31E+00	3.30E+00	3.29E+00	3.26E+00	3.22E+00	3.15E+00	3.07E+00	2.98E+00	2.91E+00	2.84E+00	
TE133M	1.64E-01	5.69E+01	2.48E+01	1.08E+01	4.69E+00	8.91E-01	7.33E-02	6.05E-03	4.99E-04	4.11E-05	3.39E-06	
TE133	9.22E+02	5.23E+01	5.82E+00	1.92E+00	8.13E-01	1.54E-01	1.27E-02	1.05E-03	8.68E-05	7.14E-06	5.89E-07	
I133	1.43E+00	1.54E+01	1.67E+01	1.67E+01	1.63E+01	1.55E+01	1.41E+01	1.27E+01	1.15E+01	1.05E+01	9.46E+00	
XE133M	6.09E-08	3.46E-03	8.36E-03	1.34E-02	1.82E-02	2.74E-02	3.96E-02	5.03E-02	5.93E-02	6.70E-02	7.34E-02	
XE133	1.06E-06	6.05E-02	1.47E-01	2.35E-01	3.22E-01	4.88E-01	7.15E-01	9.15E-01	1.09E+00	1.25E+00	1.39E+00	
TE134	2.90E+02	1.35E+02	5.01E+01	1.86E+01	6.91E+00	9.58E-01	4.90E-02	2.51E-03	1.28E-04	6.60E-06	3.38E-07	
I134	1.33E+02	1.78E+02	1.25E+02	7.31E+01	3.92E+01	9.96E+00	1.09E+00	1.12E-01	1.09E-02	1.05E-03	9.96E-05	
I135	2.42E+01	4.27E+01	3.85E+01	3.47E+01	3.14E+01	2.54E+01	1.87E+01	1.37E+01	1.00E+01	7.39E+00	5.39E+00	
XE135M	2.68E-03	1.23E+01	1.20E+01	1.09E+01	9.75E+00	7.94E+00	5.83E+00	4.27E+00	3.14E+00	2.30E+00	1.69E+00	
XE135	2.79E+00	5.52E+00	8.08E+00	1.02E+01	1.18E+01	1.42E+01	1.57E+01	1.58E+01	1.50E+01	1.37E+01	1.23E+01	
CS136	7.18E-03	7.16E-03	7.15E-03	7.13E-03	7.11E-03	7.08E-03	7.03E-03	6.99E-03	6.94E-03	6.89E-03	6.85E-03	
CS137	1.19E-04	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	
BA137M	2.50E-07	1.19E-03	1.19E-03	1.19E-03	1.19E-03	1.19E-03	1.19E-03	1.19E-03	1.19E-03	1.19E-03	1.19E-03	
XE138	9.26E+02	7.97E+01	6.93E+00	6.00E-01	5.20E-02	3.90E-04	2.53E-07	1.64E-10	1.07E-13	6.95E-17	4.52E-20	
CS138	1.38E+02	2.32E+02	8.04E+01	2.36E+01	6.62E+00	5.04E-01	1.05E-02	2.18E-04	4.52E-06	9.40E-08	1.95E-09	
CS139	8.69E+02	2.77E+01	3.48E-01	4.37E-03	5.48E-05	8.61E-09	1.71E-14	3.38E-20	6.70E-26	1.33E-31	2.62E-37	
BA139	1.60E+01	1.79E+02	1.10E+02	6.70E+01	4.05E+01	1.49E+01	3.30E+00	7.33E-01	1.63E-01	3.61E-02	8.02E-03	
BA140	1.23E-01	7.66E-01	7.66E-01	7.60E-01	7.60E-01	7.54E-01	7.54E-01	7.48E-01	7.42E-01	7.37E-01	7.31E-01	
LA140	2.92E-07	1.31E-02	2.60E-02	3.85E-02	5.09E-02	7.48E-02	1.09E-01	1.41E-01	1.72E-01	2.01E-01	2.27E-01	
BA141	1.28E+02	3.86E+01	3.83E+00	3.80E-01	3.77E-02	3.74E-04	3.64E-07	3.55E-10	3.46E-13	3.40E-16	3.31E-19	
LA141	1.18E+00	2.50E+01	2.33E+01	1.97E+01	1.66E+01	1.16E+01	6.80E+00	3.98E+00	2.34E+00	1.37E+00	8.05E-01	
CE141	1.46E-07	1.62E-02	3.80E-02	5.71E-02	7.32E-02	9.81E-02	1.22E-01	1.35E-01	1.43E-01	1.48E-01	1.50E-01	
BA142	8.54E+01	3.40E+00	7.75E-02	1.77E-03	4.03E-05	2.09E-08	2.48E-13	2.95E-18	3.50E-23	4.15E-28	4.92E-33	
LA142	1.96E+00	1.36E+01	8.98E+00	5.71E+00	3.63E+00	1.47E+00	3.79E-01	9.77E-02	2.52E-02	6.49E-03	1.67E-03	
LA143	3.24E+01	6.32E+00	3.24E-01	1.67E-02	8.55E-04	2.24E-06	3.02E-10	4.07E-14	5.49E-18	7.40E-22	9.99E-26	
CE143	1.29E-02	8.25E-01	8.55E-01	8.33E-01	8.18E-01	7.87E-01	7.37E-01	6.93E-01	6.50E-01	6.10E-01	5.73E-01	
PR143	3.79E-09	1.26E-03	3.05E-03	4.82E-03	6.56E-03	9.92E-03	1.46E-02	1.91E-02	2.32E-02	2.70E-02	3.06E-02	
CE144	5.19E-04	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.71E-03	3.71E-03	3.71E-03	3.71E-03	3.71E-03	
PR144	1.42E-07	3.39E-03	3.69E-03	3.71E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.71E-03	3.71E-03	3.71E-03	
PR145	2.07E-02	3.05E+00	2.71E+00	2.41E+00	2.15E+00	1.71E+00	1.20E+00	8.49E-01	6.01E-01	4.24E-01	3.00E-01	
CE146	6.04E+01	3.10E+00	1.59E-01	8.12E-03	4.18E-04	1.10E-06	1.48E-10	2.00E-14	2.69E-18	3.63E-22	4.89E-26	
PR146	1.25E+00	1.09E+01	2.46E+00	4.63E-01	8.33E-02	2.62E-03	1.45E-05	7.98E-08	4.42E-10	2.44E-12	1.33E-14	
PR147	7.02E+00	2.03E+00	6.34E-02	1.98E-03	6.20E-05	6.05E-08	1.85E-12	5.64E-17	1.72E-21	5.26E-26	1.60E-30	

1

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	2.51E-06	4.71E-02	4.85E-02	4.84E-02	4.83E-02	4.80E-02	4.77E-02	4.73E-02	4.69E-02	4.65E-02	4.62E-02	
ND149	3.56E+00	2.42E+00	1.65E+00	1.12E+00	7.60E-01	3.53E-01	1.11E-01	3.50E-02	1.10E-02	3.47E-03	1.10E-03	
PM149	4.95E-04	3.87E-02	6.43E-02	8.13E-02	9.21E-02	1.04E-01	1.08E-01	1.06E-01	1.03E-01	9.88E-02	9.55E-02	
PM150	4.06E-02	3.14E-02	2.43E-02	1.88E-02	1.45E-02	8.71E-03	4.03E-03	1.86E-03	8.64E-04	4.00E-04	1.85E-04	
ND151	1.36E+01	4.25E-01	1.33E-02	4.16E-04	1.30E-05	1.27E-08	3.88E-13	1.18E-17	3.61E-22	1.10E-26	3.37E-31	
PM151	8.63E-03	1.01E-01	1.01E-01	9.90E-02	9.66E-02	9.17E-02	8.51E-02	7.90E-02	7.35E-02	6.80E-02	6.32E-02	
PM152	2.18E+01	2.13E-02	2.08E-05	2.03E-08	1.98E-11	1.89E-17	1.76E-26	1.65E-35	1.53E-44	1.43E-53	1.33E-62	
SM153	2.90E-02	2.85E-02	2.81E-02	2.77E-02	2.73E-02	2.65E-02	2.54E-02	2.42E-02	2.32E-02	2.22E-02	2.13E-02	
SM155	1.54E+00	2.53E-01	4.15E-02	6.79E-03	1.11E-03	3.00E-05	1.32E-07	5.82E-10	2.57E-12	1.14E-14	2.81E-17	
EU155	1.13E-06	3.23E-05	3.74E-05	3.82E-05	3.84E-05	3.84E-05	3.84E-05	3.84E-05	3.84E-05	3.84E-05	3.84E-05	
SM156	2.57E-02	2.39E-02	2.22E-02	2.06E-02	1.91E-02	1.65E-02	1.32E-02	1.06E-02	8.50E-03	6.81E-03	5.45E-03	
EU156	7.51E-05	1.23E-04	1.66E-04	2.07E-04	2.45E-04	3.13E-04	3.98E-04	4.60E-04	5.15E-04	5.56E-04	5.85E-04	
EU157	4.21E-03	1.40E-02	1.33E-02	1.27E-02	1.21E-02	1.11E-02	9.69E-03	8.46E-03	7.37E-03	6.41E-03	5.59E-03	
EU158	1.46E-01	5.91E-02	2.39E-02	9.68E-03	3.92E-03	6.41E-04	4.27E-05	2.83E-06	1.88E-07	1.25E-08	8.29E-10	
EU159	1.77E-01	1.76E-02	1.74E-03	1.73E-04	1.72E-05	1.69E-07	1.65E-10	1.62E-13	1.58E-16	1.54E-19	1.51E-22	
GD159	7.59E-04	3.32E-03	3.46E-03	3.35E-03	3.23E-03	2.99E-03	2.66E-03	2.37E-03	2.11E-03	1.88E-03	1.68E-03	
TB161	9.33E-06	6.71E-05	6.67E-05	6.65E-05	6.63E-05	6.56E-05	6.49E-05	6.41E-05	6.32E-05	6.25E-05	6.16E-05	
TOTAL	1.14E+04	2.39E+03	9.35E+02	5.48E+02	3.84E+02	2.42E+02	1.60E+02	1.20E+02	9.51E+01	7.82E+01	6.59E+01	

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	4.90E-07	4.84E-07	4.77E-07	4.59E-07	4.30E-07	3.78E-07	3.32E-07	2.55E-07	1.34E-07	3.63E-08	9.87E-09
NA 24	7.37E-04	2.43E-04	8.03E-05	2.88E-06	1.13E-08	1.72E-13	2.63E-18	6.11E-28	0.	0.	0.
MN 54	2.35E-06	2.33E-06	2.33E-06	2.28E-06	2.26E-06	2.22E-06	2.18E-06	2.08E-06	1.85E-06	1.47E-06	1.18E-06
FE 55	5.34E-06	5.34E-06	5.34E-06	5.31E-06	5.30E-06	5.27E-06	5.22E-06	5.15E-06	4.95E-06	4.62E-06	4.29E-06
FE 59	5.43E-06	5.34E-06	5.26E-06	5.03E-06	4.65E-06	3.99E-06	3.42E-06	2.51E-06	1.17E-06	2.49E-07	5.34E-08
CO 57	1.10E-05	1.10E-05	1.09E-05	1.09E-05	1.08E-05	1.04E-05	1.02E-05	9.71E-06	8.57E-06	6.62E-06	5.12E-06
CO 58	3.49E-05	3.46E-05	3.42E-05	3.32E-05	3.17E-05	2.87E-05	2.60E-05	2.14E-05	1.32E-05	4.99E-06	1.88E-06
CO 60	5.14E-06	5.14E-06	5.14E-06	5.14E-06	5.11E-06	5.11E-06	5.08E-06	5.05E-06	4.93E-06	4.77E-06	4.59E-06
CU 64	7.27E-01	1.98E-01	5.40E-02	1.10E-03	1.64E-06	3.74E-12	8.47E-18	4.36E-29	0.	0.	0.
CU 67	1.14E-04	8.67E-05	6.62E-05	2.94E-05	7.67E-06	5.17E-07	3.49E-08	1.58E-10	2.22E-16	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	2.12E-02	1.91E-02	1.72E-02	1.27E-02	7.59E-03	2.72E-03	9.75E-04	1.25E-04	7.36E-07	7.91E-11	5.33E-11
U240	2.27E-01	6.99E-02	2.14E-02	6.22E-04	1.71E-06	1.28E-11	9.65E-17	5.45E-27	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	2.03E-03	3.09E+00	2.30E+00	9.50E-01	2.17E-01	1.14E-02	5.95E-04	1.63E-06	6.42E-13	1.53E-22	1.53E-22
NP240M	3.59E-04	7.03E-02	2.16E-02	6.26E-04	1.72E-06	1.29E-11	9.73E-17	5.49E-27	0.	0.	0.
AM241	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.65E-10
CM242	5.87E-08	5.84E-08	5.81E-08	5.75E-08	5.63E-08	5.38E-08	5.17E-08	4.74E-08	3.86E-08	2.51E-08	1.64E-08
GE 77	6.43E-03	4.05E-03	9.26E-04	1.12E-05	7.12E-09	2.88E-15	1.16E-21	1.90E-34	0.	0.	0.
AS 77	6.64E-05	9.81E-03	7.10E-03	2.05E-03	2.40E-04	3.26E-06	4.43E-08	8.17E-12	3.79E-21	8.12E-40	1.74E-58
SE 77M	2.62E-09	2.95E-05	2.13E-05	6.17E-06	7.19E-07	9.79E-09	1.33E-10	2.45E-14	1.14E-23	2.43E-42	5.24E-61
AS 78	1.78E-02	1.59E-04	4.64E-09	3.92E-23	0.	0.	0.	0.	0.	0.	0.
BR 82	6.21E-04	3.88E-04	2.42E-04	5.89E-05	5.58E-06	5.01E-08	4.50E-10	3.63E-14	2.12E-24	7.28E-45	2.48E-65
BR 83	4.75E-01	1.25E-02	1.26E-05	1.28E-14	1.30E-29	0.	0.	0.	0.	0.	0.
KR 83M	2.45E-05	5.47E-02	6.21E-05	5.58E-14	5.73E-29	0.	0.	0.	0.	0.	0.
KR 85M	5.76E-03	3.29E-01	7.49E-03	8.90E-08	5.48E-16	2.09E-32	7.90E-49	0.	0.	0.	0.
KR 85	5.96E-06	1.56E-04	1.60E-04	1.60E-04	1.60E-04	1.60E-04	1.60E-04	1.59E-04	1.57E-04	1.54E-04	1.52E-04
KR 87	9.62E+01	1.90E-04	3.76E-10	2.91E-27	0.	0.	0.	0.	0.	0.	0.
KR 88	5.49E+01	1.45E-01	3.79E-04	6.89E-12	8.67E-25	0.	0.	0.	0.	0.	0.
RB 88	1.40E+01	1.61E-01	4.25E-04	7.71E-12	9.67E-25	0.	0.	0.	0.	0.	0.
SR 89	5.11E-06	1.53E-01	1.51E-01	1.45E-01	1.36E-01	1.19E-01	1.04E-01	7.99E-02	4.09E-02	1.08E-02	2.84E-03
SR 90	1.03E-05	1.06E-03	1.06E-03	1.06E-03	1.06E-03	1.06E-03	1.06E-03	1.06E-03	1.05E-03	1.05E-03	1.04E-03
Y 90	1.52E-11	2.42E-04	4.28E-04	7.69E-04	9.82E-04	1.05E-03	1.06E-03	1.06E-03	1.05E-03	1.05E-03	1.04E-03
SR 91	1.07E+00	3.83E+00	6.87E-01	3.94E-03	7.21E-07	2.45E-14	8.29E-22	9.43E-37	0.	0.	0.

1

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
Y 91M	7.21E-05	2.48E+00	4.43E-01	2.55E-03	4.68E-07	1.58E-14	5.34E-22	6.09E-37	0.	0.	0.	0.
Y 91	2.95E-08	1.18E-01	1.39E-01	1.39E-01	1.31E-01	1.17E-01	1.04E-01	8.22E-02	4.55E-02	1.40E-02	4.31E-03	0.
SR 92	1.76E+00	2.20E-02	4.74E-05	4.77E-13	2.23E-26	0.	0.	0.	0.	0.	0.	0.
Y 92	8.13E-02	2.31E-01	2.56E-03	1.97E-09	1.15E-19	3.93E-40	1.35E-60	0.	0.	0.	0.	0.
Y 93	8.66E-02	5.85E-01	1.14E-01	8.58E-04	2.47E-07	2.04E-14	1.68E-21	1.15E-35	0.	0.	0.	0.
ZR 95	1.67E-04	2.09E-02	2.07E-02	2.00E-02	1.90E-02	1.70E-02	1.53E-02	1.24E-02	7.27E-03	2.50E-03	8.59E-04	0.
NB 95M	3.56E-12	7.09E-05	1.29E-04	2.47E-04	3.33E-04	3.51E-04	3.24E-04	2.63E-04	1.54E-04	5.31E-05	1.83E-05	0.
NB 95	1.87E-11	4.05E-04	8.00E-04	1.92E-03	3.56E-03	6.15E-03	7.93E-03	9.84E-03	9.47E-03	4.55E-03	1.75E-03	0.
ZR 97	4.03E-01	6.86E-01	2.58E-01	1.37E-02	1.03E-04	5.78E-09	3.25E-13	1.03E-21	5.80E-43	0.	0.	0.
NB 97M	2.08E-03	6.59E-01	2.48E-01	1.32E-02	9.85E-05	5.55E-09	3.12E-13	9.85E-22	5.57E-43	0.	0.	0.
NB 97	2.02E-01	6.89E-01	2.59E-01	1.37E-02	1.03E-04	6.23E-09	3.50E-13	1.11E-21	6.25E-43	0.	0.	0.
MO 99	1.21E-03	3.93E-01	3.07E-01	1.46E-01	4.21E-02	3.52E-03	2.93E-04	2.05E-06	8.32E-12	1.37E-22	2.26E-33	0.
TC 99M	1.12E-08	3.46E-01	2.91E-01	1.39E-01	4.02E-02	3.36E-03	2.80E-04	1.96E-06	7.93E-12	1.31E-22	2.16E-33	0.
RU103	1.02E-04	2.34E-01	2.29E-01	2.17E-01	2.00E-01	1.68E-01	1.41E-01	9.92E-02	4.13E-02	7.16E-03	1.25E-03	0.
RH103M	6.83E-09	2.34E-01	2.30E-01	2.18E-01	2.00E-01	1.68E-01	1.41E-01	9.92E-02	4.13E-02	7.16E-03	1.25E-03	0.
RU105	7.03E-01	6.72E-01	1.58E-02	2.08E-07	1.52E-15	8.10E-32	4.34E-48	0.	0.	0.	0.	0.
RH105M	4.62E-03	6.72E-01	1.58E-02	2.08E-07	1.52E-15	8.16E-32	4.35E-48	0.	0.	0.	0.	0.
RH105	7.59E-09	2.43E+00	1.58E+00	3.95E-01	3.89E-02	3.79E-04	3.68E-06	3.47E-10	3.01E-20	2.26E-40	1.70E-60	0.
RU106	6.03E-04	1.14E-02	1.14E-02	1.13E-02	1.12E-02	1.10E-02	1.08E-02	1.04E-02	9.44E-03	7.81E-03	6.47E-03	0.
RH106	6.52E-06	1.14E-02	1.14E-02	1.13E-02	1.12E-02	1.10E-02	1.08E-02	1.04E-02	9.44E-03	7.81E-03	6.47E-03	0.
PD109	8.37E-03	2.13E-01	6.21E-02	1.54E-03	3.25E-06	1.45E-11	6.44E-17	1.27E-27	0.	0.	0.	0.
AG109M	4.83E-05	2.13E-01	6.22E-02	1.54E-03	3.26E-06	1.45E-11	6.44E-17	1.28E-27	0.	0.	0.	0.
PD111M	1.02E+00	4.97E-02	2.42E-03	2.77E-07	7.49E-14	5.47E-27	4.01E-40	0.	0.	0.	0.	0.
PD111	3.65E-01	4.01E-02	1.94E-03	2.23E-07	6.04E-14	4.40E-27	3.22E-40	0.	0.	0.	0.	0.
AG111M	2.90E-03	5.24E-02	2.55E-03	2.93E-07	7.91E-14	5.81E-27	4.24E-40	0.	0.	0.	0.	0.
AG111	1.03E-09	2.85E-02	2.74E-02	2.08E-02	1.31E-02	5.20E-03	2.06E-03	3.25E-04	3.20E-06	3.10E-10	3.01E-14	0.
PD112	1.99E-01	9.02E-02	4.08E-02	3.79E-03	7.20E-05	2.62E-08	9.51E-12	1.25E-18	7.87E-36	0.	0.	0.
AG112	5.98E-06	1.05E-01	4.81E-02	4.47E-03	8.54E-05	3.09E-08	1.12E-11	1.48E-18	9.26E-36	0.	0.	0.
AG113	1.87E-03	1.98E-02	8.56E-04	6.95E-08	1.06E-14	2.49E-28	5.82E-42	0.	0.	0.	0.	0.
CD115M	5.49E-09	1.59E-04	1.56E-04	1.49E-04	1.38E-04	1.17E-04	9.97E-05	7.20E-05	3.22E-05	6.40E-06	1.28E-06	0.
CD115	2.12E-06	3.19E-02	2.34E-02	9.22E-03	1.95E-03	8.69E-05	3.88E-06	7.73E-09	1.36E-15	4.27E-29	1.34E-42	0.
IN115M	2.64E-11	3.37E-02	2.55E-02	1.01E-02	2.12E-03	9.49E-05	4.23E-06	8.42E-09	1.49E-15	4.67E-29	1.46E-42	0.
CD117	4.72E-02	1.03E-03	1.00E-06	9.36E-16	8.30E-31	0.	0.	0.	0.	0.	0.	0.
IN117M	2.27E-06	4.27E-03	4.95E-06	4.77E-15	4.24E-30	0.	0.	0.	0.	0.	0.	0.
IN117	9.13E-11	2.82E-03	3.34E-06	3.23E-15	2.87E-30	0.	0.	0.	0.	0.	0.	0.
SN121	9.61E-04	5.48E-02	2.96E-02	4.66E-03	2.14E-04	4.51E-07	9.49E-10	4.23E-15	1.77E-28	0.	0.	0.
SN123	5.13E-06	5.37E-04	5.32E-04	5.23E-04	5.08E-04	4.80E-04	4.56E-04	4.08E-04	3.09E-04	1.77E-04	1.02E-04	0.
SN125	1.45E-02	1.35E-02	1.25E-02	1.00E-02	6.94E-03	3.32E-03	1.59E-03	3.64E-04	9.10E-06	5.72E-09	3.59E-12	0.
SB125	8.72E-05	9.67E-05	1.06E-04	1.29E-04	1.58E-04	1.92E-04	2.07E-04	2.15E-04	2.11E-04	1.97E-04	1.84E-04	0.
SB126	2.73E-03	2.58E-03	2.45E-03	2.07E-03	1.57E-03	8.99E-04	5.18E-04	1.71E-04	1.07E-05	5.18E-08	1.04E-08	0.

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
SN127	4.03E+00	1.46E-03	5.30E-07	2.53E-17	1.59E-34	0.	0.	0.	0.	0.	0.
SB127	4.70E-02	1.93E-01	1.61E-01	9.43E-02	3.86E-02	6.45E-03	1.08E-03	3.02E-05	3.93E-09	6.72E-17	1.14E-24
TE127M	3.80E-10	2.94E-04	5.39E-04	1.05E-03	1.45E-03	1.60E-03	1.54E-03	1.36E-03	9.95E-04	5.25E-04	2.78E-04
TE127	2.65E-02	1.38E-01	1.36E-01	8.27E-02	3.49E-02	7.17E-03	2.45E-03	1.38E-03	9.82E-04	5.19E-04	2.74E-04
SB128	1.14E+00	1.94E-01	3.07E-02	1.20E-04	1.16E-08	1.09E-16	1.03E-24	9.04E-41	0.	0.	0.
SB129	6.54E+00	3.35E-01	6.98E-03	6.36E-08	2.53E-16	3.99E-33	6.30E-50	0.	0.	0.	0.
TE129M	1.24E-07	1.30E-02	1.30E-02	1.23E-02	1.11E-02	9.04E-03	7.35E-03	4.90E-03	1.76E-03	2.30E-04	2.99E-05
TE129	4.71E+00	3.92E-01	1.63E-02	7.87E-03	7.09E-03	5.79E-03	4.72E-03	3.14E-03	1.13E-03	1.48E-04	1.92E-05
I130	3.14E-02	8.22E-03	2.15E-03	3.84E-05	4.69E-08	6.99E-14	1.04E-19	2.32E-31	0.	0.	0.
TE131M	1.26E-04	4.41E-01	2.53E-01	4.80E-02	3.00E-03	1.17E-05	4.58E-08	6.99E-13	6.35E-25	0.	0.
TE131	1.16E+02	8.05E-02	4.62E-02	8.77E-03	5.47E-04	2.14E-06	8.35E-09	1.28E-13	1.16E-25	0.	0.
I131	1.69E-02	9.11E-01	8.61E-01	6.92E-01	4.55E-01	1.92E-01	8.14E-02	1.45E-02	1.96E-04	3.58E-08	6.52E-12
XE131M	4.58E-11	4.22E-04	8.01E-04	1.67E-03	2.39E-03	2.36E-03	1.75E-03	7.24E-04	4.83E-05	1.45E-07	4.08E-10
TE132	1.35E+00	2.68E+00	2.16E+00	1.14E+00	3.93E-01	4.66E-02	5.52E-03	7.75E-05	1.81E-09	9.92E-19	5.41E-28
I132	3.32E+00	2.76E+00	2.23E+00	1.17E+00	4.05E-01	4.79E-02	5.68E-03	7.98E-05	1.87E-09	1.02E-18	5.57E-28
I133	1.43E+00	7.97E+00	3.60E+00	3.34E-01	6.36E-03	2.31E-06	8.36E-10	1.10E-16	6.93E-34	0.	0.
XE133M	6.09E-08	7.53E-02	8.91E-02	5.23E-02	1.23E-02	5.76E-04	2.68E-05	5.82E-08	1.27E-14	6.09E-28	2.92E-41
XE133	1.06E-06	1.45E+00	1.94E+00	1.74E+00	9.46E-01	2.56E-01	6.87E-02	4.95E-03	6.90E-06	1.34E-11	2.60E-17
I135	2.42E+01	3.96E+00	3.30E-01	1.92E-04	7.80E-10	1.29E-20	2.12E-31	5.75E-53	0.	0.	0.
XE135M	2.68E-03	1.23E+00	1.03E-01	6.00E-05	2.44E-10	4.01E-21	6.61E-32	1.80E-53	0.	0.	0.
XE135	2.79E+00	1.07E+01	2.61E+00	1.49E-02	1.83E-06	2.56E-14	3.60E-22	7.11E-38	0.	0.	0.
CS136	7.18E-03	6.80E-03	6.45E-03	5.50E-03	4.21E-03	2.47E-03	1.45E-03	4.99E-04	3.47E-05	1.67E-07	8.11E-10
CS137	1.19E-04	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.27E-03	1.26E-03	1.26E-03
BA137M	2.50E-07	1.19E-03	1.19E-03	1.19E-03	1.19E-03	1.19E-03	1.19E-03	1.19E-03	1.19E-03	1.18E-03	1.17E-03
BA139	1.60E+01	1.71E-03	1.01E-08	2.08E-24	0.	0.	0.	0.	0.	0.	0.
BA140	1.23E-01	7.25E-01	6.90E-01	5.85E-01	4.46E-01	2.60E-01	1.51E-01	5.11E-02	3.41E-03	1.52E-05	6.72E-08
LA140	2.92E-07	2.53E-01	4.06E-01	5.62E-01	4.99E-01	2.99E-01	1.74E-01	5.90E-02	3.92E-03	1.75E-05	7.77E-08
LA141	1.18E+00	4.68E-01	6.56E-03	1.82E-08	9.93E-18	2.96E-36	8.84E-55	0.	0.	0.	0.
CE141	1.46E-07	1.62E-01	1.60E-01	1.51E-01	1.35E-01	1.09E-01	8.81E-02	5.74E-02	1.97E-02	2.32E-03	2.73E-04
LA142	1.96E+00	4.30E-04	8.33E-09	6.12E-23	0.	0.	0.	0.	0.	0.	0.
CE143	1.29E-02	5.32E-01	3.22E-01	7.09E-02	5.70E-03	3.69E-05	2.38E-07	9.99E-12	1.13E-22	0.	0.
PR143	3.79E-09	3.41E-02	5.30E-02	6.84E-02	5.87E-02	3.57E-02	2.16E-02	7.80E-03	6.24E-04	3.96E-06	2.51E-08
CE144	5.19E-04	3.71E-03	3.70E-03	3.68E-03	3.63E-03	3.54E-03	3.46E-03	3.29E-03	2.91E-03	2.28E-03	1.79E-03
PR144	1.42E-07	3.71E-03	3.70E-03	3.68E-03	3.63E-03	3.54E-03	3.46E-03	3.29E-03	2.91E-03	2.28E-03	1.79E-03
PR145	2.07E-02	2.12E-01	1.31E-02	3.11E-06	2.84E-12	2.35E-24	1.95E-36	0.	0.	0.	0.
ND147	2.51E-06	4.21E-02	3.96E-02	3.28E-02	2.40E-02	1.29E-02	6.89E-03	1.98E-03	8.67E-05	1.69E-07	3.28E-10
PM147	6.95E-15	3.15E-05	6.10E-05	1.39E-04	2.41E-04	3.68E-04	4.34E-04	4.84E-04	4.88E-04	4.55E-04	4.23E-04
ND149	3.56E+00	3.44E-04	3.33E-08	3.04E-20	2.60E-40	0.	0.	0.	0.	0.	0.
PM149	4.95E-04	9.14E-02	6.70E-02	2.52E-05	4.66E-03	2.38E-04	1.04E-05	1.97E-08	3.11E-15	7.66E-29	1.91E-42
PM150	4.06E-02	8.58E-05	1.81E-07	1.70E-15	7.10E-29	0.	0.	0.	0.	0.	0.

1

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	8.63E-03	5.88E-02	3.24E-02	5.46E-03	2.80E-04	7.35E-07	1.94E-09	1.34E-14	1.68E-27	0.	0.	0.
SM153	2.90E-02	2.03E-02	1.43E-02	4.94E-03	8.39E-04	2.44E-05	7.09E-07	5.95E-10	1.23E-17	5.23E-33	2.22E-48	0.
SM156	2.57E-02	4.38E-03	7.47E-04	3.68E-06	5.30E-10	1.09E-17	2.25E-25	9.57E-41	0.	0.	0.	0.
EU155	1.13E-06	3.84E-05	3.83E-05	3.83E-05	3.82E-05	3.81E-05	3.79E-05	3.76E-05	3.69E-05	3.54E-05	3.41E-05	0.
EU156	7.51E-05	6.11E-04	6.77E-04	6.07E-04	4.82E-04	3.03E-04	1.91E-04	7.58E-05	7.51E-06	7.40E-08	7.29E-10	0.
EU157	4.21E-03	4.87E-03	1.64E-03	6.14E-05	2.58E-07	4.55E-12	8.05E-17	2.51E-26	0.	0.	0.	0.
GD159	7.59E-04	1.49E-03	5.95E-04	3.71E-05	3.65E-07	3.54E-11	3.43E-15	3.22E-23	2.75E-43	0.	0.	0.
TB161	9.33E-06	6.10E-05	5.50E-05	4.07E-05	2.47E-05	9.03E-06	3.30E-06	4.42E-07	2.93E-09	1.27E-13	5.50E-18	0.
TOTAL	3.61E+02	5.57E+01	2.42E+01	9.45E+00	4.59E+00	1.95E+00	1.18E+00	6.27E-01	2.49E-01	7.57E-02	3.51E-02	0.

HARRY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	4.90E-07	4.23E-09	3.93E-10	3.65E-11	2.94E-14	2.35E-17	1.76E-21	1.13E-27	0.	0.	0.	0.
MN 54	2.35E-06	1.01E-06	6.67E-07	4.38E-07	1.25E-07	3.57E-08	6.73E-09	5.50E-10	1.29E-13	4.67E-19	1.69E-24	0.
FE 59	5.43E-06	1.96E-08	1.17E-09	7.07E-11	1.53E-14	3.31E-18	4.32E-23	2.02E-30	0.	0.	0.	0.
CO 57	1.10E-05	4.34E-06	2.72E-06	1.71E-06	4.20E-07	1.04E-07	1.60E-09	9.71E-10	8.49E-14	6.97E-20	0.	0.
CO 58	3.49E-05	1.00E-06	1.70E-07	2.88E-08	1.40E-10	6.82E-13	5.63E-16	1.34E-20	5.10E-36	0.	0.	0.
CO 60	5.14E-06	4.50E-06	4.20E-06	3.92E-06	3.22E-06	2.65E-06	2.03E-06	1.37E-06	3.68E-07	5.11E-08	7.06E-09	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	2.12E-02	5.29E-11	5.15E-11	5.01E-11	4.69E-11	4.36E-11	3.96E-11	3.44E-11	2.14E-11	1.05E-11	5.15E-12	0.
AM241	8.65E-10	8.65E-10	8.65E-10	8.65E-10	8.69E-10	8.73E-10	8.73E-10	8.77E-10	8.81E-10	8.73E-10	8.61E-10	0.
CM242	5.87E-08	1.24E-08	5.72E-09	2.63E-09	2.56E-10	2.50E-11	1.12E-12	1.06E-14	3.04E-19	2.83E-19	2.65E-19	0.
KR 85	5.96E-06	1.48E-04	1.43E-04	1.39E-04	1.27E-04	1.14E-04	1.00E-04	8.28E-05	4.38E-05	1.67E-05	6.39E-06	0.
SR 89	5.11E-06	1.20E-03	1.05E-04	9.19E-06	6.19E-09	4.18E-12	2.47E-16	1.12E-22	8.14E-44	0.	0.	0.
SR 90	1.03E-05	1.03E-03	1.02E-03	1.01E-03	9.72E-04	9.35E-04	8.90E-04	8.26E-04	6.46E-04	4.46E-04	3.09E-04	0.
Y 90	1.52E-11	1.03E-03	1.02E-03	1.01E-03	9.72E-04	9.35E-04	8.90E-04	8.26E-04	6.46E-04	4.46E-04	3.09E-04	0.
Y 91	2.95E-08	1.99E-03	2.32E-04	2.70E-05	4.22E-08	6.63E-11	1.21E-14	2.98E-20	6.02E-39	0.	0.	0.
ZR 95	1.67E-04	4.30E-04	6.14E-05	8.74E-06	2.55E-08	7.42E-11	3.07E-14	2.59E-19	3.17E-36	0.	0.	0.
NB 95M	3.56E-12	9.11E-06	1.30E-06	1.86E-07	5.40E-10	1.57E-12	6.51E-16	5.49E-21	6.73E-38	0.	0.	0.
NB 95	1.87E-11	9.25E-04	1.33E-04	1.89E-05	5.49E-08	1.59E-10	6.65E-14	5.62E-19	6.88E-36	0.	0.	0.
RU103	1.02E-04	3.98E-04	1.63E-05	6.70E-07	4.57E-11	3.13E-15	8.80E-21	4.14E-29	0.	0.	0.	0.
RH103M	6.83E-09	3.99E-04	1.63E-05	6.70E-07	4.58E-11	3.14E-15	8.80E-21	4.15E-29	0.	0.	0.	0.
RU106	6.03E-04	5.73E-03	4.06E-03	2.88E-03	1.02E-03	3.63E-04	9.14E-05	1.16E-05	1.17E-08	3.75E-13	1.21E-17	0.
RH106	6.52E-06	5.73E-03	4.06E-03	2.88E-03	1.02E-03	3.63E-04	9.14E-05	1.16E-05	1.17E-08	3.75E-13	1.21E-17	0.
SN123	5.13E-06	7.11E-05	2.58E-05	9.37E-06	4.50E-07	2.16E-08	3.76E-10	8.66E-13	1.39E-21	8.94E-35	5.74E-48	0.
SB125	8.72E-05	1.76E-04	1.54E-04	1.36E-04	9.25E-05	6.29E-05	3.76E-05	1.74E-05	1.34E-06	2.85E-08	6.07E-10	0.
TE125M	2.35E-12	7.17E-05	6.37E-05	5.61E-05	3.83E-05	2.60E-05	1.56E-05	7.20E-06	5.53E-07	1.18E-08	2.51E-10	0.
TE127M	3.80E-10	1.82E-04	5.70E-05	1.78E-05	5.48E-07	1.69E-08	1.62E-10	1.52E-13	1.25E-23	9.36E-39	6.97E-54	0.
TE127	2.65E-02	1.80E-04	5.63E-05	1.76E-05	5.42E-07	1.67E-08	1.60E-10	1.51E-13	1.24E-23	9.23E-39	6.91E-54	0.
CS137	1.19E-04	1.25E-03	1.24E-03	1.22E-03	1.18E-03	1.14E-03	1.09E-03	1.02E-03	8.03E-04	5.70E-04	4.03E-04	0.
BA137M	2.50E-07	1.17E-03	1.16E-03	1.14E-03	1.10E-03	1.07E-03	1.02E-03	9.52E-04	7.53E-04	5.33E-04	3.77E-04	0.
CE141	1.46E-07	6.29E-05	1.26E-06	2.54E-08	2.07E-13	1.68E-18	2.76E-25	1.83E-35	0.	0.	0.	0.
CE144	5.19E-04	1.53E-03	9.81E-04	6.26E-04	1.64E-04	4.32E-05	7.27E-06	5.01E-07	6.75E-11	1.06E-16	1.65E-22	0.
PR144	1.42E-07	1.53E-03	9.81E-04	6.26E-04	1.64E-04	4.32E-05	7.27E-06	5.01E-07	6.75E-11	1.06E-16	1.65E-22	0.
PM147	6.95E-15	4.04E-04	3.54E-04	3.10E-04	2.08E-04	1.40E-04	8.23E-05	3.74E-05	2.65E-06	5.02E-08	9.49E-10	0.
EU155	1.13E-06	3.32E-05	3.08E-05	2.87E-05	2.31E-05	1.85E-05	1.38E-05	8.93E-06	2.09E-06	2.35E-07	2.64E-08	0.
TOTAL	4.94E-02	2.57E-02	1.60E-02	1.22E-02	7.09E-03	5.25E-03	4.33E-03	3.80E-03	2.90E-03	2.01E-03	1.40E-03	0.

APPENDIX 2

HARRY EVENT

mR/hr

	<u>Page</u>
Fraction of refractories present = 1.0	2-1
Fraction of refractories present = 0.5	2-11
Fraction of refractories present = 0.1	2-21

DEBRIS DECAY FROM 1 TO 21 HOURS

ZERO TIME 1.00E+00 2.00E+00 3.00E+00 4.00E+00 6.00E+00 9.00E+00 1.20E+01 1.50E+01 1.80E+01 2.10E+01

BE	7	2.47E-09	2.47E-09	2.47E-09	2.47E-09	2.47E-09	2.47E-09	2.46E-09	2.45E-09	2.45E-09	2.45E-09	2.44E-09
NA	24	2.33E-04	2.23E-04	2.13E-04	2.03E-04	1.94E-04	1.77E-04	1.54E-04	1.34E-04	1.17E-04	1.02E-04	8.82E-05
MN	54	1.91E-07	1.91E-07	1.91E-07	1.91E-07	1.91E-07	1.91E-07	1.91E-07	1.89E-07	1.89E-07	1.89E-07	1.89E-07
FE	55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE	59	5.95E-07	5.94E-07	5.94E-07	5.94E-07	5.94E-07	5.93E-07	5.92E-07	5.91E-07	5.90E-07	5.89E-07	5.88E-07
CO	57	1.22E-07	1.22E-07	1.22E-07	1.22E-07	1.22E-07	1.22E-07	1.22E-07	1.22E-07	1.22E-07	1.22E-07	1.22E-07
CO	58	3.34E-06	3.34E-06	3.34E-06	3.34E-06	3.33E-06	3.33E-06	3.32E-06	3.32E-06	3.32E-06	3.32E-06	3.31E-06
CO	60	1.17E-06	1.17E-06	1.17E-06	1.17E-06	1.17E-06	1.17E-06	1.17E-06	1.17E-06	1.17E-06	1.17E-06	1.17E-06
CU	64	1.39E-02	1.32E-02	1.25E-02	1.18E-02	1.12E-02	1.00E-02	8.53E-03	7.25E-03	6.17E-03	5.25E-03	4.46E-03
CU	67	1.21E-06	1.20E-06	1.17E-06	1.16E-06	1.15E-06	1.12E-06	1.08E-06	1.05E-06	1.02E-06	9.79E-07	9.51E-07
W	181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB	203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U	237	2.67E-04	2.66E-04	2.65E-04	2.64E-04	2.63E-04	2.60E-04	2.57E-04	2.54E-04	2.50E-04	2.47E-04	2.44E-04
U	239	2.65E+00	4.51E-01	7.70E-02	1.31E-02	2.23E-03	6.49E-05	3.22E-07	1.59E-09	7.86E-12	3.89E-14	1.92E-16
U	240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP	239	3.14E-05	5.27E-02	6.09E-02	6.18E-02	6.14E-02	5.99E-02	5.75E-02	5.56E-02	5.36E-02	5.17E-02	4.98E-02
NP	240M	1.16E-05	6.99E-03	6.69E-03	6.37E-03	6.07E-03	5.49E-03	4.74E-03	4.09E-03	3.52E-03	3.04E-03	2.63E-03
NP	240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AM	241	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12
CM	242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE	75	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE	77	7.05E-05	1.81E-04	1.71E-04	1.61E-04	1.51E-04	1.34E-04	1.11E-04	9.24E-05	7.70E-05	6.40E-05	5.33E-05
AS	77	6.36E-09	1.01E-06	1.02E-06	1.02E-06	1.03E-06	1.04E-06	1.04E-06	1.03E-06	1.01E-06	9.94E-07	9.69E-07
SE	77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE	78	2.59E-03	1.62E-03	1.01E-03	6.30E-04	3.94E-04	1.53E-04	3.72E-05	9.00E-06	2.20E-06	5.34E-07	1.30E-07
AS	78	1.97E-04	3.26E-03	4.02E-03	3.77E-03	3.15E-03	1.86E-03	6.90E-04	2.29E-04	7.09E-05	2.12E-05	6.15E-06
AS	79	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SE	79M	0.	0.	0.								

HARRY MR/HR
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

		ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BR 84		1.	78E-03	3.07E-01	8.30E-02	2.25E-02	6.07E-03	4.44E-04	8.77E-06	1.73E-07	3.43E-09	6.78E-11	1.34E-12
KR 85M		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 87		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 88		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RB 88		7.	65E-02	2.38E-01	2.03E-01	1.60E-01	1.25E-01	7.60E-02	3.63E-02	1.73E-02	8.23E-03	3.91E-03	1.86E-03
RB 89		1.	22E+00	1.15E+00	7.74E-02	5.20E-03	3.48E-04	1.58E-06	4.77E-10	1.44E-13	4.39E-17	1.33E-20	4.03E-24
SR 89		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 91		9.	21E-03	1.71E-01	1.60E-01	1.49E-01	1.38E-01	1.20E-01	9.68E-02	7.82E-02	6.32E-02	5.07E-02	4.09E-02
Y 91M		4.	98E-07	4.75E-02	6.47E-02	6.94E-02	6.84E-02	6.15E-02	5.03E-02	4.05E-02	3.26E-02	2.63E-02	2.12E-02
Y 91		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 92		2.	12E-01	9.45E-01	7.32E-01	5.67E-01	4.39E-01	2.63E-01	1.22E-01	5.67E-02	2.63E-02	1.22E-02	5.68E-03
Y 92		1.	93E-03	3.93E-02	6.16E-02	7.33E-02	7.78E-02	7.41E-02	5.68E-02	3.87E-02	2.49E-02	1.53E-02	9.23E-03
SR 93		1.	51E+01	2.59E-01	1.43E-03	7.91E-06	4.36E-08	1.33E-12	2.25E-19	3.79E-26	6.40E-33	1.08E-39	1.82E-46
Y 93		6.	87E-04	2.22E-02	2.09E-02	1.95E-02	1.82E-02	1.59E-02	1.30E-02	1.06E-02	8.61E-03	7.07E-03	5.74E-03
Y 94		7.	51E-01	1.03E+00	1.32E-01	1.70E-02	2.20E-03	3.65E-05	7.82E-08	1.68E-10	3.59E-13	7.82E-16	4.34E-17
Y 95		4.	75E+00	4.48E-01	9.87E-03	2.18E-04	4.79E-06	2.33E-09	2.49E-14	2.66E-19	2.84E-24	3.04E-29	3.25E-34
ZR 95		1.	22E-05	1.59E-03	1.62E-03	1.62E-03	1.62E-03	1.62E-03	1.62E-03	1.62E-03	1.62E-03	1.61E-03	1.61E-03
NB 95		1.	40E-12	1.01E-06	2.37E-06	3.72E-06	5.07E-06	7.78E-06	1.18E-05	1.59E-05	1.99E-05	2.39E-05	2.79E-05
ZR 97		6.	77E-03	2.95E-02	2.82E-02	2.71E-02	2.60E-02	2.40E-02	2.12E-02	1.88E-02	1.67E-02	1.47E-02	1.30E-02
NB 97M		1.	50E-04	1.22E-01	1.17E-01	1.12E-01	1.08E-01	9.91E-02	8.76E-02	7.76E-02	6.85E-02	6.05E-02	5.35E-02
NB 97		1.	32E-02	5.77E-02	8.13E-02	9.26E-02	9.72E-02	9.67E-02	8.81E-02	7.86E-02	6.95E-02	6.13E-02	5.45E-02
NB 98		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MO 99		1.	90E-05	7.83E-03	7.74E-03	7.67E-03	7.59E-03	7.43E-03	7.21E-03	6.98E-03	6.78E-03	6.57E-03	6.37E-03
TC 99M		1.	31E-10	5.53E-04	1.04E-03	1.47E-03	1.84E-03	2.46E-03	3.13E-03	3.55E-03	3.81E-03	3.95E-03	4.01E-03
MO101		2.	48E+00	1.12E+00	6.51E-02	3.77E-03	2.19E-04	7.33E-07	1.43E-10	2.78E-14	5.40E-18	1.05E-21	2.04E-25
TC101		2.	43E-02	7.28E-01	7.96E-02	6.53E-03	4.76E-04	2.15E-06	5.36E-10	1.20E-13	2.55E-17	5.24E-21	1.06E-24
MO102		5.	71E+00										

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD111M	3.53E-03	3.10E-03	2.74E-03	2.42E-03	2.13E-03	1.66E-03	1.13E-03	7.78E-04	5.33E-04	3.64E-04	2.50E-04	1.42E-05
PD111	8.88E-05	1.60E-04	1.54E-04	1.37E-04	1.21E-04	9.40E-05	6.45E-05	4.42E-05	3.03E-05	2.08E-05	1.42E-05	0.
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG111	2.43E-13	7.19E-07	1.51E-06	2.22E-06	2.85E-06	3.88E-06	4.99E-06	5.72E-06	6.19E-06	6.49E-06	6.67E-06	0.
PD112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG112	3.66E-08	2.33E-04	4.11E-04	5.52E-04	6.56E-04	7.85E-04	8.63E-04	8.59E-04	8.19E-04	7.63E-04	7.04E-04	0.
AG113	1.28E-06	2.74E-04	2.40E-04	2.11E-04	1.85E-04	1.42E-04	9.64E-05	6.51E-05	4.39E-05	2.97E-05	2.01E-05	0.
AG115	4.11E-03	4.40E-03	5.48E-04	6.85E-05	8.58E-06	1.34E-07	2.62E-10	5.12E-13	9.91E-16	9.85E-165	9.13E-19	0.
CD115M	1.14E-12	3.03E-08	3.41E-08	3.46E-08	3.46E-08	3.46E-08	3.44E-08	3.44E-08	3.43E-08	3.42E-08	3.42E-08	0.
CD115	4.97E-09	9.37E-05	1.01E-04	1.01E-04	9.93E-05	9.68E-05	9.32E-05	8.96E-05	8.62E-05	8.30E-05	7.97E-05	0.
IN115M	4.18E-14	6.98E-06	1.55E-05	2.30E-05	2.93E-05	3.91E-05	4.83E-05	5.32E-05	5.55E-05	5.60E-05	5.55E-05	0.
CD117	4.63E-04	7.72E-03	5.81E-03	4.34E-03	3.25E-03	1.83E-03	7.66E-04	3.23E-04	1.36E-04	5.70E-05	2.40E-05	0.
IN117M	1.68E-09	2.02E-04	2.93E-04	3.18E-04	3.07E-04	2.42E-04	1.38E-04	7.08E-05	3.40E-05	1.58E-05	7.12E-06	0.
IN117	6.25E-13	3.41E-04	8.26E-04	1.15E-03	1.28E-03	1.18E-03	7.50E-04	4.02E-04	2.00E-04	9.40E-05	4.32E-05	0.
CD118	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN118	5.01E-04	3.24E-03	1.39E-03	5.94E-04	2.54E-04	4.65E-05	3.64E-06	2.86E-07	2.24E-08	1.75E-09	1.38E-10	0.
CD119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN119M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN121	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN123M	7.05E-04	1.32E-03	4.67E-04	1.65E-04	5.84E-05	7.29E-06	3.23E-07	1.43E-08	6.32E-10	2.79E-11	1.23E-12	0.
SN123	3.36E-10	3.51E-08	3.51E-08	3.51E-08	3.51E-08	3.51E-08	3.51E-08	3.51E-08	3.51E-08	3.51E-08	3.51E-08	0.
SN125	4.16E-05	4.15E-05	4.14E-05	4.13E-05	4.11E-05	4.08E-05	4.05E-05	4.01E-05	3.98E-05	3.93E-05	3.90E-05	0.
SB125	3.65E-07	3.67E-07	3.68E-07	3.70E-07	3.71E-07	3.75E-07	3.81E-07	3.86E-07	3.90E-07	3.95E-07	4.00E-07	0.
SB126	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN127	7.03E-02	5.05E-02	3.63E-02	2.61E-02	1.88E-02	9.70E-03	3.61E-03	1.34E-03	4.97E-04	1.85E-04	6.86E-05	0.
SB127	3.22E-04	1.11E-03	1.23E-03	1.31E-03	1.37E-03	1.42E-03	1.45E-03	1.43E-03	1.41E-03	1.38E-03	1.35E-03	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN128	1.74E-01	8.57E-02	4.24E-02	2.10E-02	1.04E-02	2.53E-03	3.05E-04	3.69E-05	4.45E-06	5.39E-07	6.50E-08	0.
SB128M	2.60E-04	2.88E-01	1.49E-01	7.36E-02	3.63E-02	8.90E-03	1.07E-03	1.29E-04	1.56E-05	1.89E-06	2.28E-07	0.
SB128	3.51E-02	3.38E-02	3.18E-02	2.98E-02	2.78E-02	2.38E-02	1.90E-02	1.51E-02	1.20E-02	9.52E-03	7.55E-03	0.
SN129M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN129	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SB129	8.55E-02	1.43E-01	1.35E-01	1.20E-01	1.06E-01	7.86E-02	4.90E-02	3.03E-02	1.87E-02	1.15E-02	7.10E-03	0.
TE129M	3.64E-11	4.03E-07	8.31E-07	1.22E-06	1.57E-06	2.13E-06	2.69E-06	3.04E-06	3.25E-06	3.38E-06	3.47E-06	0.
TE129	2.60E-03	3.57E-03	4.18E-03	4.35E-03	4.18E-03	3.46E-03	2.31E-03	1.45E-03	9.06E-04	5.61E-04	3.48E-04	0.
SB130M	1.68E-02	3.16E-02	8.31E-05	2.18E-07	5.74E-10	3.96E-15	7.22E-23	1.31E-30	2.38E-38	4.33E-46	7.87E-54	0.
SB130	3.56E+00	1.08E+00	3.06E-01	8.66E-02	2.45E-02	1.97E-03	4.50E-05	1.03E-06	2.34E-08	5.33E-10	1.22E-11	0.

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	6.68E-04	6.32E-04	5.98E-04	5.65E-04	5.35E-04	4.78E-04	4.04E-04	3.42E-04	2.89E-04	2.45E-04	2.07E-04	
SB131	4.66E+00	1.22E+00	1.99E-01	3.26E-02	5.35E-03	1.44E-04	6.35E-07	2.80E-09	1.23E-11	5.44E-14	2.71E-16	
TE131M	1.72E-06	9.00E-03	1.03E-02	1.03E-02	1.01E-02	9.64E-03	8.99E-03	8.38E-03	7.82E-03	7.30E-03	6.81E-03	
TE131	4.64E-01	5.04E-01	1.64E-01	4.27E-02	1.04E-02	9.74E-04	4.84E-04	4.47E-04	4.17E-04	3.90E-04	3.64E-04	
I131	6.46E-05	2.24E-03	3.30E-03	3.62E-03	3.68E-03	3.71E-03	3.71E-03	3.68E-03	3.68E-03	3.65E-03	3.65E-03	
TE132	2.77E-03	6.73E-03	6.66E-03	6.61E-03	6.55E-03	6.43E-03	6.26E-03	6.09E-03	5.94E-03	5.77E-03	5.62E-03	
I132	7.36E-02	7.34E-02	7.32E-02	7.29E-02	7.23E-02	7.14E-02	6.98E-02	6.80E-02	6.62E-02	6.45E-02	6.29E-02	
TE133M	3.58E-03	1.24E+00	5.40E-01	2.35E-01	1.02E-01	1.94E-02	1.60E-03	1.32E-04	1.09E-05	8.97E-07	7.40E-08	
TE133	8.16E+00	4.63E-01	5.14E-02	1.70E-02	7.19E-03	1.36E-03	1.13E-04	9.27E-06	7.68E-07	6.31E-08	5.21E-09	
I133	8.67E-03	9.33E-02	1.01E-01	1.01E-01	9.90E-02	9.38E-02	8.52E-02	7.72E-02	6.96E-02	6.35E-02	5.73E-02	
XE133M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE133	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
TE134	2.45E+00	1.13E+00	4.22E-01	1.57E-01	5.82E-02	8.07E-03	4.12E-04	2.11E-05	1.08E-06	5.56E-08	2.85E-09	
I134	3.33E+00	4.45E+00	3.12E+00	1.83E+00	9.82E-01	2.49E-01	2.74E-02	2.80E-03	2.74E-04	2.62E-05	2.49E-06	
I135	3.42E-01	6.03E-01	5.44E-01	4.90E-01	4.43E-01	3.59E-01	2.64E-01	1.93E-01	1.42E-01	1.04E-01	7.61E-02	
XE135M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE135	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS136	1.49E-04	1.48E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.46E-04	1.45E-04	1.44E-04	1.43E-04	1.42E-04	
CS137	6.67E-07	7.19E-06	7.19E-06	7.19E-06	7.19E-06	7.19E-06	7.19E-06	7.19E-06	7.19E-06	7.19E-06	7.19E-06	
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE138	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS138	2.83E+00	4.76E+00	1.65E+00	4.85E-01	1.36E-01	1.04E-02	2.15E-04	4.47E-06	9.27E-08	1.93E-09	4.00E-11	
CS139	2.25E+00	7.19E-02	9.01E-04	1.13E-05	1.42E-07	2.23E-11	4.44E-17	8.78E-23	1.74E-28	3.45E-34	6.80E-40	
BA139	5.55E-03	6.19E-02	3.82E-02	2.32E-02	1.40E-02	5.15E-03	1.14E-03	2.54E-04	5.64E-05	1.25E-05	2.77E-06	
BA140	2.46E-04	1.53E-03	1.53E-03	1.52E-03	1.52E-03	1.51E-03	1.51E-03	1.50E-03	1.48E-03	1.47E-03	1.46E-03	
LA140	8.06E-09	3.62E-04	7.17E-04	1.06E-03	1.41E-03	2.07E-03	3.02E-03	3.91E-03	4.75E-03	5.54E-03	6.28E-03	
BA141	2.57E+00	7.77E-01	7.71E-02	7.65E-03	7.59E-04	7.52E-06	7.34E-09	7.16E-12	6.97E-15	6.85E-18	6.67E-21	
LA141	1.11E-03	2.36E-02	2.20E-02	1.86E-02	1.56E-02	1.10E-02	6.43E-03	3.76E-03	2.21E-03	1.30E-03	7.60E-04	
CE141	2.42E-10	2.70E-05	6.31E-05	9.50E-05	1.22E-04	1.63E-04	2.03E-04	2.25E-04	2.38E-04	2.46E-04	2.50E-04	
BA142	8.44E+00	3.35E-01	7.65E-03	1.74E-04	3.97E-06	2.07E-09	2.45E-14	2.91E-19	3.45E-24	4.10E-29	4.86E-34	
LA142	4.21E-01	2.92E+00	1.93E+00	1.22E+00	7.79E-01	3.15E-01	8.14E-02	2.10E-02	5.40E-03	1.39E-03	3.59E-04	
LA143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE143	3.32E-04	2.11E-02	2.19E-02	2.13E-02	2.10E-02	2.02E-02	1.89E-02	1.78E-02	1.67E-02	1.56E-02	1.47E-02	
PR143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE144	7.96E-07	5.70E-06	5.70E-06	5.70E-06	5.70E-06	5.70E-06	5.69E-06	5.69E-06	5.69E-06	5.69E-06	5.69E-06	
PR144	3.89E-10	9.25E-06	1.01E-05	1.01E-05	1.02E-05	1.02E-05	1.02E-05	1.02E-05	1.01E-05	1.01E-05	1.01E-05	
PR145	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE146	1.85E+00	9.48E-02	4.86E-03	2.48E-04	1.28E-05	3.37E-08	4.53E-12	6.11E-16	8.23E-20	1.11E-23	1.50E-27	
PR146	1.30E-01	1.13E+00	2.57E-01	4.82E-02	8.68E-03	2.73E-04	1.51E-06	8.31E-09	4.60E-11	2.54E-13	1.39E-15	
PR147	4.85E-01	1.40E-01	4.38E-03	1.37E-04	4.28E-06	4.18E-09	1.27E-13	3.90E-18	1.19E-22	3.63E-27	1.11E-31	

1

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	3.37E-08	6.34E-04	6.52E-04	6.51E-04	6.49E-04	6.46E-04	6.41E-04	6.36E-04	6.31E-04	6.26E-04	6.21E-04	
ND149	1.30E-01	8.86E-02	6.03E-02	4.11E-02	2.78E-02	1.29E-02	4.06E-03	1.28E-03	4.03E-04	1.27E-04	4.01E-05	
PM149	5.64E-07	4.41E-05	7.32E-05	9.27E-05	1.05E-04	1.18E-04	1.23E-04	1.20E-04	1.17E-04	1.13E-04	1.09E-04	
PM150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
ND151	7.53E-01	2.35E-02	7.36E-04	2.30E-05	7.19E-07	7.02E-10	2.14E-14	6.55E-19	2.00E-23	6.08E-28	1.86E-32	
PM151	2.68E-04	3.13E-03	3.15E-03	3.08E-03	3.00E-03	2.85E-03	2.64E-03	2.45E-03	2.28E-03	2.11E-03	1.96E-03	
PM152	6.26E-01	6.12E-04	5.97E-07	5.83E-10	5.70E-13	5.44E-19	5.06E-28	4.72E-37	4.40E-46	4.11E-55	3.82E-64	
SM153	1.49E-04	1.47E-04	1.45E-04	1.42E-04	1.40E-04	1.36E-04	1.30E-04	1.25E-04	1.19E-04	1.14E-04	1.09E-04	
SM155	1.46E-02	2.39E-03	3.92E-04	6.42E-05	1.05E-05	2.83E-07	1.25E-09	5.50E-12	2.43E-14	1.08E-16	2.65E-19	
EU153	5.90E-09	1.68E-07	1.95E-07	1.99E-07	2.00E-07	2.00E-07	2.00E-07	2.00E-07	2.00E-07	2.00E-07	2.00E-07	
SM156	2.74E-04	2.54E-04	2.36E-04	2.19E-04	2.04E-04	1.76E-04	1.41E-04	1.13E-04	9.07E-05	7.26E-05	5.81E-05	
EU156	8.96E-06	1.46E-05	1.99E-05	2.47E-05	2.93E-05	3.73E-05	4.75E-05	5.49E-05	6.15E-05	6.63E-05	6.99E-05	
EU157	9.90E-05	3.28E-04	3.13E-04	2.99E-04	2.85E-04	2.61E-04	2.28E-04	1.99E-04	1.73E-04	1.51E-04	1.32E-04	
EU158	1.88E-02	7.62E-03	3.08E-03	1.25E-03	5.05E-04	8.27E-05	5.51E-06	3.65E-07	2.43E-08	1.61E-09	1.07E-10	
EU159	4.82E-03	4.79E-04	4.75E-05	4.71E-06	4.67E-07	4.61E-09	4.50E-12	4.39E-15	4.29E-18	4.19E-21	4.10E-24	
GD159	3.02E-06	1.32E-05	1.38E-05	1.33E-05	1.28E-05	1.19E-05	1.06E-05	9.45E-06	8.41E-06	7.49E-06	6.68E-06	
TB161	7.01E-09	5.04E-08	5.01E-08	4.99E-08	4.98E-08	4.93E-08	4.88E-08	4.81E-08	4.75E-08	4.70E-08	4.63E-08	
TOTAL	1.03E+02	3.11E+01	1.25E+01	6.85E+00	4.38E+00	2.35E+00	1.38E+00	1.00E+00	7.85E-01	6.45E-01	5.44E-01	

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	2.47E-09	2.44E-09	2.41E-09	2.32E-09	2.17E-09	1.91E-09	1.68E-09	1.29E-09	6.75E-10	1.83E-10	4.98E-11	
NA 24	2.33E-04	7.69E-05	2.54E-05	9.10E-07	3.56E-09	5.44E-14	8.30E-19	1.93E-28	0.	0.	0.	
MN 54	1.91E-07	1.89E-07	1.89E-07	1.85E-07	1.84E-07	1.80E-07	1.77E-07	1.69E-07	1.51E-07	1.20E-07	9.54E-08	
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
FE 59	5.95E-07	5.86E-07	5.77E-07	5.51E-07	5.10E-07	4.38E-07	3.75E-07	2.76E-07	1.28E-07	2.73E-08	5.86E-09	
CO 57	1.22E-07	1.22E-07	1.21E-07	1.21E-07	1.19E-07	1.16E-07	1.13E-07	1.08E-07	9.50E-08	7.34E-08	5.68E-08	
CO 58	3.34E-06	3.31E-06	3.27E-06	3.17E-06	3.03E-06	2.75E-06	2.49E-06	2.05E-06	1.26E-06	4.78E-07	1.80E-07	
CO 60	1.17E-06	1.17E-06	1.17E-06	1.17E-06	1.17E-06	1.17E-06	1.16E-06	1.15E-06	1.13E-06	1.09E-06	1.05E-06	
CU 64	1.39E-02	3.79E-03	1.03E-03	2.10E-05	3.15E-08	7.16E-14	1.62E-19	8.34E-31	0.	0.	0.	
CU 67	1.21E-06	9.19E-07	7.02E-07	3.12E-07	8.13E-08	5.48E-09	3.70E-10	1.68E-12	2.35E-18	0.	0.	
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
U237	2.67E-04	2.41E-04	2.17E-04	1.60E-04	9.56E-05	3.43E-05	1.23E-05	1.57E-06	9.27E-09	9.97E-13	6.72E-13	
U240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
NP239	3.14E-05	4.79E-02	3.57E-02	1.47E-02	3.37E-03	1.76E-04	9.23E-06	2.53E-08	9.95E-15	2.38E-24	2.38E-24	
NP240M	1.16E-05	2.27E-03	6.96E-04	2.02E-05	5.54E-08	4.17E-13	3.14E-18	1.77E-28	0.	0.	0.	
AM241	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.55E-12	
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
GE 77	7.05E-05	4.44E-05	1.02E-05	1.23E-07	7.81E-11	3.16E-17	1.27E-23	2.08E-36	0.	0.	0.	
AS 77	6.36E-09	9.39E-07	6.79E-07	1.96E-07	2.30E-08	3.12E-10	4.24E-12	7.82E-16	3.62E-25	7.77E-44	1.67E-62	
SE 77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AS 78	1.97E-04	1.75E-06	5.12E-11	4.32E-25	0.	0.	0.	0.	0.	0.	0.	
BR 82	1.58E-05	9.89E-06	6.18E-06	1.50E-06	1.42E-07	1.28E-09	1.15E-11	9.27E-16	5.41E-26	1.86E-46	6.32E-67	
BR 83	3.62E-05	9.54E-07	9.60E-10	9.75E-19	9.95E-34	0.	0.	0.	0.	0.	0.	
KR 83M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
KR 85M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
KR 87	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
KR 88	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
RB 88	7.65E-02	8.82E-04	2.33E-06	4.22E-14	5.29E-27	0.	0.	0.	0.	0.	0.	
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SR 91	9.21E-03	3.30E-02	5.91E-03	3.39E-05	6.20E-09	2.10E-16	7.13E-24	8.11E-39	0.	0.	0.	

DEBRIS DECAY FROM 1 TO 300 DAYS

ZERO TIME 1.00E+00 2.00E+00 5.00E+00 1.00E+01 2.00E+01 3.00E+01 5.00E+01 1.00E+02 2.00E+02 3.00E+02

Y 91M	4.98E-07	1.71E-02	3.06E-03	1.76E-05	3.23E-09	1.09E-16	3.69E-24	4.21E-39	0.	0.	0.
SR 92	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 92	2.12E-01	2.64E-03	5.69E-06	5.72E-14	2.68E-27	0.	0.	0.	0.	0.	0.
Y 93	1.93E-03	5.46E-03	6.06E-05	4.67E-11	2.72E-21	9.31E-42	3.19E-62	0.	0.	0.	0.
ZR 95	6.87E-04	4.65E-03	9.06E-04	6.81E-06	1.96E-09	1.62E-16	1.34E-23	9.12E-38	0.	0.	0.
NB 95M	1.22E-05	1.52E-03	1.51E-03	1.46E-03	1.38E-03	1.24E-03	1.12E-03	9.02E-04	5.28E-04	1.82E-04	6.25E-05
NB 95	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZR 97	1.40E-12	3.04E-05	6.01E-05	1.44E-04	2.68E-04	4.62E-04	5.96E-04	7.39E-04	7.12E-04	3.42E-04	1.31E-04
NB 97M	6.77E-03	1.15E-02	4.33E-03	2.29E-04	1.72E-06	9.70E-11	5.45E-15	1.72E-23	9.72E-45	0.	0.
NB 97	1.50E-04	4.75E-02	1.79E-02	9.51E-04	7.10E-06	4.00E-10	2.25E-14	7.10E-23	4.02E-44	0.	0.
MO 99	1.32E-02	4.51E-02	1.69E-02	8.99E-04	6.77E-06	4.07E-10	2.29E-14	7.27E-23	4.09E-44	0.	0.
TC 99M	1.90E-05	6.17E-03	4.82E-03	2.28E-03	6.61E-04	5.52E-05	4.60E-06	3.21E-08	1.30E-13	2.15E-24	3.54E-35
RU103	1.31E-10	4.02E-03	3.39E-03	1.62E-03	4.67E-04	3.90E-05	3.26E-06	2.27E-08	9.22E-14	1.52E-24	2.51E-35
RH103M	4.87E-07	1.11E-03	1.09E-03	1.03E-03	9.50E-04	7.97E-04	6.69E-04	4.72E-04	1.96E-04	3.41E-05	5.94E-06
RU105	5.36E-03	5.13E-03	1.21E-04	1.59E-09	1.16E-17	6.19E-34	3.32E-50	0.	0.	0.	0.
RH105M	1.13E-06	1.65E-04	3.89E-06	5.11E-11	3.74E-19	2.00E-35	1.07E-51	0.	0.	0.	0.
RU106	5.89E-12	1.88E-03	1.23E-03	3.06E-04	3.02E-05	2.94E-07	2.85E-09	2.69E-13	2.33E-23	1.75E-43	1.32E-63
PD109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	1.33E-08	2.33E-05	2.32E-05	2.31E-05	2.29E-05	2.25E-05	2.20E-05	2.12E-05	1.93E-05	1.59E-05	1.32E-05
PD111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG111	3.53E-03	1.71E-04	8.31E-06	9.54E-10	2.58E-16	1.88E-29	1.38E-42	0.	0.	0.	0.
PD111	8.88E-05	9.78E-06	4.73E-07	5.43E-11	1.47E-17	1.07E-30	7.85E-44	0.	0.	0.	0.
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD112	2.43E-13	6.70E-06	6.43E-06	4.90E-06	3.08E-06	1.22E-06	4.85E-07	7.65E-08	7.52E-10	7.29E-14	7.06E-18
AG112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG113	3.66E-08	6.41E-04	2.95E-04	2.73E-05	5.22E-07	1.89E-10	6.85E-14	9.04E-21	5.67E-38	0.	0.
CD115M	1.28E-06	1.35E-05	5.86E-07	4.76E-11	7.28E-18	1.70E-31	3.98E-45	0.	0.	0.	0.
IN115M	1.14E-12	3.30E-08	3.25E-08	3.09E-08	2.86E-08	2.43E-08	2.07E-08	1.50E-08	6.69E-09	1.33E-09	2.66E-10
IN117M	4.97E-09	7.49E-05	5.49E-05	2.16E-05	4.56E-06	2.04E-07	9.09E-09	1.81E-11	3.20E-18	1.00E-31	3.14E-45
IN117	4.18E-14	5.33E-05	4.04E-05	1.59E-05	3.35E-06	1.50E-07	6.68E-09	1.33E-11	2.36E-18	7.38E-32	2.31E-45
SN121	4.63E-04	1.01E-05	9.83E-09	9.18E-18	8.15E-33	0.	0.	0.	0.	0.	0.
SN123	1.68E-09	3.16E-06	3.66E-09	3.53E-							

HARRY
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	2.68E-04	1.83E-03	1.01E-03	1.70E-04	8.70E-06	2.28E-08	6.02E-11	4.15E-16	5.21E-29	0.	0.	0.
SM153	1.49E-04	1.05E-04	7.34E-05	2.54E-05	4.31E-06	1.25E-07	3.64E-09	3.06E-12	6.31E-20	2.69E-35	1.14E-50	0.
SM156	2.74E-04	4.67E-05	7.97E-06	3.93E-08	5.65E-12	1.16E-19	2.40E-27	1.02E-42	0.	0.	0.	0.
EU155	5.90E-09	2.00E-07	2.00E-07	2.00E-07	1.99E-07	1.98E-07	1.98E-07	1.96E-07	1.92E-07	1.85E-07	1.77E-07	0.
EU156	8.96E-06	7.29E-05	8.08E-05	7.25E-05	5.76E-05	3.62E-05	2.28E-05	9.05E-06	8.96E-07	8.83E-09	8.70E-11	0.
EU157	9.90E-05	1.14E-04	3.85E-05	1.44E-06	6.06E-09	1.07E-13	1.89E-18	5.89E-28	0.	0.	0.	0.
GD159	3.02E-06	5.95E-06	2.37E-06	1.48E-07	1.45E-09	1.41E-13	1.36E-17	1.28E-25	1.09E-45	0.	0.	0.
TB161	7.01E-09	4.58E-08	4.13E-08	3.06E-08	1.85E-08	6.78E-09	2.48E-09	3.32E-10	2.20E-12	9.51E-17	4.13E-21	0.
TOTAL	1.99E+00	4.62E-01	2.12E-01	7.80E-02	3.47E-02	1.40E-02	8.32E-03	4.10E-03	1.63E-03	5.98E-04	2.30E-04	0.

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.404E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	2.47E-09	2.14E-11	1.99E-12	1.84E-13	1.48E-16	1.19E-19	8.88E-24	5.70E-30	0.	0.	0.	0.
MN 54	1.91E-07	8.21E-08	5.41E-08	3.56E-08	1.02E-08	2.90E-09	5.46E-10	4.47E-11	1.05E-14	3.79E-20	1.37E-25	0.
FE 59	5.95E-07	2.15E-09	1.29E-10	7.75E-12	1.68E-15	3.63E-19	4.73E-24	2.22E-31	0.	0.	0.	0.
CO 57	1.22E-07	4.81E-08	3.01E-08	1.89E-08	4.66E-09	1.15E-09	1.77E-11	1.08E-11	9.41E-16	7.73E-22	0.	0.
CO 58	3.34E-06	9.59E-08	1.63E-08	2.75E-09	1.34E-11	6.53E-14	5.39E-17	1.28E-21	4.89E-37	0.	0.	0.
CO 60	1.17E-06	1.03E-06	9.59E-07	8.96E-07	7.36E-07	6.05E-07	4.65E-07	3.13E-07	8.40E-08	1.17E-08	1.61E-09	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	2.67E-04	6.66E-13	6.49E-13	6.32E-13	5.91E-13	5.49E-13	4.99E-13	4.33E-13	2.69E-13	1.32E-13	6.49E-14	0.
AM241	1.55E-12	1.55E-12	1.55E-12	1.55E-12	1.56E-12	1.57E-12	1.57E-12	1.57E-12	1.58E-12	1.57E-12	1.54E-12	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZR 95	1.22E-05	3.13E-05	4.46E-06	6.35E-07	1.85E-09	5.39E-12	2.23E-15	1.88E-20	2.31E-37	0.	0.	0.
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	1.40E-12	6.95E-05	9.98E-06	1.42E-06	4.13E-09	1.20E-11	5.00E-15	4.22E-20	5.17E-37	0.	0.	0.
RU103	4.87E-07	1.89E-06	7.75E-08	3.19E-09	2.17E-13	1.49E-17	4.19E-23	1.97E-31	0.	0.	0.	0.
RH103M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU106	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RH106	1.33E-08	1.17E-05	8.28E-06	5.87E-06	2.09E-06	7.42E-07	1.87E-07	2.36E-08	2.38E-11	7.66E-16	2.46E-20	0.
SN123	3.36E-10	4.65E-09	1.69E-09	6.13E-10	2.94E-11	1.41E-12	2.46E-14	5.67E-17	9.09E-26	5.85E-39	3.76E-52	0.
SB125	3.65E-07	7.35E-07	6.46E-07	5.68E-07	3.87E-07	2.63E-07	1.57E-07	7.28E-08	5.60E-09	1.19E-10	2.54E-12	0.
TE125M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS137	6.67E-07	7.03E-06	6.95E-06	6.87E-06	6.63E-06	6.39E-06	6.11E-06	5.71E-06	4.51E-06	3.21E-06	2.26E-06	0.
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE141	2.42E-10	1.05E-07	2.10E-09	4.22E-11	3.44E-16	2.80E-21	4.59E-28	3.05E-38	0.	0.	0.	0.
CE144	7.96E-07	2.34E-06	1.50E-06	9.60E-07	2.52E-07	6.62E-08	1.11E-08	7.69E-10	1.03E-13	1.62E-19	2.53E-25	0.
PR144	3.89E-10	4.17E-06	2.68E-06	1.71E-06	4.49E-07	1.18E-07	1.98E-08	1.37E-09	1.84E-13	2.89E-19	4.51E-25	0.
PM147	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EU155	5.90E-09	1.73E-07	1.61E-07	1.49E-07	1.20E-07	9.66E-08	7.21E-08	4.65E-08	1.09E-08	1.22E-09	1.38E-10	0.
TOTAL	2.87E-04	1.30E-04	3.58E-05	1.91E-05	1.07E-05	8.28E-06	7.02E-06	6.17E-06	4.61E-06	3.22E-06	2.27E-06	0.

DEBRIS DECAY FROM 1 TO 21 HOURS

BE	7	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.57E-09	1.57E-09	1.57E-09	1.56E-09
NA	24	1.49E-04	1.43E-04	1.36E-04	1.30E-04	1.24E-04	1.13E-04	9.85E-05	8.59E-05	7.48E-05	6.52E-05	5.65E-05
MN	54	1.22E-07	1.22E-07	1.22E-07	1.22E-07	1.22E-07	1.22E-07	1.22E-07	1.21E-07	1.21E-07	1.21E-07	1.21E-07
FE	55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE	59	3.81E-07	3.80E-07	3.80E-07	3.80E-07	3.80E-07	3.80E-07	3.79E-07	3.79E-07	3.77E-07	3.77E-07	3.76E-07
CO	57	7.82E-08	7.82E-08	7.82E-08	7.82E-08	7.82E-08	7.82E-08	7.82E-08	7.82E-08	7.82E-08	7.82E-08	7.82E-08
CO	58	2.14E-06	2.14E-06	2.14E-06	2.14E-06	2.13E-06	2.13E-06	2.13E-06	2.13E-06	2.12E-06	2.12E-06	2.12E-06
CO	60	7.52E-07	7.52E-07	7.52E-07	7.52E-07	7.52E-07	7.52E-07	7.52E-07	7.52E-07	7.52E-07	7.52E-07	7.52E-07
CU	64	8.90E-03	8.42E-03	7.98E-03	7.57E-03	7.16E-03	6.43E-03	5.46E-03	4.64E-03	3.95E-03	3.36E-03	2.86E-03
CU	67	7.72E-07	7.65E-07	7.52E-07	7.45E-07	7.39E-07	7.19E-07	6.93E-07	6.73E-07	6.52E-07	6.27E-07	6.09E-07
W	181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB	203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237		1.71E-04	1.70E-04	1.70E-04	1.69E-04	1.68E-04	1.67E-04	1.64E-04	1.63E-04	1.60E-04	1.58E-04	1.56E-04
U239		1.69E+00	2.89E-01	4.93E-02	8.40E-03	1.43E-03	4.16E-05	2.06E-07	1.02E-09	5.03E-12	2.49E-14	1.23E-16
U240		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239		2.01E-05	3.37E-02	3.90E-02	3.96E-02	3.93E-02	3.84E-02	3.68E-02	3.56E-02	3.43E-02	3.31E-02	3.19E-02
NP240M		7.40E-06	4.48E-03	4.28E-03	4.08E-03	3.88E-03	3.51E-03	3.03E-03	2.62E-03	2.26E-03	1.95E-03	1.68E-03
NP240		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AM241		9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13
CM242		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 75		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 77		9.03E-05	2.32E-04	2.19E-04	2.06E-04	1.94E-04	1.71E-04	1.42E-04	1.18E-04	9.86E-05	8.19E-05	6.82E-05
AS 77		8.14E-09	1.29E-06	1.30E-06	1.31E-06	1.32E-06	1.33E-06	1.33E-06	1.32E-06	1.30E-06	1.27E-06	1.24E-06
SE 77M		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 78		3.32E-03	2.08E-03	1.29E-03	8.07E-04	5.04E-04	1.96E-04	4.76E-05	1.15E-05	2.81E-06	6.84E-07	1.66E-07
AS 78		2.52E-04	4.18E-03	5.15E-03	4.82E-03	4.03E-03	2.38E-03	8.84E-04	2.93E-04	9.08E-05	2.72E-05	7.87E-06
AS 79		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SE 79M		0.	0.	0.	0.	0.</						

DEBRIS DECAY FROM 1 TO 21 HOURS

ZERO TIME 1.00E+00 2.00E+00 3.00E+00 4.00E+00 6.00E+00 9.00E+00 1.20E+01 1.50E+01 1.80E+01 2.10E+01

BR	84		2.28E-03	3.93E-01	1.06E-01	2.88E-02	7.77E-03	5.68E-04	1.12E-05	2.22E-07	4.39E-09	8.68E-11	1.71E-12
KR	85M		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR	87		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR	88		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RB	88		9.79E-02	3.04E-01	2.60E-01	2.05E-01	1.60E-01	9.73E-02	4.65E-02	2.21E-02	1.05E-02	5.01E-03	2.38E-03
RB	89		1.57E+00	1.47E+00	9.90E-02	6.66E-03	4.46E-04	2.02E-06	6.11E-10	1.84E-13	5.62E-17	1.70E-20	5.16E-24
SR	89		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR	90		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR	91		1.03E-02	1.92E-01	1.79E-01	1.67E-01	1.55E-01	1.34E-01	1.08E-01	8.76E-02	7.07E-02	5.68E-02	4.58E-02
Y	91M		5.58E-07	5.32E-02	7.25E-02	7.77E-02	7.67E-02	6.89E-02	5.63E-02	4.53E-02	3.66E-02	2.95E-02	2.38E-02
Y	91		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR	92		1.35E-01	6.05E-01	4.69E-01	3.63E-01	2.81E-01	1.68E-01	7.81E-02	3.63E-02	1.68E-02	7.81E-03	3.64E-03
Y	92		1.23E-03	2.51E-02	3.94E-02	4.69E-02	4.98E-02	4.74E-02	3.63E-02	2.48E-02	1.59E-02	9.81E-03	5.91E-03
SR	93		9.64E+00	1.66E-01	9.17E-04	5.07E-06	2.79E-08	8.54E-13	1.44E-19	2.43E-26	4.10E-33	6.91E-40	1.16E-46
Y	93		4.40E-04	1.42E-02	1.34E-02	1.25E-02	1.17E-02	1.02E-02	8.31E-03	6.79E-03	5.51E-03	4.52E-03	3.68E-03
Y	94		4.81E-01	6.57E-01	8.45E-02	1.09E-02	1.41E-03	2.34E-05	5.01E-08	1.07E-10	2.30E-13	5.01E-16	2.78E-17
Y	95		3.04E+00	2.87E-01	6.32E-03	1.39E-04	3.07E-06	1.49E-09	1.59E-14	1.70E-19	1.82E-24	1.94E-29	2.08E-34
ZR	95		7.79E-06	1.02E-03	1.04E-03	1.04E-03	1.04E-03	1.04E-03	1.04E-03	1.04E-03	1.04E-03	1.03E-03	1.03E-03
NB	95		8.97E-13	6.50E-07	1.51E-06	2.38E-06	3.25E-06	4.98E-06	7.56E-06	1.02E-05	1.27E-05	1.53E-05	1.78E-05
ZR	97		4.33E-03	1.89E-02	1.80E-02	1.74E-02	1.66E-02	1.54E-02	1.36E-02	1.20E-02	1.07E-02	9.39E-03	8.35E-03
NB	97M		9.58E-05	7.78E-02	7.46E-02	7.17E-02	6.89E-02	6.34E-02	5.61E-02	4.96E-02	4.39E-02	3.88E-02	3.43E-02
NB	97		8.46E-03	3.69E-02	5.20E-02	5.93E-02	6.22E-02	6.19E-02	5.64E-02	5.03E-02	4.45E-02	3.92E-02	3.49E-02
NB	98		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
M0	99		1.21E-05	5.01E-03	4.96E-03	4.91E-03	4.86E-03	4.76E-03	4.62E-03	4.47E-03	4.34E-03	4.21E-03	4.08E-03
TC	99M		8.37E-11	3.54E-04	6.65E-04	9.40E-04	1.18E-03	1.58E-03	2.00E-03	2.27E-03	2.44E-03	2.53E-03	2.57E-03
M0	101		3.18E+00	1.44E+00	8.33E-02	4.83E-03	2.80E-04	9.39E-07	1.82E-10	3.56E-14	6.91E-18	1.34E-21	2.62E-25
TC	101		3.11E-02	9.32E-01	1.02E-01	8.36E-03	6.09E-04	2.75E-06	6.87E-10	1.54E-13	3.26E-17	6.71E-21	1.36E-24
M0	102		7.32E+00	1.67E-01	3.80E-03	8.68E-05	1.98E-06	1.03E-09	1.22E-14	1.45E-19	1.72E-24	2.04E-29	2.42E-34
TC	102M		0.	0.									

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD111M	4.51E-03	3.98E-03	3.50E-03	3.10E-03	2.73E-03	2.12E-03	1.45E-03	9.96E-04	6.82E-04	4.67E-04	3.20E-04	3.20E-04
PD111	1.14E-04	2.05E-04	1.97E-04	1.75E-04	1.55E-04	1.20E-04	8.26E-05	5.66E-05	3.87E-05	2.66E-05	1.82E-05	1.82E-05
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG111	3.11E-13	9.21E-07	1.93E-06	2.84E-06	3.65E-06	4.97E-06	6.39E-06	7.32E-06	7.93E-06	8.31E-06	8.54E-06	8.54E-06
PD112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG112	4.69E-08	2.98E-04	5.26E-04	7.07E-04	8.40E-04	1.01E-03	1.11E-03	1.10E-03	1.05E-03	9.77E-04	9.01E-04	9.01E-04
AG113	1.64E-06	3.51E-04	3.08E-04	2.70E-04	2.37E-04	1.82E-04	1.23E-04	8.33E-05	5.63E-05	3.80E-05	2.57E-05	2.57E-05
AG115	5.26E-03	5.64E-03	7.02E-04	8.77E-05	1.10E-05	1.72E-07	3.35E-10	6.56E-13	1.27E-15	1.26E-16	1.17E-18	1.17E-18
CD115M	1.46E-12	3.89E-08	4.37E-08	4.42E-08	4.42E-08	4.42E-08	4.41E-08	4.41E-08	4.40E-08	4.38E-08	4.38E-08	4.38E-08
CD115	6.37E-09	1.20E-04	1.29E-04	1.29E-04	1.27E-04	1.24E-04	1.19E-04	1.15E-04	1.10E-04	1.06E-04	1.02E-04	1.02E-04
IN115M	5.35E-14	8.94E-06	1.99E-05	2.95E-05	3.76E-05	5.01E-05	6.18E-05	6.81E-05	7.10E-05	7.17E-05	7.11E-05	7.11E-05
CD117	5.93E-04	9.88E-03	7.44E-03	5.56E-03	4.17E-03	3.34E-03	9.81E-04	4.13E-04	1.74E-04	7.30E-05	3.07E-05	3.07E-05
IN117M	2.15E-09	2.59E-04	3.75E-04	4.07E-04	3.93E-04	3.10E-04	1.77E-04	9.06E-05	4.35E-05	2.02E-05	9.12E-06	9.12E-06
IN117	8.01E-13	4.37E-04	1.06E-03	1.47E-03	1.64E-03	1.51E-03	9.61E-04	5.14E-04	2.56E-04	1.20E-04	5.53E-05	5.53E-05
CD118	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN118	6.41E-04	4.15E-03	1.78E-03	7.60E-04	3.25E-04	5.96E-05	4.66E-06	3.66E-07	2.87E-08	2.25E-09	1.76E-10	1.76E-10
CD119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN119M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN121	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN123M	9.02E-04	1.69E-03	5.98E-04	2.12E-04	7.47E-05	9.33E-06	4.13E-07	1.83E-08	8.09E-10	3.57E-11	1.58E-12	1.58E-12
SN123	4.30E-10	4.50E-08	4.50E-08	4.50E-08	4.50E-08	4.50E-08	4.50E-08	4.50E-08	4.50E-08	4.50E-08	4.50E-08	4.50E-08
SN125	5.33E-05	5.31E-05	5.30E-05	5.29E-05	5.26E-05	5.23E-05	5.19E-05	5.13E-05	5.09E-05	5.04E-05	4.99E-05	4.99E-05
SB125	4.67E-07	4.69E-07	4.71E-07	4.73E-07	4.75E-07	4.80E-07	4.88E-07	4.94E-07	5.00E-07	5.06E-07	5.12E-07	5.12E-07
SB126	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN127	9.00E-02	6.46E-02	4.65E-02	3.35E-02	2.41E-02	1.24E-02	4.62E-03	1.72E-03	6.36E-04	2.37E-04	8.79E-05	8.79E-05
SB127	4.12E-04	1.42E-03	1.57E-03	1.68E-03	1.75E-03	1.82E-03	1.85E-03	1.83E-03	1.81E-03	1.77E-03	1.73E-03	1.73E-03
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN128	2.22E-01	1.10E-01	5.43E-02	2.68E-02	1.33E-02	3.24E-03	3.91E-04	4.72E-05	5.69E-06	6.90E-07	8.32E-08	8.32E-08
SB128M	3.33E-04	3.68E-01	1.91E-01	9.43E-02	4.65E-02	1.14E-02	1.37E-03	1.66E-04	2.00E-05	2.41E-06	2.92E-07	2.92E-07
SB128	4.50E-02	4.33E-02	4.07E-02	3.82E-02	3.56E-02	3.05E-02	2.44E-02	1.93E-02	1.54E-02	1.22E-02	9.67E-03	9.67E-03
SN129M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN129	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SB129	1.10E-01	1.84E-01	1.72E-01	1.54E-01	1.36E-01	1.01E-01	6.27E-02	3.88E-02	2.39E-02	1.48E-02	9.09E-03	9.09E-03
TE129M	4.67E-11	5.17E-07	1.06E-06	1.56E-06	2.01E-06	2.72E-06	3.44E-06	3.89E-06	4.17E-06	4.33E-06	4.44E-06	4.44E-06
TE129	3.33E-03	4.58E-03	5.36E-03	5.57E-03	5.36E-03	4.44E-03	2.95E-03	1.86E-03	1.16E-03	7.18E-04	4.45E-04	4.45E-04
SB130M	2.15E-02	4.05E-02	1.06E-04	2.79E-07	7.35E-10	5.07E-15	9.24E-23	1.68E-30	3.05E-38	5.54E-46	1.01E-53	1.01E-53
SB130	4.55E+00	1.38E+00	3.92E-01	1.11E-01	3.14E-02	2.53E-03	5.76E-05	1.31E-06	3.00E-08	6.83E-10	1.56E-11	1.56E-11

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	8.56E-04	8.09E-04	7.66E-04	7.24E-04	6.85E-04	6.13E-04	5.17E-04	4.38E-04	3.70E-04	3.13E-04	2.65E-04	
SB131	5.96E+00	1.56E+00	2.54E-01	4.18E-02	6.86E-03	1.85E-04	8.13E-07	3.59E-09	1.58E-11	6.97E-14	3.48E-16	
TE131M	2.20E-06	1.15E-02	1.31E-02	1.32E-02	1.29E-02	1.23E-02	1.15E-02	1.07E-02	1.00E-02	9.35E-03	8.72E-03	
TE131	5.94E-01	6.45E-01	2.10E-01	5.47E-02	1.33E-02	1.25E-03	6.19E-04	5.72E-04	5.34E-04	5.00E-04	4.66E-04	
I131	8.27E-05	2.87E-03	4.22E-03	4.63E-03	4.71E-03	4.75E-03	4.75E-03	4.71E-03	4.71E-03	4.67E-03	4.67E-03	
TE132	3.55E-03	8.62E-03	8.53E-03	8.47E-03	8.38E-03	8.23E-03	8.02E-03	7.80E-03	7.61E-03	7.39E-03	7.20E-03	
I132	9.42E-02	9.40E-02	9.38E-02	9.33E-02	9.26E-02	9.14E-02	8.94E-02	8.70E-02	8.47E-02	8.26E-02	8.05E-02	
TE133M	4.58E-03	1.59E+00	6.92E-01	3.01E-01	1.31E-01	2.49E-02	2.05E-03	1.69E-04	1.39E-05	1.15E-06	9.47E-08	
TE133	1.04E+01	5.92E-01	6.59E-02	2.18E-02	9.21E-03	1.74E-03	1.44E-04	1.19E-05	9.83E-07	8.08E-08	6.67E-09	
I133	1.11E-02	1.19E-01	1.29E-01	1.29E-01	1.27E-01	1.20E-01	1.09E-01	9.88E-02	8.91E-02	8.13E-02	7.34E-02	
XE133M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE133	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
TE134	3.13E+00	1.45E+00	5.40E-01	2.01E-01	7.45E-02	1.03E-02	5.28E-04	2.71E-05	1.39E-06	7.12E-08	3.65E-09	
I134	4.26E+00	5.70E+00	3.99E+00	2.34E+00	1.26E+00	3.19E-01	3.51E-02	3.58E-03	3.51E-04	3.36E-05	3.19E-06	
I135	4.38E-01	7.72E-01	6.96E-01	6.27E-01	5.67E-01	4.60E-01	3.37E-01	2.47E-01	1.81E-01	1.33E-01	9.75E-02	
XE135M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE135	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS136	1.90E-04	1.90E-04	1.90E-04	1.89E-04	1.89E-04	1.88E-04	1.87E-04	1.85E-04	1.84E-04	1.83E-04	1.82E-04	
CS137	8.54E-07	9.20E-06	9.20E-06	9.20E-06	9.20E-06	9.20E-06	9.20E-06	9.20E-06	9.20E-06	9.20E-06	9.20E-06	
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE138	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS138	3.62E+00	6.10E+00	2.11E+00	6.21E-01	1.74E-01	1.33E-02	2.76E-04	5.72E-06	1.19E-07	2.47E-09	5.12E-11	
CS139	2.89E+00	9.21E-02	1.15E-03	1.45E-05	1.82E-07	2.86E-11	5.69E-17	1.12E-22	2.22E-28	4.41E-34	8.71E-40	
BA139	7.11E-03	7.92E-02	4.89E-02	2.97E-02	1.80E-02	6.59E-03	1.46E-03	3.25E-04	7.22E-05	1.60E-05	3.55E-06	
BA140	2.67E-04	1.67E-03	1.67E-03	1.65E-03	1.65E-03	1.64E-03	1.64E-03	1.63E-03	1.62E-03	1.60E-03	1.59E-03	
LA140	8.77E-09	3.94E-04	7.81E-04	1.16E-03	1.53E-03	2.25E-03	3.29E-03	4.25E-03	5.17E-03	6.03E-03	6.84E-03	
BA141	2.19E+00	6.62E-01	6.56E-02	6.51E-03	6.46E-04	6.41E-06	6.25E-09	6.09E-12	5.94E-15	5.83E-18	5.68E-21	
LA141	9.48E-04	2.01E-02	1.87E-02	1.59E-02	1.33E-02	9.33E-03	5.47E-03	3.20E-03	1.88E-03	1.10E-03	6.47E-04	
CE141	2.06E-10	2.30E-05	5.38E-05	8.09E-05	1.04E-04	1.39E-04	1.72E-04	1.92E-04	2.03E-04	2.09E-04	2.13E-04	
BA142	5.40E+00	2.15E-01	4.90E-03	1.12E-04	2.54E-06	1.32E-09	1.57E-14	1.86E-19	2.21E-24	2.62E-29	3.11E-34	
LA142	2.69E-01	1.87E+00	1.23E+00	7.84E-01	4.99E-01	2.02E-01	5.21E-02	1.34E-02	3.46E-03	8.91E-04	2.30E-04	
LA143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE143	2.12E-04	1.35E-02	1.40E-02	1.37E-02	1.34E-02	1.29E-02	1.21E-02	1.14E-02	1.07E-02	1.00E-02	9.40E-03	
PR143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE144	5.10E-07	3.65E-06	3.65E-06	3.65E-06	3.65E-06	3.65E-06	3.64E-06	3.64E-06	3.64E-06	3.64E-06	3.64E-06	
PR144	2.49E-10	5.92E-06	6.46E-06	6.50E-06	6.51E-06	6.51E-06	6.51E-06	6.51E-06	6.50E-06	6.50E-06	6.50E-06	
PR145	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE146	1.18E+00	6.07E-02	3.11E-03	1.59E-04	8.18E-06	2.16E-08	2.90E-12	3.91E-16	5.27E-20	7.11E-24	9.58E-28	
PR146	8.33E-02	7.25E-01	1.64E-01	3.09E-02	5.56E-03	1.75E-04	9.65E-07	5.32E-09	2.95E-11	1.63E-13	8.90E-16	
PR147	3.10E-01	8.98E-02	2.80E-03	8.75E-05	2.74E-06	2.67E-09	8.16E-14	2.49E-18	7.60E-23	2.32E-27	7.08E-32	

1

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	2.16E-08	4.06E-04	4.17E-04	4.17E-04	4.15E-04	4.14E-04	4.10E-04	4.07E-04	4.04E-04	4.01E-04	3.98E-04
ND149	8.33E-02	5.67E-02	3.86E-02	2.63E-02	1.78E-02	8.27E-03	2.60E-03	8.21E-04	2.58E-04	8.13E-05	2.57E-05
PM149	3.61E-07	2.82E-05	4.69E-05	5.93E-05	6.72E-05	7.55E-05	7.84E-05	7.70E-05	7.50E-05	7.21E-05	6.96E-05
PM150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ND151	4.82E-01	1.51E-02	4.71E-04	1.47E-05	4.60E-07	4.50E-10	1.37E-14	4.20E-19	1.28E-23	3.89E-28	1.19E-32
PM151	1.72E-04	2.01E-03	2.02E-03	1.97E-03	1.92E-03	1.83E-03	1.69E-03	1.57E-03	1.46E-03	1.35E-03	1.26E-03
PM152	4.01E-01	3.92E-04	3.82E-07	3.73E-10	3.65E-13	3.48E-19	3.24E-28	3.02E-37	2.82E-46	2.63E-55	2.45E-64
SM153	9.52E-05	9.38E-05	9.25E-05	9.11E-05	8.99E-05	8.72E-05	8.35E-05	7.97E-05	7.64E-05	7.31E-05	6.99E-05
SM155	9.33E-03	1.53E-03	2.51E-04	4.11E-05	6.73E-06	1.81E-07	8.00E-10	3.52E-12	1.55E-14	6.92E-17	1.70E-19
EU155	3.78E-09	1.08E-07	1.25E-07	1.28E-07	1.28E-07	1.28E-07	1.28E-07	1.28E-07	1.28E-07	1.28E-07	1.28E-07
SM156	1.75E-04	1.63E-04	1.51E-04	1.40E-04	1.30E-04	1.13E-04	9.02E-05	7.24E-05	5.81E-05	4.65E-05	3.72E-05
EU156	5.74E-06	9.37E-06	1.27E-05	1.58E-05	1.87E-05	2.39E-05	3.04E-05	3.52E-05	3.94E-05	4.25E-05	4.47E-05
EU157	6.34E-05	2.10E-04	2.01E-04	1.92E-04	1.83E-04	1.67E-04	1.46E-04	1.27E-04	1.11E-04	9.65E-05	8.42E-05
EU158	1.20E-02	4.88E-03	1.97E-03	7.99E-04	3.24E-04	5.29E-05	3.53E-06	2.34E-07	1.55E-08	1.03E-09	6.85E-11
EU159	3.09E-03	3.07E-04	3.04E-05	3.02E-06	2.99E-07	2.95E-09	2.88E-12	2.81E-15	2.75E-18	2.68E-21	2.62E-24
GD159	1.93E-06	8.47E-06	8.81E-06	8.54E-06	8.22E-06	7.61E-06	6.79E-06	6.05E-06	5.38E-06	4.79E-06	4.28E-06
TB161	4.49E-09	3.23E-08	3.21E-08	3.20E-08	3.19E-08	3.15E-08	3.12E-08	3.08E-08	3.04E-08	3.01E-08	2.96E-08
TOTAL	1.08E+02	3.41E+01	1.35E+01	7.21E+00	4.47E+00	2.33E+00	1.37E+00	1.00E+00	7.86E-01	6.42E-01	5.38E-01

1

HARRY MR/HR
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.500
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	1.58E-09	1.56E-09	1.54E-09	1.49E-09	1.39E-09	1.22E-09	1.07E-09	8.25E-10	4.32E-10	1.17E-10	3.19E-11
NA 24	1.49E-04	4.93E-05	1.62E-05	5.83E-07	2.28E-09	3.48E-14	5.32E-19	1.24E-28	0.	0.	0.
MN 54	1.22E-07	1.21E-07	1.21E-07	1.19E-07	1.18E-07	1.15E-07	1.13E-07	1.08E-07	9.64E-08	7.66E-08	6.11E-08
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	3.81E-07	3.75E-07	3.69E-07	3.53E-07	3.26E-07	2.80E-07	2.40E-07	1.76E-07	8.19E-08	1.75E-08	3.75E-09
CO 57	7.82E-08	7.82E-08	7.76E-08	7.76E-08	7.64E-08	7.41E-08	7.24E-08	6.89E-08	6.08E-08	4.70E-08	3.64E-08
CO 58	2.14E-06	2.12E-06	2.10E-06	2.03E-06	1.94E-06	1.76E-06	1.60E-06	1.31E-06	8.09E-07	3.06E-07	1.15E-07
CO 60	7.52E-07	7.52E-07	7.52E-07	7.52E-07	7.47E-07	7.47E-07	7.43E-07	7.38E-07	7.20E-07	6.98E-07	6.71E-07
CU 64	8.90E-03	2.42E-03	6.61E-04	1.34E-05	2.02E-08	4.58E-14	1.04E-19	5.34E-31	0.	0.	0.
CU 67	7.72E-07	5.88E-07	4.49E-07	2.00E-07	5.20E-08	3.51E-09	2.37E-10	1.08E-12	1.50E-18	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.71E-04	1.54E-04	1.39E-04	1.02E-04	6.12E-05	2.19E-05	7.87E-06	1.01E-06	5.94E-09	6.38E-13	4.30E-13
U240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	2.01E-05	3.07E-02	2.29E-02	9.43E-03	2.16E-03	1.13E-04	5.91E-06	1.62E-08	6.37E-15	1.52E-24	1.52E-24
NP240M	7.40E-06	1.45E-03	4.46E-04	1.29E-05	3.55E-08	2.67E-13	2.01E-18	1.13E-28	0.	0.	0.
AM241	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.93E-13
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 77	9.03E-05	5.68E-05	1.30E-05	1.57E-07	1.00E-10	4.05E-17	1.63E-23	2.66E-36	0.	0.	0.
AS 77	8.14E-09	1.20E-06	8.70E-07	2.52E-07	2.95E-08	4.00E-10	5.43E-12	1.00E-15	4.64E-25	9.95E-44	2.14E-62
SE 77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AS 78	2.52E-04	2.24E-06	6.56E-11	5.54E-25	0.	0.	0.	0.	0.	0.	0.
BR 82	2.03E-05	1.27E-05	7.91E-06	1.92E-06	1.82E-07	1.64E-09	1.47E-11	1.19E-15	6.93E-26	2.38E-46	8.09E-67
BR 83	4.64E-05	1.22E-06	1.23E-09	1.25E-18	1.27E-33	0.	0.	0.	0.	0.	0.
KR 83M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 87	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RB 88	9.79E-02	1.13E-03	2.98E-06	5.41E-14	6.78E-27	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 91	1.03E-02	3.69E-02	6.62E-03	3.80E-05	6.95E-09	2.36E-16	7.98E-24	9.09E-39	0.	0.	0.

DEBRIS DECAY FROM 1 TO 300 DAYS

Y	91	M
Y	91	
SR	92	
Y	92	
Y	93	
ZR	95	
NB	95	M
NB	95	
ZR	97	
NB	97	M
NB	97	
MC	99	
TC	99	M
RU	103	
RH	103	M
RU	105	
RH	105	M
RH	105	
RU	106	
RH	106	
PD	109	
AG	109	M
PD	111	
PD	111	
AG	111	M
AG	111	
PD	112	
AG	112	
AG	113	
CD	115	M
CD	115	
IN	115	M
CD	117	
IN	117	M
IN	117	
SN	121	
SN	123	
SN	125	
SB	125	
SB	126	

5.58E-07	1.92E-02	3.43E-03	1.97E-05	3.62E-09	1.22E-16	4.13E-24	4.72E-39	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
1.35E-01	1.69E-03	3.64E-06	3.66E-14	1.71E-27	0.	0.	0.	0.	0.	0.
1.23E-03	3.50E-03	3.88E-05	2.99E-11	1.74E-21	5.96E-42	2.04E-62	0.	0.	0.	0.
4.40E-04	2.97E-03	5.80E-04	4.36E-06	1.25E-09	1.04E-16	8.56E-24	5.84E-38	0.	0.	0.
7.79E-06	9.74E-04	9.64E-04	9.33E-04	8.85E-04	7.93E-04	7.14E-04	5.78E-04	3.38E-04	1.17E-04	4.00E-05
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
8.97E-13	1.95E-05	3.85E-05	9.22E-05	1.71E-04	2.96E-04	3.81E-04	4.73E-04	4.56E-04	2.19E-04	8.40E-05
4.33E-03	7.37E-03	2.77E-03	1.47E-04	1.10E-06	6.21E-11	3.49E-15	1.10E-23	6.23E-45	0.	0.
9.58E-05	3.04E-02	1.14E-02	6.09E-04	4.55E-06	2.56E-10	1.44E-14	4.55E-23	2.57E-44	0.	0.
8.46E-03	2.89E-02	1.08E-02	5.76E-04	4.33E-06	2.61E-10	1.47E-14	4.65E-23	2.62E-44	0.	0.
1.21E-05	3.95E-03	3.09E-03	1.46E-03	4.23E-04	3.53E-05	2.95E-06	2.06E-08	8.35E-14	1.38E-24	2.27E-35
8.37E-11	2.57E-03	2.17E-03	1.04E-03	2.99E-04	2.50E-05	2.09E-06	1.46E-08	5.91E-14	9.75E-25	1.61E-35
6.24E-07	1.42E-03	1.40E-03	1.32E-03	1.22E-03	1.02E-03	8.56E-04	6.04E-04	2.51E-04	4.36E-05	7.60E-06
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
6.87E-03	6.57E-03	1.54E-04	2.03E-09	1.48E-17	7.92E-34	4.25E-50	0.	0.	0.	0.
1.45E-06	2.11E-04	4.98E-06	6.54E-11	4.79E-19	2.56E-35	1.37E-51	0.	0.	0.	0.
7.54E-12	2.41E-03	1.57E-03	3.92E-04	3.87E-05	3.76E-07	3.65E-09	3.45E-13	2.99E-23	2.25E-43	1.69E-63
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
1.71E-08	2.98E-05	2.97E-05	2.96E-05	2.93E-05	2.88E-05	2.82E-05	2.71E-05	2.47E-05	2.04E-05	1.69E-05
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4.51E-03	2.19E-04	1.06E-05	1.22E-09	3.30E-16	2.41E-29	1.77E-42	0.	0.	0.	0.
1.14E-04	1.25E-05	6.06E-07	6.95E-11	1.88E-17	1.37E-30	1.00E-43	0.	0.	0.	0.
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
3.11E-13	8.57E-06	8.24E-06	6.27E-06	3.95E-06	1.56E-06	6.21E-07	9.79E-08	9.63E-10	9.33E-14	9.04E-18
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
4.69E-08	8.21E-04	3.77E-04	3.50E-05	6.69E-07	2.42E-10	8.77E-14	1.16E-20	7.26E-38	0.	0.
1.64E-06	1.73E-05	7.50E-07	6.09E-11	9.32E-18	2.18E-31	5.10E-45	0.	0.	0.	0.
1.46E-12	4.23E-08	4.16E-08	3.96E-08	3.66E-08	3.11E-08	2.65E-08	1.91E-08	8.57E-09	1.70E-09	3.40E-10
6.37E-09	9.58E-05	7.02E-05	2.77E-05	5.84E-06	2.61E-07	1.16E-08	2.32E-11	4.10E-18	1.28E-31	4.02E-45
5.35E-14	6.82E-05	5.17E-05	2.04E-05	4.29E-06	1.92E-07	8.56E-09	1.71E-11	3.02E-18	9.45E-32	2.96E-45
5.93E-04	1.29E-05	1.26E-08	1.18E-17	1.04E-32	0.	0.	0.	0.	0.	0.
2.15E-09	4.04E-06	4.68E-09	4.52E-18	4.01E-33	0.	0.	0.	0.	0.	0.
8.01E-13	2.47E-05	2.93E-08	2.83E-17	2.51E-32	0.	0.	0.	0.	0.	0.

1

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	1.72E-04	1.17E-03	6.45E-04	1.09E-04	5.57E-06	1.46E-08	3.86E-11	2.66E-16	3.34E-29	0.	0.	0.
SM153	9.52E-05	6.69E-05	4.70E-05	1.62E-05	2.76E-06	8.03E-08	2.33E-09	1.96E-12	4.04E-20	1.72E-35	7.31E-51	0.
SM156	1.75E-04	2.99E-05	5.10E-06	2.51E-08	3.62E-12	7.44E-20	1.54E-27	6.53E-43	0.	0.	0.	0.
EU155	3.78E-09	1.28E-07	1.28E-07	1.28E-07	1.28E-07	1.27E-07	1.27E-07	1.25E-07	1.23E-07	1.18E-07	1.14E-07	0.
EU156	5.74E-06	4.67E-05	5.18E-05	4.64E-05	3.68E-05	2.32E-05	1.46E-05	5.79E-06	5.74E-07	5.65E-09	5.57E-11	0.
EU157	6.34E-05	7.32E-05	2.46E-05	9.24E-07	3.88E-09	6.85E-14	1.21E-18	3.77E-28	0.	0.	0.	0.
GD159	1.93E-06	3.81E-06	1.52E-06	9.45E-08	9.30E-10	9.01E-14	8.73E-18	8.19E-26	7.00E-46	0.	0.	0.
TB161	4.49E-09	2.93E-08	2.65E-08	1.96E-08	1.19E-08	4.34E-09	1.59E-09	2.13E-10	1.41E-12	6.09E-17	2.65E-21	0.
TOTAL	2.03E+00	4.54E-01	2.05E-01	8.05E-02	3.72E-02	1.48E-02	8.41E-03	3.79E-03	1.25E-03	4.21E-04	1.65E-04	0.

1

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.798E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	1.58E-09	1.37E-11	1.27E-12	1.18E-13	9.50E-17	7.61E-20	5.69E-24	3.65E-30	0.	0.	0.	0.
MN 54	1.22E-07	5.26E-08	3.46E-08	2.28E-08	6.51E-09	1.86E-09	3.50E-10	2.86E-11	6.71E-15	2.43E-20	8.79E-26	0.
FE 59	3.81E-07	1.37E-09	8.25E-11	4.96E-12	1.08E-15	2.33E-19	3.03E-24	1.42E-31	0.	0.	0.	0.
CO 57	7.82E-08	3.08E-08	1.93E-08	1.21E-08	2.98E-09	7.35E-10	1.14E-11	6.89E-12	6.02E-16	4.95E-22	0.	0.
CO 58	2.14E-06	6.14E-08	1.04E-08	1.76E-09	8.59E-12	4.18E-14	3.45E-17	8.18E-22	3.13E-37	0.	0.	0.
CO 60	7.52E-07	6.58E-07	6.14E-07	5.74E-07	4.71E-07	3.87E-07	2.97E-07	2.01E-07	5.38E-08	7.47E-09	1.03E-09	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.71E-04	4.27E-13	4.16E-13	4.04E-13	3.78E-13	3.51E-13	3.19E-13	2.77E-13	1.73E-13	8.46E-14	4.16E-14	0.
AM241	9.93E-13	9.93E-13	9.93E-13	9.93E-13	9.98E-13	1.00E-12	1.00E-12	1.01E-12	1.01E-12	1.00E-12	9.88E-13	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZR 95	7.79E-06	2.00E-05	2.86E-06	4.07E-07	1.19E-09	3.45E-12	1.43E-15	1.21E-20	1.48E-37	0.	0.	0.
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	8.97E-13	4.45E-05	6.39E-06	9.11E-07	2.64E-09	7.66E-12	3.20E-15	2.70E-20	3.31E-37	0.	0.	0.
RU103	6.24E-07	2.42E-06	9.92E-08	4.08E-09	2.78E-13	1.91E-17	5.36E-23	2.52E-31	0.	0.	0.	0.
RH103M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU106	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RH106	1.71E-08	1.50E-05	1.06E-05	7.52E-06	2.67E-06	9.49E-07	2.39E-07	3.02E-08	3.05E-11	9.80E-16	3.15E-20	0.
SN123	4.30E-10	5.95E-09	2.16E-09	7.85E-10	3.77E-11	1.81E-12	3.15E-14	7.26E-17	1.16E-25	7.49E-39	4.81E-52	0.
SB125	4.67E-07	9.41E-07	8.27E-07	7.27E-07	4.96E-07	3.37E-07	2.02E-07	9.33E-08	7.17E-09	1.53E-10	3.25E-12	0.
TE125M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS137	8.54E-07	9.00E-06	8.90E-06	8.79E-06	8.49E-06	8.18E-06	7.82E-06	7.31E-06	5.78E-06	4.11E-06	2.90E-06	0.
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE141	2.06E-10	8.90E-08	1.79E-09	3.60E-11	2.93E-16	2.38E-21	3.91E-28	2.59E-38	0.	0.	0.	0.
CE144	5.10E-07	1.50E-06	9.63E-07	6.14E-07	1.61E-07	4.24E-08	7.13E-09	4.92E-10	6.62E-14	1.04E-19	1.62E-25	0.
PR144	2.49E-10	2.67E-06	1.72E-06	1.10E-06	2.87E-07	7.56E-08	1.27E-08	8.77E-10	1.18E-13	1.85E-19	2.89E-25	0.
PM147	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EU155	3.78E-09	1.11E-07	1.03E-07	9.57E-08	7.70E-08	6.18E-08	4.61E-08	2.98E-08	6.96E-09	7.83E-10	8.82E-11	0.
TOTAL	1.85E-04	9.70E-05	3.31E-05	2.08E-05	1.27E-05	1.00E-05	8.63E-06	7.67E-06	5.84E-06	4.11E-06	2.90E-06	0.

DEBRIS DECAY FROM 1 TO 21 HOURS

ZERO TIME 1.00E+00 2.00E+00 3.00E+00 4.00E+00 6.00E+00 9.00E+00 1.20E+01 1.50E+01 1.80E+01 2.10E+01

BE	7	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.08E-10	4.07E-10	4.06E-10	4.05E-10	4.05E-10	4.04E-10	4.03E-10
NA	24	3.85E-05	3.68E-05	3.52E-05	3.35E-05	3.20E-05	2.92E-05	2.54E-05	2.21E-05	1.93E-05	1.68E-05	1.46E-05
MN	54	3.15E-08	3.15E-08	3.15E-08	3.15E-08	3.15E-08	3.15E-08	3.15E-08	3.12E-08	3.12E-08	3.12E-08	3.12E-08
FE	55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE	59	9.82E-08	9.81E-08	9.81E-08	9.81E-08	9.81E-08	9.79E-08	9.78E-08	9.76E-08	9.73E-08	9.72E-08	9.70E-08
CO	57	2.02E-08	2.02E-08	2.02E-08	2.02E-08	2.02E-08	2.02E-08	2.02E-08	2.02E-08	2.02E-08	2.02E-08	2.02E-08
CO	58	5.51E-07	5.51E-07	5.51E-07	5.51E-07	5.50E-07	5.50E-07	5.49E-07	5.49E-07	5.47E-07	5.47E-07	5.46E-07
CO	60	1.94E-07	1.94E-07	1.94E-07	1.94E-07	1.94E-07	1.94E-07	1.94E-07	1.94E-07	1.94E-07	1.94E-07	1.94E-07
CU	64	2.30E-03	2.17E-03	2.06E-03	1.95E-03	1.85E-03	1.66E-03	1.41E-03	1.20E-03	1.02E-03	8.66E-04	7.36E-04
CU	67	1.99E-07	1.97E-07	1.94E-07	1.92E-07	1.90E-07	1.85E-07	1.79E-07	1.73E-07	1.68E-07	1.62E-07	1.57E-07
W	181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB	203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U	237	4.41E-05	4.39E-05	4.37E-05	4.35E-05	4.33E-05	4.30E-05	4.24E-05	4.19E-05	4.13E-05	4.08E-05	4.03E-05
U	239	4.37E-01	7.45E-02	1.27E-02	2.17E-03	3.68E-04	1.07E-05	5.31E-08	2.62E-10	1.30E-12	6.41E-15	3.17E-17
U	240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP	239	5.18E-06	8.69E-03	1.00E-02	1.02E-02	1.01E-02	9.89E-03	9.49E-03	9.17E-03	8.85E-03	8.53E-03	8.21E-03
NP	240M	1.91E-06	1.15E-03	1.10E-03	1.05E-03	1.00E-03	9.06E-04	7.82E-04	6.75E-04	5.82E-04	5.02E-04	4.33E-04
NP	240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AM	241	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13
CM	242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE	75	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE	77	1.16E-04	3.00E-04	2.82E-04	2.65E-04	2.50E-04	2.21E-04	1.84E-04	1.53E-04	1.27E-04	1.06E-04	8.79E-05
AS	77	1.05E-08	1.66E-06	1.68E-06	1.69E-06	1.70E-06	1.71E-06	1.71E-06	1.70E-06	1.67E-06	1.64E-06	1.60E-06
SE	77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE	78	4.28E-03	2.68E-03	1.66E-03	1.04E-03	6.50E-04	2.53E-04	6.14E-05	1.49E-05	3.63E-06	8.81E-07	2.14E-07
AS	78	3.24E-04	5.39E-03	6.64E-03	6.22E-03	5.20E-03	3.07E-03	1.14E-03	3.78E-04	1.17E-04	3.50E-05	1.01E-05
AS	79	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SE	79M	0.	0.	0.								

DEBRIS DECAY FROM 1 TO 21 HOURS

ZERO TIME 1.00E+00 2.00E+00 3.00E+00 4.00E+00 6.00E+00 9.00E+00 1.20E+01 1.50E+01 1.80E+01 2.10E+01

BR	84		2.	94E-03	5.	07E-01	1.	37E-01	3.	71E-02	1.	00E-02	7.	33E-04	1.	45E-05	2.	86E-07	5.	66E-09	1.	12E-10	2.	21E-12
KR	85M		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
KR	87		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
KR	88		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
RB	88		1.	26E-01	3.	92E-01	3.	35E-01	2.	64E-01	2.	06E-01	1.	25E-01	5.	99E-02	2.	85E-02	1.	36E-02	6.	46E-03	3.	07E-03
RB	89		2.	02E+00	1.	90E+00	1.	28E-01	8.	58E-03	5.	75E-04	2.	60E-06	7.	88E-10	2.	38E-13	7.	24E-17	2.	19E-20	6.	66E-24
SR	89		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
SR	90		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
SR	91		1.	18E-02	2.	19E-01	2.	05E-01	1.	90E-01	1.	77E-01	1.	53E-01	1.	24E-01	1.	00E-01	8.	08E-02	6.	49E-02	5.	23E-02
Y	91M		6.	37E-07	6.	08E-02	8.	28E-02	8.	87E-02	8.	76E-02	7.	86E-02	6.	43E-02	5.	18E-02	4.	18E-02	3.	37E-02	2.	72E-02
Y	91		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
SR	92		3.	49E-02	1.	56E-01	1.	21E-01	9.	36E-02	7.	25E-02	4.	34E-02	2.	01E-02	9.	36E-03	4.	34E-03	2.	01E-03	9.	38E-04
Y	92		3.	18E-04	6.	48E-03	1.	02E-02	1.	21E-02	1.	28E-02	1.	22E-02	9.	37E-03	6.	39E-03	4.	11E-03	2.	53E-03	1.	52E-03
SR	93		2.	49E+00	4.	28E-02	2.	36E-04	1.	31E-06	7.	20E-09	2.	20E-13	3.	71E-20	6.	26E-27	1.	06E-33	1.	78E-40	3.	00E-47
Y	93		1.	13E-04	3.	67E-03	3.	45E-03	3.	22E-03	3.	01E-03	2.	63E-03	2.	14E-03	1.	75E-03	1.	42E-03	1.	17E-03	9.	48E-04
Y	94		1.	24E-01	1.	69E-01	2.	18E-02	2.	81E-03	3.	63E-04	6.	02E-06	1.	29E-08	2.	77E-11	5.	92E-14	1.	29E-16	7.	16E-18
Y	95		7.	84E-01	7.	39E-02	1.	63E-03	3.	59E-05	7.	91E-07	3.	84E-10	4.	11E-15	4.	39E-20	4.	69E-25	5.	01E-30	5.	36E-35
ZR	95		2.	01E-06	2.	63E-04	2.	68E-04	2.	68E-04	2.	68E-04	2.	68E-04	2.	68E-04	2.	67E-04	2.	67E-04	2.	66E-04	2.	66E-04
NB	95		2.	31E-13	1.	68E-07	3.	91E-07	6.	14E-07	8.	38E-07	1.	28E-06	1.	95E-06	2.	62E-06	3.	28E-06	3.	94E-06	4.	60E-06
ZR	97		1.	12E-03	4.	86E-03	4.	65E-03	4.	48E-03	4.	29E-03	3.	96E-03	3.	50E-03	3.	10E-03	2.	75E-03	2.	42E-03	2.	15E-03
NB	97M		2.	47E-05	2.	01E-02	1.	92E-02	1.	85E-02	1.	78E-02	1.	64E-02	1.	45E-02	1.	28E-02	1.	13E-02	9.	99E-03	8.	84E-03
NB	97		2.	18E-03	9.	52E-03	1.	34E-02	1.	53E-02	1.	60E-02	1.	60E-02	1.	45E-02	1.	30E-02	1.	15E-02	1.	01E-02	8.	99E-03

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD111M	5.82E-03	5.12E-03	4.52E-03	4.00E-03	3.52E-03	2.74E-03	1.87E-03	1.28E-03	8.79E-04	6.02E-04	4.13E-04	
PD111	1.47E-04	2.64E-04	2.54E-04	2.26E-04	2.00E-04	1.55E-04	1.07E-04	7.30E-05	4.99E-05	3.43E-05	2.35E-05	
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AG111	4.01E-13	1.19E-06	2.49E-06	3.66E-06	4.70E-06	6.41E-06	8.23E-06	9.43E-06	1.02E-05	1.07E-05	1.10E-05	
PD112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AG112	6.04E-08	3.85E-04	6.79E-04	9.11E-04	1.08E-03	1.30E-03	1.42E-03	1.42E-03	1.35E-03	1.26E-03	1.16E-03	
AG113	2.12E-06	4.53E-04	3.97E-04	3.48E-04	3.06E-04	2.35E-04	1.59E-04	1.07E-04	7.25E-05	4.89E-05	3.31E-05	
AG115	6.78E-03	7.27E-03	9.04E-04	1.13E-04	1.42E-05	2.21E-07	4.32E-10	8.45E-13	1.64E-15	1.63E-16	1.51E-18	
CD115M	1.88E-12	5.01E-08	5.63E-08	5.70E-08	5.70E-08	5.70E-08	5.69E-08	5.69E-08	5.67E-08	5.65E-08	5.65E-08	
CD115	8.21E-09	1.55E-04	1.66E-04	1.66E-04	1.64E-04	1.60E-04	1.54E-04	1.48E-04	1.42E-04	1.37E-04	1.32E-04	
IN115M	6.90E-14	1.15E-05	2.56E-05	3.80E-05	4.84E-05	6.46E-05	7.97E-05	8.78E-05	9.15E-05	9.24E-05	9.17E-05	
CD117	7.65E-04	1.27E-02	9.60E-03	7.17E-03	5.37E-03	3.01E-03	1.26E-03	5.33E-04	2.24E-04	9.42E-05	3.96E-05	
IN117M	2.77E-09	3.34E-04	4.83E-04	5.24E-04	5.07E-04	3.99E-04	2.28E-04	1.17E-04	5.61E-05	2.60E-05	1.18E-05	
IN117	1.03E-12	5.64E-04	1.36E-03	1.90E-03	2.11E-03	1.95E-03	1.24E-03	6.63E-04	3.30E-04	1.55E-04	7.13E-05	
CD118	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
IN118	8.26E-04	5.35E-03	2.29E-03	9.80E-04	4.19E-04	7.68E-05	6.01E-06	4.72E-07	3.70E-08	2.90E-09	2.27E-10	
CD119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
IN119M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
IN119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN121	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN123M	1.16E-03	2.18E-03	7.71E-04	2.73E-04	9.64E-05	1.20E-05	5.32E-07	2.36E-08	1.04E-09	4.60E-11	2.04E-12	
SN123	5.54E-10	5.80E-08	5.80E-08	5.80E-08	5.80E-08	5.80E-08	5.80E-08	5.80E-08	5.80E-08	5.80E-08	5.80E-08	
SN125	6.87E-05	6.85E-05	6.83E-05	6.81E-05	6.78E-05	6.74E-05	6.69E-05	6.62E-05	6.56E-05	6.49E-05	6.44E-05	
SB125	6.03E-07	6.05E-07	6.08E-07	6.10E-07	6.13E-07	6.18E-07	6.29E-07	6.37E-07	6.44E-07	6.52E-07	6.60E-07	
SB126	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN127	1.16E-01	8.33E-02	5.99E-02	4.31E-02	3.11E-02	1.60E-02	5.95E-03	2.21E-03	8.20E-04	3.05E-04	1.13E-04	
SB127	5.31E-04	1.83E-03	2.03E-03	2.16E-03	2.25E-03	2.35E-03	2.39E-03	2.36E-03	2.33E-03	2.28E-03	2.23E-03	
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN128	2.87E-01	1.41E-01	7.00E-02	3.46E-02	1.71E-02	4.18E-03	5.04E-04	6.08E-05	7.34E-06	8.90E-07	1.07E-07	
SB128M	4.30E-04	4.75E-01	2.46E-01	1.22E-01	6.00E-02	1.47E-02	1.77E-03	2.14E-04	2.57E-05	3.11E-06	3.76E-07	
SB128	5.80E-02	5.58E-02	5.25E-02	4.92E-02	4.59E-02	3.94E-02	3.14E-02	2.49E-02	1.98E-02	1.57E-02	1.25E-02	
SN129M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN129	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SB129	1.41E-01	2.37E-01	2.22E-01	1.99E-01	1.75E-01	1.30E-01	8.08E-02	5.00E-02	3.08E-02	1.91E-02	1.17E-02	
TE129M	6.02E-11	6.66E-07	1.37E-06	2.02E-06	2.59E-06	3.51E-06	4.44E-06	5.01E-06	5.37E-06	5.59E-06	5.73E-06	
TE129	4.29E-03	5.90E-03	6.91E-03	7.17E-03	6.91E-03	5.72E-03	3.81E-03	2.40E-03	1.50E-03	9.25E-04	5.74E-04	
SB130M	2.77E-02	5.22E-02	1.37E-04	3.60E-07	9.48E-10	6.54E-15	1.19E-22	2.17E-30	3.93E-38	7.14E-46	1.30E-53	
SB130	5.87E+00	1.78E+00	5.05E-01	1.43E-01	4.05E-02	3.26E-03	7.43E-05	1.69E-06	3.86E-08	8.80E-10	2.01E-11	

1

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	1.10E-03	1.04E-03	9.88E-04	9.33E-04	8.83E-04	7.90E-04	6.67E-04	5.64E-04	4.76E-04	4.04E-04	3.41E-04
SB131	7.69E+00	2.01E+00	3.28E-01	5.39E-02	8.84E-03	2.38E-04	1.05E-06	4.63E-09	2.04E-11	8.99E-14	4.48E-16
TE131M	2.84E-06	1.49E-02	1.69E-02	1.70E-02	1.66E-02	1.59E-02	1.48E-02	1.38E-02	1.29E-02	1.21E-02	1.12E-02
TE131	7.65E-01	8.31E-01	2.71E-01	7.05E-02	1.71E-02	1.61E-03	7.98E-04	7.38E-04	6.88E-04	6.44E-04	6.00E-04
I131	1.07E-04	3.70E-03	5.44E-03	5.97E-03	6.07E-03	6.13E-03	6.13E-03	6.07E-03	6.07E-03	6.02E-03	6.02E-03
TE132	4.57E-03	1.11E-02	1.10E-02	1.09E-02	1.08E-02	1.06E-02	1.03E-02	1.01E-02	9.81E-03	9.53E-03	9.28E-03
I132	1.21E-01	1.21E-01	1.21E-01	1.20E-01	1.19E-01	1.18E-01	1.15E-01	1.12E-01	1.09E-01	1.06E-01	1.04E-01
TE133M	5.91E-03	2.05E+00	8.92E-01	3.88E-01	1.69E-01	3.21E-02	2.64E-03	2.18E-04	1.80E-05	1.48E-06	1.22E-07
TE133	1.35E+01	7.64E-01	8.49E-02	2.81E-02	1.19E-02	2.25E-03	1.86E-04	1.53E-05	1.27E-06	1.04E-07	8.59E-09
I133	1.43E-02	1.54E-01	1.67E-01	1.67E-01	1.63E-01	1.55E-01	1.41E-01	1.27E-01	1.15E-01	1.05E-01	9.46E-02
XE133M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE133	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE134	4.04E+00	1.87E+00	6.96E-01	2.59E-01	9.61E-02	1.33E-02	6.81E-04	3.49E-05	1.79E-06	9.17E-08	4.70E-09
I134	5.49E+00	7.35E+00	5.15E+00	3.02E+00	1.62E+00	4.11E-01	4.52E-02	4.62E-03	4.52E-04	4.33E-05	4.11E-06
I135	5.65E-01	9.95E-01	8.98E-01	8.08E-01	7.30E-01	5.93E-01	4.35E-01	3.18E-01	2.34E-01	1.72E-01	1.26E-01
XE135M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE135	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS136	2.46E-04	2.45E-04	2.44E-04	2.44E-04	2.43E-04	2.42E-04	2.40E-04	2.39E-04	2.37E-04	2.36E-04	2.34E-04
CS137	1.10E-06	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE138	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS138	4.67E+00	7.86E+00	2.73E+00	8.01E-01	2.24E-01	1.71E-02	3.55E-04	7.37E-06	1.53E-07	3.19E-09	6.60E-11
CS139	3.72E+00	1.19E-01	1.49E-03	1.87E-05	2.35E-07	3.68E-11	7.33E-17	1.45E-22	2.87E-28	5.69E-34	1.12E-39
BA139	9.16E-03	1.02E-01	6.30E-02	3.83E-02	2.31E-02	8.49E-03	1.88E-03	4.18E-04	9.30E-05	2.06E-05	4.58E-06
BA140	2.96E-04	1.85E-03	1.85E-03	1.83E-03	1.83E-03	1.82E-03	1.82E-03	1.80E-03	1.79E-03	1.78E-03	1.76E-03
LA140	9.71E-09	4.36E-04	8.64E-04	1.28E-03	1.69E-03	2.49E-03	3.64E-03	4.71E-03	5.72E-03	6.68E-03	7.57E-03
BA141	1.68E+00	5.09E-01	5.05E-02	5.01E-03	4.97E-04	4.93E-06	4.81E-09	4.69E-12	4.57E-15	4.49E-18	4.37E-21
LA141	7.29E-04	1.55E-02	1.44E-02	1.22E-02	1.02E-02	7.18E-03	4.21E-03	2.46E-03	1.45E-03	8.50E-04	4.98E-04
CE141	1.59E-10	1.77E-05	4.14E-05	6.22E-05	7.98E-05	1.07E-04	1.33E-04	1.48E-04	1.56E-04	1.61E-04	1.64E-04
BA142	1.39E+00	5.53E-02	1.26E-03	2.88E-05	6.56E-07	3.41E-10	4.05E-15	4.80E-20	5.70E-25	6.76E-30	8.02E-35
LA142	6.94E-02	4.82E-01	3.18E-01	2.02E-01	1.29E-01	5.20E-02	1.34E-02	3.46E-03	8.92E-04	2.30E-04	5.92E-05
LA143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE143	5.48E-05	3.49E-03	3.62E-03	3.52E-03	3.46E-03	3.33E-03	3.12E-03	2.93E-03	2.75E-03	2.58E-03	2.42E-03
PR143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE144	1.31E-07	9.42E-07	9.42E-07	9.42E-07	9.42E-07	9.42E-07	9.40E-07	9.40E-07	9.40E-07	9.40E-07	9.40E-07
PR144	6.43E-11	1.53E-06	1.66E-06	1.68E-06	1.68E-06	1.68E-06	1.68E-06	1.68E-06	1.68E-06	1.68E-06	1.68E-06
PR145	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE146	3.05E-01	1.56E-02	8.02E-04	4.10E-05	2.11E-06	5.56E-09	7.48E-13	1.01E-16	1.36E-20	1.83E-24	2.47E-28
PR146	2.15E-02	1.87E-01	4.24E-02	7.96E-03	1.43E-03	4.50E-05	2.49E-07	1.37E-09	7.60E-12	4.20E-14	2.29E-16
PR147	8.00E-02	2.32E-02	7.22E-04	2.26E-05	7.06E-07	6.90E-10	2.10E-14	6.43E-19	1.96E-23	5.99E-28	1.83E-32

1

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	5.56E-09	1.05E-04	1.08E-04	1.07E-04	1.07E-04	1.07E-04	1.06E-04	1.05E-04	1.04E-04	1.03E-04	1.03E-04	1.03E-04
ND149	2.15E-02	1.46E-02	9.95E-03	6.78E-03	4.59E-03	2.13E-03	6.70E-04	2.12E-04	6.66E-05	2.10E-05	6.62E-06	6.62E-06
PM149	9.32E-08	7.28E-06	1.21E-05	1.53E-05	1.73E-05	1.95E-05	2.02E-05	1.98E-05	1.93E-05	1.86E-05	1.79E-05	1.79E-05
PM150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ND151	1.24E-01	3.88E-03	1.21E-04	3.79E-06	1.19E-07	1.16E-10	3.54E-15	1.08E-19	3.29E-24	1.00E-28	3.07E-33	3.07E-33
PM151	4.43E-05	5.17E-04	5.20E-04	5.08E-04	4.96E-04	4.71E-04	4.36E-04	4.05E-04	3.77E-04	3.49E-04	3.24E-04	3.24E-04
PM152	1.03E-01	1.01E-04	9.85E-08	9.63E-11	9.40E-14	8.98E-20	8.36E-29	7.80E-38	7.26E-47	6.78E-56	6.31E-65	6.31E-65
SM153	2.46E-05	2.42E-05	2.39E-05	2.35E-05	2.32E-05	2.25E-05	2.15E-05	2.06E-05	1.97E-05	1.89E-05	1.80E-05	1.80E-05
SM155	2.41E-03	3.95E-04	6.47E-05	1.06E-05	1.74E-06	4.67E-08	2.06E-10	9.08E-13	4.01E-15	1.78E-17	4.38E-20	4.38E-20
EU155	9.75E-10	2.78E-08	3.22E-08	3.29E-08	3.30E-08	3.30E-08	3.30E-08	3.30E-08	3.30E-08	3.30E-08	3.30E-08	3.30E-08
SM156	4.52E-05	4.20E-05	3.90E-05	3.62E-05	3.36E-05	2.90E-05	2.33E-05	1.87E-05	1.50E-05	1.20E-05	9.59E-06	9.59E-06
EU156	1.48E-06	2.42E-06	3.28E-06	4.08E-06	4.83E-06	6.16E-06	7.83E-06	9.07E-06	1.02E-05	1.10E-05	1.15E-05	1.15E-05
EU157	1.63E-05	5.42E-05	5.17E-05	4.94E-05	4.71E-05	4.31E-05	3.76E-05	3.28E-05	2.86E-05	2.49E-05	2.17E-05	2.17E-05
EU158	3.10E-03	1.26E-03	5.09E-04	2.06E-04	8.34E-05	1.37E-05	9.10E-07	6.03E-08	4.01E-09	2.66E-10	1.77E-11	1.77E-11
EU159	7.96E-04	7.90E-05	7.83E-06	7.78E-07	7.71E-08	7.60E-10	7.43E-13	7.25E-16	7.08E-19	6.92E-22	6.76E-25	6.76E-25
GD159	4.99E-07	2.18E-06	2.27E-06	2.20E-06	2.12E-06	1.96E-06	1.75E-06	1.56E-06	1.39E-06	1.24E-06	1.10E-06	1.10E-06
TB161	1.16E-09	8.33E-09	8.27E-09	8.24E-09	8.22E-09	8.13E-09	8.05E-09	7.94E-09	7.83E-09	7.75E-09	7.64E-09	7.64E-09
TOTAL	1.14E+02	3.82E+01	1.50E+01	7.70E+00	4.60E+00	2.30E+00	1.36E+00	1.00E+00	7.86E-01	6.39E-01	5.30E-01	5.30E-01

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	4.08E-10	4.03E-10	3.98E-10	3.83E-10	3.59E-10	3.15E-10	2.77E-10	2.13E-10	1.11E-10	3.03E-11	8.23E-12	
NA 24	3.85E-05	1.27E-05	4.19E-06	1.50E-07	5.88E-10	8.98E-15	1.37E-19	3.19E-29	0.	0.	0.	0.
MN 54	3.15E-08	3.12E-08	3.12E-08	3.06E-08	3.03E-08	2.98E-08	2.92E-08	2.78E-08	2.49E-08	1.98E-08	1.58E-08	
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	9.82E-08	9.67E-08	9.53E-08	9.10E-08	8.42E-08	7.22E-08	6.19E-08	4.55E-08	2.11E-08	4.50E-09	9.67E-10	
CO 57	2.02E-08	2.02E-08	2.00E-08	2.00E-08	1.97E-08	1.91E-08	1.87E-08	1.78E-08	1.57E-08	1.21E-08	9.38E-09	
CO 58	5.51E-07	5.46E-07	5.40E-07	5.24E-07	5.00E-07	4.54E-07	4.11E-07	3.39E-07	2.09E-07	7.89E-08	2.98E-08	
CO 60	1.94E-07	1.94E-07	1.94E-07	1.94E-07	1.93E-07	1.93E-07	1.91E-07	1.90E-07	1.86E-07	1.80E-07	1.73E-07	
CU 64	2.30E-03	6.25E-04	1.70E-04	3.47E-06	5.20E-09	1.18E-14	2.68E-20	1.38E-31	0.	0.	0.	0.
CU 67	1.99E-07	1.52E-07	1.16E-07	5.15E-08	1.34E-08	9.05E-10	6.10E-11	2.77E-13	3.88E-19	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	4.41E-05	3.98E-05	3.59E-05	2.64E-05	1.58E-05	5.65E-06	2.03E-06	2.59E-07	1.53E-09	1.65E-13	1.11E-13	
U240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	5.18E-06	7.91E-03	5.89E-03	2.43E-03	5.57E-04	2.91E-05	1.52E-06	4.18E-09	1.64E-15	3.92E-25	3.92E-25	
NP240M	1.91E-06	3.74E-04	1.15E-04	3.33E-06	9.15E-09	6.89E-14	5.18E-19	2.92E-29	0.	0.	0.	0.
AM241	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.56E-13	
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 77	1.16E-04	7.33E-05	1.68E-05	2.03E-07	1.29E-10	5.22E-17	2.10E-23	3.44E-36	0.	0.	0.	0.
AS 77	1.05E-08	1.55E-06	1.12E-06	3.24E-07	3.80E-08	5.15E-10	7.00E-12	1.29E-15	5.98E-25	1.28E-43	2.75E-62	
SE 77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AS 78	3.24E-04	2.89E-06	8.45E-11	7.14E-25	0.	0.	0.	0.	0.	0.	0.	0.
BR 82	2.62E-05	1.63E-05	1.02E-05	2.48E-06	2.35E-07	2.11E-09	1.89E-11	1.53E-15	8.93E-26	3.06E-46	1.04E-66	
BR 83	5.98E-05	1.58E-06	1.58E-09	1.61E-18	1.64E-33	0.	0.	0.	0.	0.	0.	0.
KR 83M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 87	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RB 88	1.26E-01	1.46E-03	3.84E-06	6.97E-14	8.74E-27	0.	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 91	1.18E-02	4.22E-02	7.56E-03	4.34E-05	7.93E-09	2.69E-16	9.12E-24	1.04E-38	0.	0.	0.	0.

DEBRIS DECAY FROM 1 TO 300 DAYS

Y 91M	6.37E-07	2.19E-02	3.92E-03	2.25E-05	4.13E-09	1.39E-16	4.72E-24	5.38E-39	0.	0.	0.
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 92	3.49E-02	4.35E-04	9.39E-07	9.44E-15	4.42E-28	0.	0.	0.	0.	0.	0.
Y 92	3.18E-04	9.02E-04	1.00E-05	7.70E-12	4.49E-22	1.54E-42	5.26E-63	0.	0.	0.	0.
Y 93	1.13E-04	7.67E-04	1.50E-04	1.12E-06	3.23E-10	2.67E-17	2.21E-24	1.51E-38	0.	0.	0.
ZR 95	2.01E-06	2.51E-04	2.48E-04	2.41E-04	2.28E-04	2.04E-04	1.84E-04	1.49E-04	8.72E-05	3.00E-05	1.03E-05
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	2.31E-13	5.02E-06	9.92E-06	2.38E-05	4.42E-05	7.62E-05	9.83E-05	1.22E-04	1.17E-04	5.65E-05	2.17E-05
ZR 97	1.12E-03	1.90E-03	7.15E-04	3.79E-05	2.85E-07	1.60E-11	9.00E-16	2.85E-24	1.61E-45	0.	0.
NB 97M	2.47E-05	7.85E-03	2.95E-03	1.57E-04	1.17E-06	6.61E-11	3.72E-15	1.17E-23	6.63E-45	0.	0.
NB 97	2.18E-03	7.44E-03	2.80E-03	1.48E-04	1.12E-06	6.72E-11	3.78E-15	1.20E-23	6.75E-45	0.	0.
MO 99	3.13E-06	1.02E-03	7.96E-04	3.77E-04	1.09E-04	9.11E-06	7.60E-07	5.30E-09	2.15E-14	3.55E-25	5.84E-36
TC 99M	2.16E-11	6.64E-04	5.59E-04	2.68E-04	7.72E-05	6.45E-06	5.38E-07	3.75E-09	1.52E-14	2.51E-25	4.14E-36
RU103	8.05E-07	1.84E-03	1.80E-03	1.71E-03	1.57E-03	1.32E-03	1.10E-03	7.79E-04	3.24E-04	5.62E-05	9.80E-06
RH103M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU105	8.85E-03	8.47E-03	1.99E-04	2.62E-09	1.91E-17	1.02E-33	5.47E-50	0.	0.	0.	0.
RH105M	1.87E-06	2.72E-04	6.42E-06	8.43E-11	6.17E-19	3.30E-35	1.76E-51	0.	0.	0.	0.
RH105	9.72E-12	3.11E-03	2.03E-03	5.06E-04	4.98E-05	4.84E-07	4.71E-09	4.44E-13	3.85E-23	2.90E-43	2.17E-63
RU106	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RH106	2.20E-08	3.85E-05	3.83E-05	3.81E-05	3.78E-05	3.71E-05	3.63E-05	3.50E-05	3.18E-05	2.63E-05	2.18E-05
PD109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD111M	5.82E-03	2.82E-04	1.37E-05	1.57E-09	4.26E-16	3.11E-29	2.28E-42	0.	0.	0.	0.
PD111	1.47E-04	1.61E-05	7.81E-07	8.96E-11	2.43E-17	1.77E-30	1.30E-43	0.	0.	0.	0.
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG111	4.01E-13	1.11E-05	1.06E-05	8.08E-06	5.09E-06	2.02E-06	8.01E-07	1.26E-07	1.24E-09	1.20E-13	1.17E-17
PD112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG112	6.04E-08	1.06E-03	4.86E-04	4.51E-05	8.62E-07	3.12E-10	1.13E-13	1.49E-20	9.36E-38	0.	0.
AG113	2.12E-06	2.24E-05	9.67E-07	7.86E-11	1.20E-17	2.81E-31	6.57E-45	0.	0.	0.	0.
CD115M	1.88E-12	5.45E-08	5.36E-08	5.10E-08	4.72E-08	4.00E-08	3.42E-08	2.47E-08	1.10E-08	2.19E-09	4.39E-10
CD115	8.21E-09	1.24E-04	9.06E-05	3.57E-05	7.53E-06	3.36E-07	1.50E-08	2.99E-11	5.28E-18	1.65E-31	5.18E-45
IN115M	6.90E-14	8.79E-05	6.66E-05	2.63E-05	5.54E-06	2.48E-07	1.10E-08	2.20E-11	3.90E-18	1.22E-31	3.81E-45
CD117	7.										

DEBRIS DECAY FROM 1 TO 300 DAYS

ZERO TIME 1.00E+00 2.00E+00 5.00E+00 1.00E+01 2.00E+01 3.00E+01 5.00E+01 1.00E+02 2.00E+02 3.00E+02

SN127	1.16E-01	4.20E-05	1.53E-08	7.29E-19	4.58E-36	0.	0.	0.	0.	0.	0.	0.
SB127	5.31E-04	2.18E-03	1.82E-03	1.07E-03	4.36E-04	7.29E-05	1.22E-05	3.41E-07	4.44E-11	7.59E-19	1.29E-26	0.
TE127M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SB128	5.80E-02	9.88E-03	1.56E-03	6.09E-06	5.90E-10	5.54E-18	5.21E-26	4.59E-42	0.	0.	0.	0.
SB129	1.41E-01	7.23E-03	1.51E-04	1.37E-09	5.46E-18	8.62E-35	1.36E-51	0.	0.	0.	0.	0.
TE129M	6.02E-11	6.34E-06	6.34E-06	5.98E-06	5.41E-06	4.40E-06	3.58E-06	2.38E-06	8.59E-07	1.12E-07	1.46E-08	0.
TE129	4.29E-03	3.57E-04	1.49E-05	7.17E-06	6.47E-06	5.28E-06	4.30E-06	2.86E-06	1.03E-06	1.35E-07	1.75E-08	0.
I130	1.10E-03	2.88E-04	7.55E-05	1.35E-06	1.65E-09	2.45E-15	3.66E-21	8.15E-33	0.	0.	0.	0.
TE131M	2.84E-06	9.93E-03	5.70E-03	1.08E-03	6.75E-05	2.63E-07	1.03E-09	1.57E-14	1.43E-26	0.	0.	0.
TE131	7.65E-01	5.30E-04	3.05E-04	5.78E-05	3.61E-06	1.41E-08	5.50E-11	8.43E-16	7.65E-28	0.	0.	0.
I131	1.07E-04	5.76E-03	5.44E-03	4.37E-03	2.88E-03	1.21E-03	5.14E-04	9.19E-05	1.24E-06	2.26E-10	4.12E-14	0.
XE131M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE132	4.57E-03	9.06E-03	7.31E-03	3.85E-03	1.33E-03	1.57E-04	1.86E-05	2.62E-07	6.12E-12	3.35E-21	1.83E-30	0.
I132	1.21E-01	1.01E-01	8.16E-02	4.29E-02	1.48E-02	1.75E-03	2.08E-04	2.92E-06	6.84E-11	3.72E-20	2.04E-29	0.
I133	1.43E-02	7.97E-02	3.60E-02	3.34E-03	6.36E-05	2.31E-08	8.36E-12	1.10E-18	6.93E-36	0.	0.	0.
XE133M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE133	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
I135	5.65E-01	9.22E-02	7.69E-03	4.48E-06	1.82E-11	3.00E-22	4.93E-33	1.34E-54	0.	0.	0.	0.
XE135M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE135	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS136	2.46E-04	2.33E-04	2.20E-04	1.88E-04	1.44E-04	8.46E-05	4.97E-05	1.71E-05	1.19E-06	5.72E-09	2.77E-11	0.
CS137	1.10E-06	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.18E-05	1.17E-05	1.17E-05	0.
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
BA139	9.16E-03	9.78E-07	5.77E-12	1.19E-27	0.	0.	0.	0.	0.	0.	0.	0.
BA140	2.96E-04	1.75E-03	1.66E-03	1.41E-03	1.07E-03	6.26E-04	3.63E-04	1.23E-04	8.23E-06	3.66E-08	1.62E-10	0.
LA140	9.71E-09	8.41E-03	1.35E-02	1.87E-02	1.66E-02	9.95E-03	5.78E-03	1.97E-03	1.31E-04	5.82E-07	2.59E-09	0.
LA141	7.29E-04	2.90E-04	4.06E-06	1.12E-11	6.15E-21	1.83E-39	5.47E-58	0.	0.	0.	0.	0.
CE141	1.59E-10	1.76E-04	1.75E-04	1.64E-04	1.47E-04	1.19E-04	9.60E-05	6.26E-05	2.15E-05	2.53E-06	2.98E-07	0.
LA142	6.94E-02	1.52E-05	2.95E-10	2.17E-24	0.	0.	0.	0.	0.	0.	0.	0.
CE143	5.48E-05	2.25E-03	1.36E-03	3.00E-04	2.41E-05	1.56E-07	1.01E-09	4.23E-14	4.77E-25	0.	0.	0.

1

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	4.43E-05	3.02E-04	1.66E-04	2.80E-05	1.44E-06	3.77E-09	9.94E-12	6.86E-17	8.60E-30	0.	0.	0.
SM153	2.46E-05	1.73E-05	1.21E-05	4.19E-06	7.11E-07	2.07E-08	6.01E-10	5.05E-13	1.04E-20	4.44E-36	1.89E-51	0.
SM156	4.52E-05	7.71E-06	1.32E-06	6.48E-09	9.33E-13	1.92E-20	3.96E-28	1.68E-43	0.	0.	0.	0.
EU155	9.75E-10	3.30E-08	3.30E-08	3.30E-08	3.29E-08	3.28E-08	3.26E-08	3.24E-08	3.17E-08	3.05E-08	2.93E-08	0.
EU156	1.48E-06	1.20E-05	1.33E-05	1.20E-05	9.50E-06	5.97E-06	3.76E-06	1.49E-06	1.48E-07	1.46E-09	1.44E-11	0.
EU157	1.63E-05	1.89E-05	6.35E-06	2.38E-07	1.00E-09	1.76E-14	3.12E-19	9.72E-29	0.	0.	0.	0.
GD159	4.99E-07	9.82E-07	3.91E-07	2.44E-08	2.40E-10	2.32E-14	2.25E-18	2.11E-26	1.80E-46	0.	0.	0.
TB161	1.16E-09	7.56E-09	6.82E-09	5.05E-09	3.06E-09	1.12E-09	4.09E-10	5.49E-11	3.63E-13	1.57E-17	6.82E-22	0.
TOTAL	2.09E+00	4.43E-01	1.96E-01	8.38E-02	4.04E-02	1.57E-02	8.52E-03	3.38E-03	7.41E-04	1.87E-04	7.84E-05	0.

1

HARRY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.318E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	4.08E-10	3.53E-12	3.28E-13	3.04E-14	2.45E-17	1.96E-20	1.47E-24	9.40E-31	0.	0.	0.
MN 54	3.15E-08	1.36E-08	8.93E-09	5.87E-09	1.68E-09	4.79E-10	9.02E-11	7.38E-12	1.73E-15	6.26E-21	2.27E-26
FE 59	9.82E-08	3.54E-10	2.13E-11	1.28E-12	2.78E-16	6.00E-20	7.81E-25	3.66E-32	0.	0.	0.
CO 57	2.02E-08	7.94E-09	4.97E-09	3.12E-09	7.69E-10	1.90E-10	2.93E-12	1.78E-12	1.55E-16	1.28E-22	0.
CO 58	5.51E-07	1.58E-08	2.68E-09	4.55E-10	2.22E-12	1.08E-14	8.90E-18	2.11E-22	8.06E-38	0.	0.
CO 60	1.94E-07	1.70E-07	1.58E-07	1.48E-07	1.22E-07	9.99E-08	7.67E-08	5.17E-08	1.39E-08	1.93E-09	2.66E-10
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	4.41E-05	1.10E-13	1.07E-13	1.04E-13	9.76E-14	9.06E-14	8.24E-14	7.15E-14	4.45E-14	2.18E-14	1.07E-14
AM241	2.56E-13	2.56E-13	2.56E-13	2.56E-13	2.57E-13	2.58E-13	2.58E-13	2.60E-13	2.61E-13	2.58E-13	2.55E-13
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZR 95	2.01E-06	5.16E-06	7.37E-07	1.05E-07	3.06E-10	8.90E-13	3.68E-16	3.11E-21	3.81E-38	0.	0.
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	2.31E-13	1.15E-05	1.65E-06	2.35E-07	6.81E-10	1.98E-12	8.25E-16	6.97E-21	8.53E-38	0.	0.
RU103	8.05E-07	3.13E-06	1.28E-07	5.26E-09	3.59E-13	2.46E-17	6.91E-23	3.25E-31	0.	0.	0.
RH103M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU106	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RH106	2.20E-08	1.93E-05	1.37E-05	9.69E-06	3.45E-06	1.22E-06	3.08E-07	3.90E-08	3.93E-11	1.26E-15	4.06E-20
SN123	5.54E-10	7.68E-09	2.79E-09	1.01E-09	4.86E-11	2.33E-12	4.06E-14	9.35E-17	1.50E-25	9.66E-39	6.20E-52
SB125	6.03E-07	1.21E-06	1.07E-06	9.38E-07	6.39E-07	4.35E-07	2.60E-07	1.20E-07	9.25E-09	1.97E-10	4.19E-12
TE125M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS137	1.10E-06	1.16E-05	1.15E-05	1.13E-05	1.09E-05	1.05E-05	1.01E-05	9.42E-06	7.45E-06	5.29E-06	3.74E-06
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE141	1.59E-10	6.85E-08	1.38E-09	2.77E-11	2.25E-16	1.83E-21	3.01E-28	2.00E-38	0.	0.	0.
CE144	1.31E-07	3.86E-07	2.48E-07	1.58E-07	4.16E-08	1.09E-08	1.84E-09	1.27E-10	1.71E-14	2.68E-20	4.18E-26
PR144	6.43E-11	6.88E-07	4.42E-07	2.82E-07	7.41E-08	1.95E-08	3.28E-09	2.26E-10	3.04E-14	4.78E-20	7.45E-26
PM147	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EU155	9.75E-10	2.85E-08	2.65E-08	2.47E-08	1.98E-08	1.59E-08	1.19E-08	7.68E-09	1.80E-09	2.02E-10	2.27E-11
TOTAL	4.97E-05	5.33E-05	2.96E-05	2.29E-05	1.53E-05	1.24E-05	1.07E-05	9.64E-06	7.47E-06	5.29E-06	3.74E-06

APPENDIX 3

HARRY EVENT

Fit To Sum of Eleven Exponentials

The calculated values are fit to the function

$$\sum_{i=1}^{11} a_i e^{-\lambda_i t}$$

In the first table the a_i 's are the variables and are designated by an odd number in the column under "K"; the i 's are fixed parameters so designated. The quality of fit to each point is shown in the second table.

	<u>Page</u>
Fraction refractories present = 1.0	3-1
Fraction refractories present = 0.5	3-3
Fraction refractories present = 0.1	3-5

1 HARRY CI/SQ KM, 1.0 REFRACTORIES PRESENT

K	FINAL VALUE	STND. DEV.	
1	1.7213E+04	2.3069E+03	
2	2.7390E+00	0.	FIXED PARAMETER
3	2.0380E+03	4.3358E+02	
4	8.8130E-01	0.	FIXED PARAMETER
5	3.4677E+02	1.3777E+02	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.6331E+02	2.8627E+01	
8	1.2090E-01	0.	FIXED PARAMETER
9	9.3561E+01	6.9050E+00	
10	3.4400E-02	0.	FIXED PARAMETER
11	2.6233E+01	1.3221E+00	
12	8.8070E-03	0.	FIXED PARAMETER
13	3.2643E+00	1.8037E-01	
14	2.3380E-03	0.	FIXED PARAMETER
15	6.7360E-01	2.3668E-02	
16	4.4040E-04	0.	FIXED PARAMETER
17	4.6747E-02	3.5370E-03	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.3259E-02	9.6805E-04	
20	4.5780E-05	0.	FIXED PARAMETER
21	2.8454E-03	4.9096E-05	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	2.5400E+03	2.5454E+03	-0.21
2	2.000E+00	9.1700E+02	9.0457E+02	1.37
3	3.000E+00	5.4600E+02	5.5440E+02	-1.51
4	4.000E+00	4.0400E+02	4.0647E+02	-0.61
5	6.000E+00	2.8000E+02	2.7621E+02	1.37
6	9.000E+00	1.9800E+02	1.9665E+02	0.69
7	1.200E+01	1.5500E+02	1.5443E+02	0.37
8	1.500E+01	1.2600E+02	1.2667E+02	-0.53
9	1.800E+01	1.0600E+02	1.0681E+02	-0.76
10	2.100E+01	9.1800E+01	9.1960E+01	-0.17
11	2.400E+01	7.9800E+01	8.0523E+01	-0.90
12	4.800E+01	3.9700E+01	3.9571E+01	0.33
13	1.200E+02	1.4500E+01	1.3792E+01	5.13
14	2.400E+02	5.5100E+00	5.7231E+00	-3.72
15	4.800E+02	1.9800E+00	2.0508E+00	-3.45
16	7.200E+02	1.2200E+00	1.2019E+00	1.50
17	1.200E+03	6.8800E-01	6.5144E-01	5.61
18	2.400E+03	3.1000E-01	2.9650E-01	4.55
19	4.800E+03	1.1700E-01	1.2222E-01	-4.27
20	7.200E+03	5.8700E-02	6.1541E-02	-4.62
21	8.770E+03	4.2500E-02	4.3394E-02	-2.06
22	1.320E+04	2.3600E-02	2.2732E-02	3.82
23	1.750E+04	1.6200E-02	1.5609E-02	3.79
24	3.070E+04	7.3700E-03	7.3941E-03	-0.33
25	4.380E+04	4.5300E-03	4.6638E-03	-2.87
26	6.140E+04	3.2400E-03	3.2536E-03	-0.42
27	8.770E+04	2.5700E-03	2.4815E-03	3.57
28	1.750E+05	1.7800E-03	1.7691E-03	0.62
29	3.070E+05	1.2200E-03	1.2307E-03	-0.87
30	4.380E+05	8.5000E-04	8.6068E-04	-1.24

1 HARRY MR/HR, 1.0 REFRACTORIES PRESENT 0.16 GM/SQCM

K	FINAL VALUE	STND. DEV.	
1	1.1798E+02	1.6865E+01	
2	2.7390E+00	0.	FIXED PARAMETER
3	4.0539E+01	2.7995E+00	
4	8.8130E-01	0.	FIXED PARAMETER
5	6.2567E+00	7.2643E-01	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.0318E+00	1.1404E-01	
8	1.2090E-01	0.	FIXED PARAMETER
9	4.8350E-01	2.5601E-02	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.3531E-01	4.8599E-03	
12	8.8070E-03	0.	FIXED PARAMETER
13	2.4834E-02	6.9428E-04	
14	2.3380E-03	0.	FIXED PARAMETER
15	4.5354E-03	6.0746E-05	
16	4.4040E-04	0.	FIXED PARAMETER
17	4.2749E-05	4.2486E-06	
18	1.1150E-04	0.	FIXED PARAMETER
19	9.5062E-06	1.1706E-06	
20	4.5780E-05	0.	FIXED PARAMETER
21	7.5081E-06	7.8636E-08	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	3.1100E+01	3.1087E+01	0.04
2	2.000E+00	1.2500E+01	1.2529E+01	-0.23
3	3.000E+00	6.8500E+00	6.8686E+00	-0.27
4	4.000E+00	4.3800E+00	4.3465E+00	0.77
5	6.000E+00	2.3500E+00	2.3434E+00	0.28
6	9.000E+00	1.3800E+00	1.3954E+00	-1.10
7	1.200E+01	1.0000E+00	1.0060E+00	-0.60
8	1.500E+01	7.8500E-01	7.8527E-01	-0.03
9	1.800E+01	6.4500E-01	6.4034E-01	0.73
10	2.100E+01	5.4400E-01	5.3761E-01	1.19
11	2.400E+01	4.6200E-01	4.6148E-01	0.11
12	4.800E+01	2.1200E-01	2.1423E-01	-1.04
13	1.200E+02	7.8000E-02	7.7938E-02	0.08
14	2.400E+02	3.4700E-02	3.4778E-02	-0.22
15	4.800E+02	1.4000E-02	1.3787E-02	1.54
16	7.200E+02	8.3200E-03	8.2105E-03	1.33
17	1.200E+03	4.1000E-03	4.2327E-03	-3.14
18	2.400E+03	1.6300E-03	1.7156E-03	-4.99
19	4.800E+03	5.9800E-04	5.8812E-04	1.68
20	7.200E+03	2.3000E-04	2.2369E-04	2.82
21	8.770E+03	1.3000E-04	1.2510E-04	3.91
22	1.320E+04	3.5800E-05	3.5799E-05	0.00
23	1.750E+04	1.9100E-05	1.9538E-05	-2.24
24	3.070E+04	1.0700E-05	1.0636E-05	0.60
25	4.380E+04	8.2800E-06	8.2654E-06	0.18
26	6.140E+04	7.0200E-06	6.9667E-06	0.77
27	8.770E+04	6.1700E-06	6.0834E-06	1.42
28	1.750E+05	4.6100E-06	4.6595E-06	-1.06
29	3.070E+05	3.2200E-06	3.2475E-06	-0.85
30	4.380E+05	2.2700E-06	2.2710E-06	-0.05

1 HARRY CI/SQ KM, 0.5 REFRACTORIES PRESENT

K	FINAL VALUE	STND. DEV.	
1	1.5038E+04	2.7414E+03	
2	2.7390E+00	0.	FIXED PARAMETER
3	2.2799E+03	5.0863E+02	
4	8.8130E-01	0.	FIXED PARAMETER
5	3.3717E+02	1.5624E+02	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.6954E+02	3.0801E+01	
8	1.2090E-01	0.	FIXED PARAMETER
9	7.7103E+01	7.3395E+00	
10	3.4400E-02	0.	FIXED PARAMETER
11	2.0846E+01	1.4407E+00	
12	8.8070E-03	0.	FIXED PARAMETER
13	3.6921E+00	2.0939E-01	
14	2.3380E-03	0.	FIXED PARAMETER
15	5.9741E-01	2.6002E-02	
16	4.4040E-04	0.	FIXED PARAMETER
17	3.3384E-02	4.1092E-03	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.1667E-02	1.2486E-03	
20	4.5780E-05	0.	FIXED PARAMETER
21	3.6007E-03	7.4703E-05	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	2.4800E+03	2.4831E+03	-0.13
2	2.000E+00	9.2500E+02	9.1717E+02	0.85
3	3.000E+00	5.4700E+02	5.5260E+02	-1.01
4	4.000E+00	3.9500E+02	3.9617E+02	-0.30
5	6.000E+00	2.6400E+02	2.6136E+02	1.01
6	9.000E+00	1.8200E+02	1.8182E+02	0.10
7	1.200E+01	1.4000E+02	1.4039E+02	-0.28
8	1.500E+01	1.1300E+02	1.1344E+02	-0.38
9	1.800E+01	9.4300E+01	9.4371E+01	-0.08
10	2.100E+01	8.0700E+01	8.0298E+01	0.50
11	2.400E+01	6.9400E+01	6.9611E+01	-0.30
12	4.800E+01	3.3000E+01	3.3196E+01	-0.59
13	1.200E+02	1.2300E+01	1.1891E+01	3.44
14	2.400E+02	5.1100E+00	5.2298E+00	-2.29
15	4.800E+02	1.9700E+00	2.0364E+00	-3.26
16	7.200E+02	1.2000E+00	1.2033E+00	-0.28
17	1.200E+03	6.6100E-01	6.1981E-01	6.65
18	2.400E+03	2.8400E-01	2.6068E-01	8.94
19	4.800E+03	9.9200E-02	1.0466E-01	-5.22
20	7.200E+03	4.8500E-02	5.1951E-02	-6.64
21	8.770E+03	3.5300E-02	3.6438E-02	-3.12
22	1.320E+04	2.0300E-02	1.9295E-02	5.21
23	1.750E+04	1.4500E-02	1.3681E-02	5.99
24	3.070E+04	7.2500E-03	7.2621E-03	-0.17
25	4.380E+04	4.8400E-03	5.0183E-03	-3.55
26	6.140E+04	3.7100E-03	3.7823E-03	-1.91
27	8.770E+04	3.1000E-03	3.0465E-03	1.76
28	1.750E+05	2.2600E-03	2.2369E-03	1.03
29	3.070E+05	1.5600E-03	1.5574E-03	0.17
30	4.380E+05	1.0900E-03	1.0891E-03	0.08

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HARRY

MR/HR, 0.5 REFRACTORIES PRESENT 0.16 GM/SQCM

K	FINAL VALUE	STND. DEV.	
1	1.1832E+02	7.9405E+00	
2	2.7390E+00	0.	FIXED PARAMETER
3	4.9375E+01	1.2769E+00	
4	8.8130E-01	0.	FIXED PARAMETER
5	5.0321E+00	3.2256E-01	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.2254E+00	4.9824E-02	
8	1.2090E-01	0.	FIXED PARAMETER
9	4.2988E-01	1.1227E-02	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.3390E-01	2.1974E-03	
12	8.8070E-03	0.	FIXED PARAMETER
13	3.1466E-02	2.9939E-04	
14	2.3380E-03	0.	FIXED PARAMETER
15	3.1240E-03	2.1067E-05	
16	4.4040E-04	0.	FIXED PARAMETER
17	3.9922E-05	1.9943E-06	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.0319E-05	6.0543E-07	
20	4.5780E-05	0.	FIXED PARAMETER
21	9.4831E-06	4.3605E-08	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	3.4100E+01	3.4064E+01	0.11
2	2.000E+00	1.3500E+01	1.3590E+01	-0.67
3	3.000E+00	7.2100E+00	7.2064E+00	0.05
4	4.000E+00	4.4700E+00	4.4254E+00	1.01
5	6.000E+00	2.3300E+00	2.3237E+00	0.27
6	9.000E+00	1.3700E+00	1.3915E+00	-1.54
7	1.200E+01	1.0000E+00	1.0085E+00	-0.84
8	1.500E+01	7.8600E-01	7.8507E-01	0.12
9	1.800E+01	6.4200E-01	6.3610E-01	0.93
10	2.100E+01	5.3800E-01	5.3026E-01	1.46
11	2.400E+01	4.5400E-01	4.5226E-01	0.39
12	4.800E+01	2.0500E-01	2.0816E-01	-1.52
13	1.200E+02	8.0500E-02	8.0257E-02	0.30
14	2.400E+02	3.7200E-02	3.7109E-02	0.25
15	4.800E+02	1.4800E-02	1.4784E-02	0.11
16	7.200E+02	8.4100E-03	8.4121E-03	-0.03
17	1.200E+03	3.7900E-03	3.8019E-03	-0.31
18	2.400E+03	1.2500E-03	1.2499E-03	0.01
19	4.800E+03	4.2100E-04	4.1870E-04	0.55
20	7.200E+03	1.6500E-04	1.6571E-04	-0.43
21	8.770E+03	9.7000E-05	9.6845E-05	0.16
22	1.320E+04	3.3100E-05	3.3282E-05	-0.55
23	1.750E+04	2.0800E-05	2.0749E-05	0.24
24	3.070E+04	1.2700E-05	1.2558E-05	1.13
25	4.380E+04	1.0000E-05	1.0106E-05	-1.05
26	6.140E+04	8.6300E-06	8.6827E-06	-0.61
27	8.770E+04	7.6700E-06	7.6524E-06	0.23
28	1.750E+05	5.8400E-06	5.8846E-06	-0.76
29	3.070E+05	4.1100E-06	4.1017E-06	0.20
30	4.380E+05	2.9000E-06	2.8684E-06	1.10

1 HARRY CI/SQ KM, 0.1 REFRACTORIES PRESENT

K	FINAL VALUE	STND. DEV.	
1	1.1874E+04	3.9784E+03	
2	2.7390E+00	0.	FIXED PARAMETER
3	2.6237E+03	7.2330E+02	
4	8.8130E-01	0.	FIXED PARAMETER
5	3.2395E+02	2.1066E+02	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.7547E+02	3.7933E+01	
8	1.2090E-01	0.	FIXED PARAMETER
9	5.5796E+01	8.8532E+00	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.3440E+01	1.8202E+00	
12	8.8070E-03	0.	FIXED PARAMETER
13	4.3097E+00	2.9453E-01	
14	2.3380E-03	0.	FIXED PARAMETER
15	4.9443E-01	3.3153E-02	
16	4.4040E-04	0.	FIXED PARAMETER
17	1.3654E-02	5.7051E-03	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.0365E-02	1.9689E-03	
20	4.5780E-05	0.	FIXED PARAMETER
21	4.5661E-03	1.4106E-04	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	2.3900E+03	2.3899E+03	0.00
2	2.000E+00	9.3500E+02	9.3486E+02	0.02
3	3.000E+00	5.4800E+02	5.5026E+02	-0.41
4	4.000E+00	3.8400E+02	3.8188E+02	0.55
5	6.000E+00	2.4200E+02	2.4081E+02	0.49
6	9.000E+00	1.6000E+02	1.6155E+02	-0.96
7	1.200E+01	1.2000E+02	1.2138E+02	-1.14
8	1.500E+01	9.5100E+01	9.5631E+01	-0.56
9	1.800E+01	7.8200E+01	7.7711E+01	0.63
10	2.100E+01	6.5900E+01	6.4726E+01	1.81
11	2.400E+01	5.5700E+01	5.5070E+01	1.14
12	4.800E+01	2.4200E+01	2.4706E+01	-2.05
13	1.200E+02	9.4500E+00	9.3232E+00	1.36
14	2.400E+02	4.5900E+00	4.5699E+00	0.44
15	4.800E+02	1.9500E+00	2.0270E+00	-3.80
16	7.200E+02	1.1800E+00	1.2115E+00	-2.60
17	1.200E+03	6.2700E-01	5.7873E-01	8.34
18	2.400E+03	2.4900E-01	2.1185E-01	17.54
19	4.800E+03	7.5700E-02	8.0589E-02	-6.07
20	7.200E+03	3.5100E-02	3.8800E-02	-9.54
21	8.770E+03	2.5700E-02	2.6924E-02	-4.55
22	1.320E+04	1.6000E-02	1.4680E-02	9.00
23	1.750E+04	1.2200E-02	1.1168E-02	9.24
24	3.070E+04	7.0900E-03	7.1872E-03	-1.35
25	4.380E+04	5.2500E-03	5.5504E-03	-5.41
26	6.140E+04	4.3300E-03	4.4995E-03	-3.77
27	8.770E+04	3.8000E-03	3.7817E-03	0.48
28	1.750E+05	2.9000E-03	2.8353E-03	2.28
29	3.070E+05	2.0100E-03	1.9750E-03	1.77
30	4.380E+05	1.4000E-03	1.3812E-03	1.36

1 HARRY MR/HR, 0.1 REFRACTORIES PRESENT 0.16 GM/SQCM

K	FINAL VALUE	STND. DEV.	
1	1.1483E+02	4.6284E+01	
2	2.7390E+00	0.	FIXED PARAMETER
3	6.2195E+01	7.1637E+00	
4	8.8130E-01	0.	FIXED PARAMETER
5	3.3174E+00	1.7434E+00	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.4723E+00	2.6372E-01	
8	1.2090E-01	0.	FIXED PARAMETER
9	3.6663E-01	5.9711E-02	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.2866E-01	1.2101E-02	
12	8.8070E-03	0.	FIXED PARAMETER
13	4.0835E-02	1.5311E-03	
14	2.3380E-03	0.	FIXED PARAMETER
15	1.2854E-03	6.8975E-05	
16	4.4040E-04	0.	FIXED PARAMETER
17	1.7164E-05	1.0544E-05	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.5947E-05	3.7226E-06	
20	4.5780E-05	0.	FIXED PARAMETER
21	1.1969E-05	2.9507E-07	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	3.8200E+01	3.8148E+01	0.14
2	2.000E+00	1.5000E+01	1.5126E+01	-0.84
3	3.000E+00	7.7000E+00	7.7010E+00	-0.01
4	4.000E+00	4.6000E+00	4.5415E+00	1.29
5	6.000E+00	2.3000E+00	2.2934E+00	0.29
6	9.000E+00	1.3600E+00	1.3839E+00	-1.73
7	1.200E+01	1.0000E+00	1.0114E+00	-1.13
8	1.500E+01	7.8600E-01	7.8525E-01	0.10
9	1.800E+01	6.3900E-01	6.3119E-01	1.24
10	2.100E+01	5.3000E-01	5.2129E-01	1.67
11	2.400E+01	4.4300E-01	4.4075E-01	0.51
12	4.800E+01	1.9600E-01	1.9990E-01	-1.95
13	1.200E+02	8.3800E-02	8.2735E-02	1.29
14	2.400E+02	4.0400E-02	4.0137E-02	0.66
15	4.800E+02	1.5700E-02	1.6255E-02	-3.42
16	7.200E+02	8.5200E-03	8.7911E-03	-3.08
17	1.200E+03	3.3800E-03	3.2724E-03	3.29
18	2.400E+03	7.4100E-04	6.3531E-04	16.64
19	4.800E+03	1.8700E-04	1.9044E-04	-1.80
20	7.200E+03	7.8400E-05	8.4840E-05	-7.59
21	8.770E+03	5.3300E-05	5.5833E-05	-4.54
22	1.320E+04	2.9600E-05	2.8039E-05	5.57
23	1.750E+04	2.2900E-05	2.1585E-05	6.09
24	3.070E+04	1.5300E-05	1.5479E-05	-1.16
25	4.380E+04	1.2400E-05	1.2897E-05	-3.85
26	6.140E+04	1.0700E-05	1.1099E-05	-3.60
27	8.770E+04	9.6400E-06	9.7093E-06	-0.71
28	1.750E+05	7.4700E-06	7.4282E-06	0.56
29	3.070E+05	5.2900E-06	5.1769E-06	2.18
30	4.380E+05	3.7400E-06	3.6204E-06	3.30

APPENDIX 4

SMOKY EVENT

Microcuries per Square Meter

	<u>Page</u>
Fraction of refractories present = 1.0	
Total mR/hr and Total $\mu\text{Ci}/\text{m}^2$	4-1
Individual nuclide $\mu\text{Ci}/\text{m}^2$	4-2
Fraction of refractories present = 0.5	
Total mR/hr and Total $\mu\text{Ci}/\text{m}^2$	4-12
Individual nuclide $\mu\text{Ci}/\text{m}^2$	4-13
Fraction of refractories present = 0.1	
Total mR/hr and Total $\mu\text{Ci}/\text{m}^2$	4-23
Individual nuclide $\mu\text{Ci}/\text{m}^2$	4-24

SMOKY
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	9.91E+01	9.70E+03
1.00E+00	3.09E+01	2.17E+03
2.00E+00	1.25E+01	8.56E+02
3.00E+00	6.90E+00	5.34E+02
4.00E+00	4.43E+00	3.99E+02
6.00E+00	2.39E+00	2.74E+02
9.00E+00	1.40E+00	1.90E+02
1.20E+01	1.00E+00	1.45E+02
1.50E+01	7.77E-01	1.16E+02
1.80E+01	6.31E-01	9.54E+01
2.10E+01	5.28E-01	8.09E+01
1.00E+00 DAYS	4.44E-01	6.90E+01
2.00E+00	1.93E-01	3.12E+01
5.00E+00	6.89E-02	1.10E+01
1.00E+01	3.27E-02	4.75E+00
2.00E+01	1.39E-02	1.96E+00
3.00E+01	8.29E-03	1.22E+00
5.00E+01	4.08E-03	6.86E-01
1.00E+02	1.64E-03	3.10E-01
2.00E+02	6.09E-04	1.17E-01
3.00E+02	2.34E-04	5.81E-02
1.00E+00 YEARS	1.32E-04	4.15E-02
1.50E+00	3.57E-05	2.27E-02
2.00E+00	1.91E-05	1.56E-02
3.50E+00	1.13E-05	7.31E-03
5.00E+00	8.99E-06	4.67E-03
7.00E+00	7.59E-06	3.42E-03
1.00E+01	6.50E-06	2.73E-03
2.00E+01	4.64E-06	1.87E-03
3.50E+01	3.19E-06	1.27E-03
5.00E+01	2.24E-06	8.85E-04

1

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BE 7	3.57E-04	3.56E-04	3.56E-04	3.56E-04	3.56E-04	3.56E-04	3.55E-04	3.54E-04	3.53E-04	3.53E-04	3.52E-04
NA 24	2.53E-01	2.42E-01	2.31E-01	2.20E-01	2.10E-01	1.92E-01	1.67E-01	1.46E-01	1.27E-01	1.10E-01	9.57E-02
MN 54	1.16E-04	1.16E-04	1.16E-04	1.16E-04	1.16E-04	1.16E-04	1.16E-04	1.15E-04	1.15E-04	1.15E-04	1.15E-04
FE 55	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04
FE 59	5.12E-04	5.11E-04	5.11E-04	5.11E-04	5.11E-04	5.11E-04	5.10E-04	5.09E-04	5.08E-04	5.07E-04	5.06E-04
CO 57	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06
CO 58	1.06E-05	1.06E-05	1.06E-05	1.06E-05	1.06E-05	1.06E-05	1.05E-05	1.05E-05	1.05E-05	1.05E-05	1.05E-05
CO 60	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05
CU 64	1.67E+00	1.58E+00	1.50E+00	1.42E+00	1.34E+00	1.21E+00	1.02E+00	8.72E-01	7.41E-01	6.31E-01	5.36E-01
CU 67	5.27E-05	5.22E-05	5.13E-05	5.09E-05	5.04E-05	4.91E-05	4.73E-05	4.59E-05	4.45E-05	4.28E-05	4.16E-05
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	3.47E-04	3.42E-04	3.37E-04	3.32E-04	3.27E-04	3.20E-04	3.08E-04	2.96E-04	2.84E-04	2.71E-04	2.62E-04
U237	2.74E-01	2.73E-01	2.72E-01	2.71E-01	2.69E-01	2.67E-01	2.63E-01	2.60E-01	2.57E-01	2.53E-01	2.50E-01
U239	1.39E+03	2.38E+02	4.06E+01	6.92E+00	1.17E+00	3.42E-02	1.70E-04	8.37E-07	4.14E-09	2.05E-11	1.01E-13
U240	2.29E+00	2.18E+00	2.08E+00	1.98E+00	1.88E+00	1.70E+00	1.47E+00	1.27E+00	1.09E+00	9.43E-01	8.13E-01
NP239	4.77E-03	8.00E+00	9.25E+00	9.40E+00	9.32E+00	9.10E+00	8.74E+00	8.44E+00	8.15E+00	7.86E+00	7.56E+00
NP240M	3.62E-03	2.19E+00	2.09E+00	1.99E+00	1.90E+00	1.72E+00	1.48E+00	1.28E+00	1.10E+00	9.51E-01	8.22E-01
NP240	9.17E-11	4.71E-11	2.45E-11	1.26E-11	6.53E-12	1.75E-12	2.41E-13	3.32E-14	4.58E-15	6.31E-16	8.73E-17
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.47E-05	1.47E-05	1.47E-05	1.47E-05	1.47E-05
GE 75	1.19E-05	5.76E-02	3.47E-02	2.09E-02	1.26E-02	4.56E-03	9.97E-04	2.18E-04	4.76E-05	1.04E-05	2.27E-06
GE 77	4.99E-03	1.28E-02	1.21E-02	1.14E-02	1.07E-02	9.46E-03	7.87E-03	6.54E-03	5.45E-03	4.53E-03	3.77E-03
AS 77	5.16E-05	8.15E-03	8.24E-03	8.30E-03	8.35E-03	8.41E-03	8.41E-03	8.35E-03	8.22E-03	8.06E-03	7.85E-03
SE 77M	2.03E-09	2.44E-05	2.48E-05	2.49E-05	2.49E-05	2.51E-05	2.53E-05	2.51E-05	2.48E-05	2.42E-05	2.35E-05
GE 78	6.54E-01	4.09E-01	2.54E-01	1.59E-01	9.92E-02	3.86E-02	9.38E-03	2.27E-03	5.54E-04	1.35E-04	3.27E-05
AS 78	1.18E-02	1.95E-01	2.41E-01	2.25E-01	1.88E-01	1.11E-01	4.13E-02	1.37E-02	4.25E-03	1.27E-03	3.68E-04
AS 79	1.25E+01	1.23E-01	1.21E-03	1.19E-05	1.18E-07	1.14E-11	1.09E-17	1.04E-23	9.89E-30	9.44E-36	9.02E-42
SE 79M	1.85E-02	2.17E-01	2.14E-03	2.11E-05	2.08E-07	2.01E-11	1.92E-17	1.83E-23	1.75E-29	1.67E-35	1.59E-41
BR 80	7.85E-02	7.40E-03	6.96E-04	6.54E-05	6.16E-06	5.46E-08	4.57E-11	3.81E-14	3.18E-17	2.65E-20	2.21E-23
SE 81M	6.44E-02	3.01E+00	1.45E+00	6.97E-01	3.35E-01	7.84E-02	8.77E-03	9.83E-04	1.10E-04	1.24E-05	1.39E-06
SE 81	7.87E-01	3.55E+00	2.06E+00	1.03E+00	4.98E-01	1.16E-01	1.30E-02	1.46E-03	1.63E-04	1.83E-05	2.05E-06
BR 82	3.95E-04	3.88E-04	3.80E-04	3.73E-04	3.65E-04	3.51E-04	3.31E-04	3.12E-04	2.95E-04	2.78E-04	2.62E-04
SE 83	3.78E+01	7.16E+00	1.36E+00	2.57E-01	4.86E-02	1.75E-03	1.19E-05	8.09E-08	5.53E-10	3.75E-12	2.38E-14
BR 83	3.14E-01	4.69E+00	4.34E+00	3.41E+00	2.59E+00	1.46E+00	6.19E-01	2.60E-01	1.10E-01	4.64E-02	1.96E-02
KR 83M	1.62E-05	1.06E+00	2.17E+00	2.69E+00	2.78E+00	2.32E+00	1.37E+00	7.03E-01	3.39E-01	1.57E-01	7.03E-02

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

ZERO TIME 1.00E+00 2.00E+00 3.00E+00 4.00E+00 6.00E+00 9.00E+00 1.20E+01 1.50E+01 1.80E+01 2.10E+01

BR 84	8.14E-02	1.40E+01	3.80E+00	1.03E+00	2.78E-01	2.03E-02	4.01E-04	7.92E-06	1.57E-07	3.10E-09	6.13E-11
KR 85M	4.11E-03	8.82E+00	7.50E+00	6.41E+00	5.48E+00	4.00E+00	2.49E+00	1.56E+00	9.69E-01	6.02E-01	3.76E-01
KR 87	6.66E+01	3.85E+01	2.23E+01	1.29E+01	7.42E+00	2.49E+00	4.83E-01	9.35E-02	1.81E-02	3.51E-03	6.78E-04
KR 88	3.87E+01	3.02E+01	2.36E+01	1.84E+01	1.44E+01	8.73E+00	4.17E+00	1.98E+00	9.43E-01	4.49E-01	2.14E-01
RB 88	9.84E+00	3.06E+01	2.61E+01	2.05E+01	1.61E+01	9.78E+00	4.67E+00	2.22E+00	1.06E+00	5.03E-01	2.39E-01
RB 89	4.59E+01	4.31E+01	2.90E+00	1.95E-01	1.30E-02	5.91E-05	1.79E-08	5.39E-12	1.64E-15	4.98E-19	1.51E-22
SR 89	3.51E-06	1.23E-01	1.32E-01	1.32E-01	1.32E-01	1.32E-01	1.32E-01	1.31E-01	1.31E-01	1.30E-01	1.30E-01
SR 90	6.90E-06	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.09E-04
SR 91	9.20E-01	1.71E+01	1.60E+01	1.49E+01	1.38E+01	1.20E+01	9.66E+00	7.81E+00	6.31E+00	5.06E+00	4.08E+00
Y 91M	6.19E-05	5.90E+00	8.04E+00	8.62E+00	8.50E+00	7.64E+00	6.25E+00	5.03E+00	4.06E+00	3.27E+00	2.64E+00
Y 91	2.53E-08	5.25E-03	1.21E-02	1.93E-02	2.64E-02	3.95E-02	5.61E-02	6.94E-02	8.04E-02	8.91E-02	9.60E-02
SR 92	1.17E+01	5.21E+01	4.04E+01	3.12E+01	2.42E+01	1.45E+01	6.73E+00	3.12E+00	1.45E+00	6.73E-01	3.13E-01
Y 92	5.37E-01	1.10E+01	1.72E+01	2.04E+01	2.17E+01	2.07E+01	1.58E+01	1.08E+01	6.94E+00	4.27E+00	2.58E+00
SR 93	4.57E+02	7.87E+00	4.35E-02	2.40E-04	1.32E-06	4.05E-11	6.83E-18	1.15E-24	1.94E-31	3.28E-38	5.52E-45
Y 93	5.57E-01	1.80E+01	1.69E+01	1.58E+01	1.48E+01	1.29E+01	1.05E+01	8.60E+00	6.98E+00	5.73E+00	4.66E+00
Y 94	6.59E+01	9.01E+01	1.16E+01	1.49E+00	1.93E-01	3.20E-03	6.87E-06	1.47E-08	3.15E-11	6.87E-14	3.81E-15
Y 95	2.80E+02	2.64E+01	5.81E-01	1.28E-02	2.82E-04	1.37E-07	1.47E-12	1.57E-17	1.67E-22	1.79E-27	1.91E-32
ZR 95	1.05E-03	1.37E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.40E-01	1.39E-01	1.39E-01
NB 95	1.17E-10	8.48E-05	1.98E-04	3.11E-04	4.24E-04	6.50E-04	9.86E-04	1.33E-03	1.66E-03	2.00E-03	2.33E-03
ZR 97	2.49E+00	1.08E+01	1.04E+01	9.98E+00	9.55E+00	8.82E+00	7.79E+00	6.89E+00	6.12E+00	5.39E+00	4.80E+00
NB 97M	1.28E-02	1.04E+01	9.98E+00	9.59E+00	9.21E+00	8.48E+00	7.49E+00	6.64E+00	5.87E+00	5.18E+00	4.58E+00
NB 97	1.25E+00	5.44E+00	7.66E+00	8.73E+00	9.16E+00	9.12E+00	8.31E+00	7.41E+00	6.55E+00	5.78E+00	5.14E+00
NB 98	1.39E+01	6.15E+00	2.72E+00	1.20E+00	5.33E-01	1.04E-01	9.01E-03	7.78E-04	6.78E-05	5.87E-06	5.05E-07
MO 99	7.20E-03	2.97E+00	2.94E+00	2.91E+00	2.88E+00	2.82E+00	2.74E+00	2.65E+00	2.57E+00	2.50E+00	2.42E+00
TC 99M	6.70E-08	2.83E-01	5.32E-01	7.52E-01	9.45E-01	1.26E+00	1.60E+00	1.82E+00	1.95E+00	2.02E+00	2.05E+00
MO101	9.79E+01	4.42E+01	2.57E+00	1.49E-01	8.64E-03	2.89E-05	5.62E-09	1.09E-12	2.13E-16	4.13E-20	8.06E-24
TC101	4.13E+00	1.24E+02	1.36E+01	1.11E+00	8.10E-02	3.65E-04	9.13E-08	2.05E-11	4.34E-15	8.92E-19	1.81E-22
MO102	7.74E+02	1.77E+01	4.02E-01	9.18E-03	2.09E-04	1.09E-07	1.29E-12	1.53E-17	1.82E-22	2.16E-27	2.56E-32
TC102M	4.98E-01	1.49E+01	3.42E-01	7.82E-03	1.78E-04	9.22E-08	1.09E-12	1.30E-17	1.54E-22	1.82E-27	2.17E-32
TC102	2.33E+03	8.88E+00	2.03E-01	4.61E-03	1.05E-04	5.49E-08	6.53E-13	7.74E-18	9.18E-23	1.09E-27	1.29E-32
RU103	5.09E-05	1.18E-01	1.18E-01	1.18E-01	1.18E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.16E-01
RH103M	3.39E-09	6.10E-02	9.04E-02	1.05E-01	1.12E-01	1.16E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01	1.17E-01
TC104	4.02E+01	2.89E+01	2.89E+00	2.86E-01	2.83E-02	2.79E-04	2.72E-07	2.66E-10	2.60E-13	2.54E-16	2.48E-19
RU105	2.86E-01	9.90E+00	8.46E+00	7.25E+00	6.20E+00	4.53E+00	2.84E+00	1.78E+00	1.11E+00	6.96E-01	4.37E-01
RH105M	1.88E-03	9.92E+00	8.48E+00	7.27E+00	6.20E+00	4.55E+00	2.84E+00	1.78E+00	1.12E+00	6.98E-01	4.37E-01
RU105	3.09E-09	2.01E-01	3.74E-01	5.16E-01	6.35E-01	8.12E-01	9.71E-01	1.04E+00	1.07E+00	1.05E+00	1.03E+00
RU106	2.29E-04	4.34E-03	4.34E-03	4.34E-03	4.34E-03	4.34E-03	4.34E-03	4.34E-03	4.34E-03	4.34E-03	4.34E-03
RH106	2.48E-06	4.34E-03	4.34E-03	4.34E-03	4.34E-03	4.34E-03	4.34E-03	4.34E-03	4.34E-03	4.34E-03	4.34E-03
RH107	5.02E-02	6.81E+00	1.03E+00	1.55E-01	2.35E-02	5.35E-04	1.84E-06	6.36E-09	2.19E-11	7.48E-14	7.44E-18
PD107M	1.04E-04	1.39E+00	2.09E-01	3.16E-02	4.77E-03	1.09E-04	3.75E-07	1.29E-09	4.45E-12	1.54E-14	5.24E-17

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRATORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	6.68E-03	5.54E-01	5.27E-01	4.99E-01	4.74E-01	4.28E-01	3.68E-01	3.15E-01	2.70E-01	2.32E-01	1.99E-01
AG109M	3.85E-05	5.54E-01	5.27E-01	5.01E-01	4.76E-01	4.29E-01	3.68E-01	3.15E-01	2.70E-01	2.32E-01	1.99E-01
PD111M	1.03E+00	9.09E-01	8.01E-01	7.08E-01	6.24E-01	4.85E-01	3.32E-01	2.28E-01	1.56E-01	1.07E-01	7.32E-02
PD111	3.67E-01	6.62E-01	6.35E-01	5.66E-01	5.01E-01	3.89E-01	2.67E-01	1.83E-01	1.25E-01	8.59E-02	5.89E-02
AG111M	2.92E-03	8.93E-01	8.39E-01	7.51E-01	6.62E-01	5.12E-01	3.50E-01	2.40E-01	1.64E-01	1.13E-01	7.70E-02
AG111	1.04E-09	3.08E-03	6.47E-03	9.51E-03	1.22E-02	1.66E-02	2.14E-02	2.45E-02	2.65E-02	2.78E-02	2.86E-02
PD112	3.05E-01	2.95E-01	2.85E-01	2.76E-01	2.68E-01	2.50E-01	2.27E-01	2.05E-01	1.86E-01	1.68E-01	1.52E-01
AG112	9.18E-06	5.84E-02	1.03E-01	1.38E-01	1.64E-01	1.97E-01	2.16E-01	2.16E-01	2.05E-01	1.91E-01	1.76E-01
AG113	3.99E-03	8.54E-01	7.48E-01	6.57E-01	5.76E-01	4.43E-01	3.00E-01	2.03E-01	1.37E-01	9.23E-02	6.24E-02
AG115	1.64E+00	1.76E+00	2.19E-01	2.73E-02	3.42E-03	5.35E-05	1.05E-07	2.04E-10	3.96E-13	3.93E-162	3.64E-16
CD115M	1.34E-08	3.57E-04	4.01E-04	4.06E-04	4.06E-04	4.06E-04	4.05E-04	4.05E-04	4.04E-04	4.02E-04	4.02E-04
CD115	5.18E-06	9.76E-02	1.05E-01	1.05E-01	1.03E-01	1.01E-01	9.71E-02	9.33E-02	8.98E-02	8.64E-02	8.31E-02
IN115M	6.46E-11	1.08E-02	2.40E-02	3.55E-02	4.53E-02	6.04E-02	7.46E-02	8.21E-02	8.57E-02	8.64E-02	8.58E-02
CD117	1.15E-01	1.92E+00	1.45E+00	1.08E+00	8.11E-01	4.55E-01	1.91E-01	8.04E-02	3.38E-02	1.42E-02	5.98E-03
IN117M	5.55E-06	6.68E-01	9.68E-01	1.05E+00	1.01E+00	8.00E-01	4.57E-01	2.34E-01	1.12E-01	5.21E-02	2.35E-02
IN117	2.23E-10	1.22E-01	2.95E-01	4.10E-01	4.57E-01	4.21E-01	2.68E-01	1.43E-01	7.13E-02	3.36E-02	1.54E-02
CD118	7.69E+00	3.30E+00	1.41E+00	6.03E-01	2.58E-01	4.73E-02	3.71E-03	2.90E-04	2.28E-05	1.79E-06	1.40E-07
IN118	5.10E-01	3.30E+00	1.41E+00	6.04E-01	2.58E-01	4.74E-02	3.71E-03	2.91E-04	2.28E-05	1.79E-06	1.40E-07
CD119	1.93E+01	3.00E-01	4.68E-03	7.33E-05	1.14E-06	2.80E-10	1.07E-15	4.08E-21	1.55E-26	5.93E-32	2.27E-37
IN119M	2.90E-02	3.25E+00	3.53E-01	3.56E-02	3.55E-03	3.49E-05	3.40E-08	3.33E-11	3.25E-14	3.17E-17	3.10E-20
IN119	1.43E+00	1.71E-01	1.98E-02	2.01E-03	2.01E-04	1.97E-06	1.93E-09	1.88E-12	1.84E-15	1.80E-18	1.75E-21
SN121	2.39E+03	2.46E-01	2.39E-01	2.34E-01	2.28E-01	2.17E-01	2.00E-01	1.86E-01	1.72E-01	1.59E-01	1.48E-01
SN123M	1.18E+00	2.21E+00	7.82E-01	2.77E-01	9.78E-02	1.22E-02	5.40E-04	2.39E-05	1.06E-06	4.67E-08	2.07E-09
SN123	1.11E-05	1.16E-03	1.16E-03	1.16E-03	1.16E-03	1.16E-03	1.16E-03	1.16E-03	1.16E-03	1.16E-03	1.16E-03
SN125	2.52E-02	2.52E-02	2.51E-02	2.50E-02	2.49E-02	2.48E-02	2.46E-02	2.43E-02	2.41E-02	2.38E-02	2.36E-02
SB125	1.52E-04	1.52E-04	1.53E-04	1.53E-04	1.54E-04	1.55E-04	1.58E-04	1.60E-04	1.62E-04	1.64E-04	1.66E-04
SB126	3.38E-03	3.37E-03	3.36E-03	3.36E-03	3.35E-03	3.33E-03	3.31E-03	3.29E-03	3.26E-03	3.24E-03	3.22E-03
SN127	3.70E+00	2.66E+00	1.91E+00	1.38E+00	9.90E-01	5.11E-01	1.90E-01	7.06E-02	2.62E-02	9.73E-03	3.61E-03
SB127	4.32E-02	1.49E-01	1.65E-01	1.76E-01	1.83E-01	1.91E-01	1.94E-01	1.92E-01	1.89E-01	1.85E-01	1.81E-01
TE127	2.44E-02	3.04E-02	3.69E-02	4.38E-02	5.06E-02	6.35E-02	8.13E-02	9.49E-02	1.06E-01	1.14E-01	1.19E-01
SN128	2.37E+01	1.17E+01	5.78E+00	2.86E+00	1.41E+00	3.45E-01	4.16E-02	5.02E-03	6.06E-04	7.35E-05	8.86E-06
SB128M	1.21E-02	1.33E+01	6.91E+00	3.41E+00	1.68E+00	4.12E-01	4.96E-02	5.99E-03	7.22E-04	8.73E-05	1.06E-05
SB128	9.99E-01	9.61E-01	9.04E-01	8.48E-01	7.91E-01	6.78E-01	5.41E-01	4.30E-01	3.41E-01	2.71E-01	2.15E-01
SN129M	1.36E+01	6.79E+00	3.41E+00	1.70E+00	8.52E-01	2.13E-01	2.67E-02	3.33E-03	4.16E-04	5.20E-05	6.50E-06
SN129	9.09E+01	8.92E-01	8.81E-03	8.69E-05	8.52E-07	8.29E-11	7.89E-17	7.54E-23	7.20E-29	6.85E-35	6.56E-41
SB129	5.12E+00	8.58E+00	8.06E+00	7.20E+00	6.33E+00	4.70E+00	2.93E+00	1.81E+00	1.12E+00	6.91E-01	4.25E-01
TE129M	9.67E-08	1.07E-03	2.20E-03	3.24E-03	4.16E-03	5.64E-03	7.14E-03	8.06E-03	8.63E-03	8.98E-03	9.21E-03
TE129	3.68E+00	5.07E+00	5.93E+00	6.16E+00	5.93E+00	4.91E+00	3.27E+00	2.06E+00	1.28E+00	7.94E-01	4.93E-01
SB130M	4.47E-01	8.43E-01	2.21E-03	5.81E-06	1.53E-08	1.06E-13	1.92E-21	3.50E-29	6.34E-37	1.15E-44	2.10E-52
SB130	7.65E+01	2.31E+01	6.59E+00	1.86E+00	5.28E-01	4.25E-02	9.69E-04	2.21E-05	5.04E-07	1.15E-08	2.62E-10

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

ZERO TIME 1.00E+00 2.00E+00 3.00E+00 4.00E+00 6.00E+00 9.00E+00 1.20E+01 1.50E+01 1.80E+01 2.10E+01

I130	2.13E-02	2.01E-02	1.91E-02	1.80E-02	1.70E-02	1.53E-02	1.29E-02	1.09E-02	9.20E-03	7.80E-03	6.59E-03
SB131	1.60E+02	4.17E+01	6.82E+00	1.12E+00	1.84E-01	4.94E-03	2.18E-05	9.61E-08	4.23E-10	1.87E-12	9.31E-15
TE131M	7.68E-05	4.02E-01	4.58E-01	4.59E-01	4.50E-01	4.30E-01	4.01E-01	3.74E-01	3.49E-01	3.26E-01	3.04E-01
TE131	7.07E+01	7.68E+01	2.50E+01	6.51E+00	1.58E+00	1.49E-01	7.38E-02	6.82E-02	6.36E-02	5.95E-02	5.54E-02
I131	1.03E-02	3.56E-01	5.24E-01	5.75E-01	5.85E-01	5.90E-01	5.90E-01	5.85E-01	5.85E-01	5.80E-01	5.80E-01
TE132	8.01E-01	1.95E+00	1.93E+00	1.91E+00	1.89E+00	1.86E+00	1.81E+00	1.76E+00	1.72E+00	1.67E+00	1.63E+00
I132	1.97E+00	1.96E+00	1.96E+00	1.95E+00	1.93E+00	1.91E+00	1.86E+00	1.82E+00	1.77E+00	1.72E+00	1.68E+00
TE133M	9.82E-02	3.40E+01	1.48E+01	6.45E+00	2.80E+00	5.33E-01	4.38E-02	3.62E-03	2.98E-04	2.46E-05	2.03E-06
TE133	5.52E+02	3.13E+01	3.48E+00	1.15E+00	4.86E-01	9.21E-02	7.62E-03	6.26E-04	5.19E-05	4.27E-06	3.52E-07
I133	8.55E-01	9.21E+00	9.96E+00	9.96E+00	9.77E+00	9.25E+00	8.41E+00	7.62E+00	6.87E+00	6.26E+00	5.66E+00
XE133M	3.64E-08	2.07E-03	5.00E-03	7.99E-03	1.09E-02	1.64E-02	2.37E-02	3.01E-02	3.54E-02	4.01E-02	4.39E-02
XE133	6.36E-07	3.62E-02	8.79E-02	1.40E-01	1.93E-01	2.92E-01	4.28E-01	5.47E-01	6.54E-01	7.48E-01	8.32E-01
TE134	1.68E+02	7.80E+01	2.90E+01	1.08E+01	4.01E+00	5.55E-01	2.84E-02	1.45E-03	7.45E-05	3.83E-06	1.96E-07
I134	7.71E+01	1.03E+02	7.23E+01	4.24E+01	2.27E+01	5.77E+00	6.35E-01	6.48E-02	6.35E-03	6.08E-04	5.77E-05
I135	1.42E+01	2.51E+01	2.26E+01	2.04E+01	1.84E+01	1.49E+01	1.10E+01	8.02E+00	5.89E+00	4.34E+00	3.17E+00
XE135M	1.58E-03	7.24E+00	7.04E+00	6.38E+00	5.73E+00	4.67E+00	3.43E+00	2.51E+00	1.84E+00	1.35E+00	9.90E-01
XE135	1.64E+00	3.25E+00	4.75E+00	5.97E+00	6.96E+00	8.35E+00	9.25E+00	9.29E+00	8.84E+00	8.06E+00	7.20E+00
CS136	5.07E-03	5.05E-03	5.05E-03	5.04E-03	5.02E-03	5.00E-03	4.97E-03	4.93E-03	4.90E-03	4.87E-03	4.84E-03
CS137	7.09E-05	7.64E-04	7.64E-04	7.64E-04	7.64E-04	7.64E-04	7.64E-04	7.64E-04	7.64E-04	7.64E-04	7.64E-04
BA137M	1.49E-07	7.13E-04	7.13E-04	7.13E-04	7.13E-04	7.13E-04	7.13E-04	7.13E-04	7.13E-04	7.13E-04	7.13E-04
XE138	5.72E+02	4.93E+01	4.28E+00	3.71E-01	3.21E-02	2.41E-04	1.57E-07	1.02E-10	6.61E-14	4.30E-17	2.79E-20
CS138	8.52E+01	1.43E+02	4.97E+01	1.46E+01	4.09E+00	3.12E-01	6.48E-03	1.34E-04	2.79E-06	5.81E-08	1.20E-09
CS139	5.02E+02	1.60E+01	2.01E-01	2.52E-03	3.17E-05	4.97E-09	9.90E-15	1.96E-20	3.87E-26	7.68E-32	1.52E-37
BA139	9.27E+00	1.03E+02	6.37E+01	3.87E+01	2.34E+01	8.59E+00	1.91E+00	4.23E-01	9.41E-02	2.09E-02	4.63E-03
BA140	1.02E-01	6.37E-01	6.37E-01	6.32E-01	6.32E-01	6.28E-01	6.28E-01	6.23E-01	6.18E-01	6.13E-01	6.08E-01
LA140	2.43E-07	1.09E-02	2.16E-02	3.21E-02	4.23E-02	6.23E-02	9.10E-02	1.18E-01	1.43E-01	1.67E-01	1.89E-01
BA141	1.96E+02	5.92E+01	5.88E+00	5.83E-01	5.78E-02	5.74E-04	5.60E-07	5.46E-10	5.32E-13	5.22E-16	5.08E-19
LA141	1.81E+00	3.83E+01	3.58E+01	3.03E+01	2.54E+01	1.78E+01	1.04E+01	6.11E+00	3.60E+00	2.11E+00	1.24E+00
CE141	2.24E-07	2.49E-02	5.83E-02	8.77E-02	1.12E-01	1.51E-01	1.87E-01	2.08E-01	2.20E-01	2.27E-01	2.31E-01
BA142	5.12E+02	2.04E+01	4.64E-01	1.06E-02	2.41E-04	1.25E-07	1.49E-12	1.77E-17	2.10E-22	2.49E-27	2.95E-32
LA142	1.18E+01	8.16E+01	5.38E+01	3.43E+01	2.18E+01	8.81E+00	2.27E+00	5.86E-01	1.51E-01	3.89E-02	1.00E-02
LA143	1.98E+02	3.86E+01	1.98E+00	1.02E-01	5.22E-03	1.37E-05	1.84E-09	2.49E-13	3.35E-17	4.52E-21	6.10E-25
CE143	7.91E-02	5.04E+00	5.22E+00	5.09E+00	4.99E+00	4.81E+00	4.50E+00	4.23E+00	3.97E+00	3.73E+00	3.50E+00
PR143	2.31E-08	7.72E-03	1.86E-02	2.95E-02	4.00E-02	6.06E-02	8.92E-02	1.17E-01	1.41E-01	1.65E-01	1.87E-01
CE144	3.21E-03	2.30E-02	2.30E-02	2.30E-02	2.30E-02	2.30E-02	2.29E-02	2.29E-02	2.29E-02	2.29E-02	2.29E-02
PR144	8.80E-07	2.09E-02	2.28E-02	2.29E-02	2.30E-02	2.30E-02	2.30E-02	2.30E-02	2.29E-02	2.29E-02	2.29E-02
PR145	1.26E-01	1.85E+01	1.65E+01	1.47E+01	1.31E+01	1.04E+01	7.31E+00	5.16E+00	3.66E+00	2.58E+00	1.83E+00
CE146	3.57E+02	1.83E+01	9.39E-01	4.80E-02	2.47E-03	6.51E-06	8.77E-10	1.18E-13	1.59E-17	2.15E-21	2.89E-25
PR146	7.39E+00	6.43E+01	1.46E+01	2.74E+00	4.93E-01	1.55E-02	8.56E-05	4.72E-07	2.61E-09	1.44E-11	7.89E-14
PR147	4.20E+01	1.22E+01	3.79E-01	1.18E-02	3.71E-04	3.62E-07	1.10E-11	3.38E-16	1.03E-20	3.14E-25	9.58E-30

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	1.50E-05	2.82E-01	2.90E-01	2.90E-01	2.89E-01	2.87E-01	2.85E-01	2.83E-01	2.81E-01	2.79E-01	2.76E-01	
ND149	1.94E+01	1.32E+01	9.01E+00	6.14E+00	4.15E+00	1.93E+00	6.07E-01	1.92E-01	6.03E-02	1.90E-02	5.99E-03	
PM149	2.71E-03	2.12E-01	3.51E-01	4.45E-01	5.04E-01	5.66E-01	5.88E-01	5.77E-01	5.62E-01	5.40E-01	5.22E-01	
PM150	2.22E-01	1.71E-01	1.33E-01	1.02E-01	7.91E-02	4.75E-02	2.20E-02	1.02E-02	4.71E-03	2.18E-03	1.01E-03	
ND151	6.86E+01	2.14E+00	6.71E-02	2.10E-03	6.55E-05	6.40E-08	1.95E-12	5.97E-17	1.82E-21	5.54E-26	1.70E-30	
PM151	4.35E-02	5.08E-01	5.12E-01	4.99E-01	4.87E-01	4.63E-01	4.29E-01	3.98E-01	3.71E-01	3.43E-01	3.19E-01	
PM152	1.08E+02	1.05E-01	1.03E-04	1.00E-07	9.79E-11	9.35E-17	8.71E-26	8.12E-35	7.56E-44	7.07E-53	6.57E-62	
SM153	1.43E-01	1.41E-01	1.39E-01	1.37E-01	1.35E-01	1.31E-01	1.26E-01	1.20E-01	1.15E-01	1.10E-01	1.05E-01	
SM155	1.50E+01	2.46E+00	4.03E-01	6.59E-02	1.08E-02	2.91E-04	1.28E-06	5.65E-09	2.49E-11	1.11E-13	2.73E-16	
EU155	1.10E-05	3.14E-04	3.63E-04	3.71E-04	3.73E-04	3.73E-04	3.73E-04	3.73E-04	3.73E-04	3.73E-04	3.73E-04	
SM156	9.15E-02	8.49E-02	7.89E-02	7.33E-02	6.80E-02	5.87E-02	4.71E-02	3.77E-02	3.03E-02	2.42E-02	1.94E-02	
EU156	2.67E-04	4.36E-04	5.92E-04	7.38E-04	8.73E-04	1.11E-03	1.42E-03	1.64E-03	1.84E-03	1.98E-03	2.08E-03	
EU157	1.43E-02	4.75E-02	4.53E-02	4.33E-02	4.13E-02	3.77E-02	3.30E-02	2.88E-02	2.51E-02	2.18E-02	1.90E-02	
EU158	3.39E-01	1.37E-01	5.55E-02	2.25E-02	9.10E-03	1.49E-03	9.92E-05	6.58E-06	4.37E-07	2.90E-08	1.93E-09	
EU159	4.49E-01	4.46E-02	4.42E-03	4.39E-04	4.35E-05	4.29E-07	4.19E-10	4.09E-13	3.99E-16	3.90E-19	3.81E-22	
GD159	1.92E-03	8.42E-03	8.76E-03	8.49E-03	8.17E-03	7.57E-03	6.75E-03	6.01E-03	5.35E-03	4.76E-03	4.25E-03	
TB161	3.23E-05	2.33E-04	2.31E-04	2.30E-04	2.30E-04	2.27E-04	2.25E-04	2.22E-04	2.19E-04	2.17E-04	2.14E-04	
TOTAL	9.70E+03	2.17E+03	8.56E+02	5.34E+02	3.99E+02	2.74E+02	1.90E+02	1.45E+02	1.16E+02	9.54E+01	8.09E+01	

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	3.57E-04	3.52E-04	3.48E-04	3.35E-04	3.13E-04	2.75E-04	2.42E-04	1.86E-04	9.73E-05	2.64E-05	7.19E-06	
NA 24	2.53E-01	8.35E-02	2.75E-02	9.87E-04	3.86E-06	5.90E-11	9.01E-16	2.10E-25	0.	0.	0.	0.
MN 54	1.16E-04	1.15E-04	1.15E-04	1.12E-04	1.11E-04	1.09E-04	1.07E-04	1.02E-04	9.13E-05	7.26E-05	5.79E-05	
FE 55	2.99E-04	2.99E-04	2.99E-04	2.98E-04	2.97E-04	2.95E-04	2.92E-04	2.89E-04	2.77E-04	2.59E-04	2.40E-04	
FE 59	5.12E-04	5.04E-04	4.97E-04	4.74E-04	4.39E-04	3.77E-04	3.23E-04	2.37E-04	1.10E-04	2.35E-05	5.04E-06	
CO 57	1.46E-06	1.46E-06	1.45E-06	1.45E-06	1.43E-06	1.38E-06	1.35E-06	1.29E-06	1.13E-06	8.77E-07	6.79E-07	
CO 58	1.06E-05	1.05E-05	1.04E-05	1.01E-05	9.62E-06	8.72E-06	7.90E-06	6.51E-06	4.01E-06	1.52E-06	5.72E-07	
CO 60	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.66E-05	5.66E-05	5.63E-05	5.59E-05	5.46E-05	5.29E-05	5.09E-05	
CU 64	1.67E+00	4.55E-01	1.24E-01	2.52E-03	3.78E-06	8.60E-12	1.95E-17	1.00E-28	0.	0.	0.	0.
CU 67	5.27E-05	4.02E-05	3.07E-05	1.36E-05	3.55E-06	2.40E-07	1.62E-08	7.34E-11	1.03E-16	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	2.52E-04	1.83E-04	7.00E-05	1.42E-05	5.84E-07	2.39E-08	4.02E-11	4.70E-18	0.	0.	0.	0.
U237	2.74E-01	2.47E-01	2.23E-01	1.64E-01	9.81E-02	3.51E-02	1.26E-02	1.61E-03	9.51E-06	1.02E-09	6.90E-10	
U240	2.29E+00	7.05E-01	2.16E-01	6.27E-03	1.72E-05	1.29E-10	9.73E-16	5.49E-26	0.	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	4.77E-03	7.28E+00	5.43E+00	2.24E+00	5.12E-01	2.68E-02	1.40E-03	3.85E-06	1.51E-12	3.61E-22	3.61E-22	
NP240M	3.62E-03	7.09E-01	2.18E-01	6.31E-03	1.73E-05	1.31E-10	9.81E-16	5.53E-26	0.	0.	0.	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	1.48E-05	1.47E-05	1.46E-05	1.45E-05	1.42E-05	1.36E-05	1.30E-05	1.19E-05	9.72E-06	6.32E-06	4.13E-06	
GE 77	4.99E-03	3.14E-03	7.19E-04	8.69E-06	5.53E-09	2.24E-15	9.02E-22	1.47E-34	0.	0.	0.	0.
AS 77	5.16E-05	7.61E-03	5.51E-03	1.59E-03	1.87E-04	2.53E-06	3.44E-08	6.34E-12	2.94E-21	6.30E-40	1.35E-58	
SE 77M	2.03E-09	2.29E-05	1.65E-05	4.79E-06	5.58E-07	7.59E-09	1.03E-10	1.90E-14	8.81E-24	1.88E-42	4.07E-61	
AS 78	1.18E-02	1.05E-04	3.07E-09	2.59E-23	0.	0.	0.	0.	0.	0.	0.	0.
BR 82	3.95E-04	2.47E-04	1.54E-04	3.75E-05	3.55E-06	3.19E-08	2.86E-10	2.31E-14	1.35E-24	4.63E-45	1.58E-65	
BR 83	3.14E-01	8.27E-03	8.31E-06	8.45E-15	8.62E-30	0.	0.	0.	0.	0.	0.	0.
KR 83M	1.62E-05	3.62E-02	4.11E-05	3.69E-14	3.79E-29	0.	0.	0.	0.	0.	0.	0.
KR 85M	4.11E-03	2.35E-01	5.35E-03	6.35E-08	3.92E-16	1.49E-32	5.64E-49	0.	0.	0.	0.	0.
KR 85	4.26E-06	1.12E-04	1.14E-04	1.14E-04	1.14E-04	1.14E-04	1.14E-04	1.13E-04	1.12E-04	1.10E-04	1.08E-04	
KR 87	6.66E+01	1.32E-04	2.60E-10	2.02E-27	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	3.87E+01	1.02E-01	2.67E-04	4.85E-12	6.11E-25	0.	0.	0.	0.	0.	0.	0.
RB 88	9.84E+00	1.13E-01	2.99E-04	5.43E-12	6.81E-25	0.	0.	0.	0.	0.	0.	0.
SR 89	3.51E-06	1.05E-01	1.04E-01	9.97E-02	9.35E-02	8.17E-02	7.14E-02	5.50E-02	2.81E-02	7.40E-03	1.95E-03	
SR 90	6.90E-06	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.03E-04	7.03E-04	6.97E-04	
Y 90	1.02E-11	1.63E-04	2.87E-04	5.17E-04	6.59E-04	7.03E-04	7.09E-04	7.09E-04	7.03E-04	7.03E-04	6.97E-04	
SR 91	9.20E-01	3.29E+00	5.90E-01	3.38E-03	6.19E-07	2.10E-14	7.12E-22	8.10E-37	0.	0.	0.	0.

1

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
Y 91M	6.19E-05	2.13E+00	3.81E-01	2.19E-03	4.01E-07	1.35E-14	4.58E-22	5.23E-37	0.	0.	0.
Y 91	2.53E-08	1.01E-01	1.20E-01	1.20E-01	1.13E-01	1.00E-01	8.91E-02	7.06E-02	3.90E-02	1.20E-02	3.70E-03
SR 92	1.17E+01	1.45E-01	3.13E-04	3.15E-12	1.48E-25	0.	0.	0.	0.	0.	0.
Y 92	5.37E-01	1.52E+00	1.69E-02	1.30E-08	7.59E-19	2.60E-39	8.89E-60	0.	0.	0.	0.
Y 93	5.57E-01	3.77E+00	7.35E-01	5.52E-03	1.59E-06	1.31E-13	1.08E-20	7.40E-35	0.	0.	0.
ZR 95	1.05E-03	1.31E-01	1.30E-01	1.26E-01	1.19E-01	1.07E-01	9.63E-02	7.79E-02	4.56E-02	1.57E-02	5.39E-03
NB 95M	2.24E-11	4.45E-04	8.11E-04	1.55E-03	2.09E-03	2.20E-03	2.03E-03	1.65E-03	9.68E-04	3.33E-04	1.15E-04
NB 95	1.17E-10	2.54E-03	5.02E-03	1.20E-02	2.24E-02	3.86E-02	4.98E-02	6.18E-02	5.95E-02	2.86E-02	1.10E-02
ZR 97	2.49E+00	4.23E+00	1.59E+00	8.43E-02	6.34E-04	3.57E-08	2.00E-12	6.34E-21	3.58E-42	0.	0.
NB 97M	1.28E-02	4.07E+00	1.53E+00	8.14E-02	6.08E-04	3.43E-08	1.93E-12	6.08E-21	3.44E-42	0.	0.
NB 97	1.25E+00	4.25E+00	1.60E+00	8.48E-02	6.38E-04	3.84E-08	2.16E-12	6.85E-21	3.85E-42	0.	0.
MO 99	7.20E-03	2.34E+00	1.83E+00	8.67E-01	2.51E-01	2.10E-02	1.75E-03	1.22E-05	4.95E-11	8.16E-22	1.34E-32
TC 99M	6.70E-08	2.06E+00	1.73E+00	8.30E-01	2.39E-01	2.00E-02	1.67E-03	1.17E-05	4.72E-11	7.80E-22	1.28E-32
RU103	5.09E-05	1.16E-01	1.14E-01	1.08E-01	9.92E-02	8.32E-02	6.98E-02	4.93E-02	2.05E-02	3.56E-03	6.20E-04
RH103M	3.39E-09	1.16E-01	1.14E-01	1.08E-01	9.92E-02	8.32E-02	6.98E-02	4.93E-02	2.05E-02	3.56E-03	6.20E-04
RU105	2.86E-01	2.74E-01	6.43E-03	8.46E-08	6.18E-16	3.30E-32	1.77E-48	0.	0.	0.	0.
RH105M	1.88E-03	2.74E-01	6.45E-03	8.48E-08	6.20E-16	3.32E-32	1.77E-48	0.	0.	0.	0.
RH105	3.09E-09	9.88E-01	6.45E-01	1.61E-01	1.59E-02	1.54E-04	1.50E-06	1.41E-10	1.23E-20	9.21E-41	6.91E-61
RU106	2.29E-04	4.34E-03	4.32E-03	4.31E-03	4.27E-03	4.19E-03	4.10E-03	3.95E-03	3.59E-03	2.97E-03	2.46E-03
RH106	2.48E-06	4.34E-03	4.32E-03	4.31E-03	4.27E-03	4.19E-03	4.10E-03	3.95E-03	3.59E-03	2.97E-03	2.46E-03
PD109	6.68E-03	1.70E-01	4.96E-02	1.23E-03	2.59E-06	1.16E-11	5.14E-17	1.02E-27	0.	0.	0.
AG109M	3.85E-05	1.70E-01	4.97E-02	1.23E-03	2.60E-06	1.16E-11	5.14E-17	1.02E-27	0.	0.	0.
PD111M	1.03E+00	5.01E-02	2.43E-03	2.79E-07	7.55E-14	5.51E-27	4.04E-40	0.	0.	0.	0.
PD111	3.67E-01	4.04E-02	1.96E-03	2.24E-07	6.08E-14	4.43E-27	3.25E-40	0.	0.	0.	0.
AG111M	2.92E-03	5.27E-02	2.57E-03	2.95E-07	7.97E-14	5.85E-27	4.27E-40	0.	0.	0.	0.
AG111	1.04E-09	2.87E-02	2.76E-02	2.10E-02	1.32E-02	5.24E-03	2.08E-03	3.28E-04	3.22E-06	3.12E-10	3.03E-14
PD112	3.05E-01	1.38E-01	6.26E-02	5.82E-03	1.11E-04	4.01E-08	1.46E-11	1.91E-18	1.21E-35	0.	0.
AG112	9.18E-06	1.61E-01	7.38E-02	6.86E-03	1.31E-04	4.74E-08	1.72E-11	2.27E-18	1.42E-35	0.	0.
AG113	3.99E-03	4.22E-02	1.82E-03	1.48E-07	2.27E-14	5.31E-28	1.24E-41	0.	0.	0.	0.
CD115M	1.34E-08	3.88E-04	3.81E-04	3.63E-04	3.36E-04	2.85E-04	2.43E-04	1.76E-04	7.86E-05	1.56E-05	3.12E-06
CD115	5.18E-06	7.80E-02	5.71E-02	2.25E-02	4.75E-03	2.12E-04	9.46E-06	1.89E-08	3.33E-15	1.04E-28	3.27E-42
IN115M	6.46E-11	8.23E-02	6.24E-02	2.46E-02	5.18E-03	2.32E-04	1.03E-05	2.06E-08	3.64E-15	1.14E-28	3.57E-42
CD117	1.15E-01	2.52E-03	2.45E-06	2.29E-15	2.03E-30	0.	0.	0.	0.	0.	0.
IN117M	5.55E-06	1.04E-02	1.21E-05	1.17E-14	1.04E-29	0.	0.	0.	0.	0.	0.
IN117	2.23E-10	6.89E-03	8.16E-06	7.90E-15	7.01E-30	0.	0.	0.	0.	0.	0.
SN121	2.39E-03	1.36E-01	7.36E-02	1.16E-02	5.32E-04	1.12E-06	2.36E-09	1.05E-14	4.41E-28	0.	0.
SN123	1.11E-05	1.16E-03	1.15E-03	1.13E-03	1.10E-03	1.04E-03	9.85E-04	8.81E-04	6.67E-04	3.84E-04	2.21E-04
SN125	2.52E-02	2.34E-02	2.18E-02	1.75E-02	1.21E-02	5.78E-03	2.76E-03	6.32E-04	1.58E-05	9.95E-09	6.23E-12
SB125	1.52E-04	1.68E-04	1.84E-04	2.25E-04	2.75E-04	3.33E-04	3.59E-04	3.74E-04	3.67E-04	3.43E-04	3.19E-04
SB126	3.38E-03	3.20E-03	3.03E-03	2.56E-03	1.94E-03	1.11E-03	6.42E-04	2.11E-04	1.32E-05	6.42E-08	1.29E-08

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
SN127	3.70E+00	1.34E-03	4.87E-07	2.32E-17	1.46E-34	0.	0.	0.	0.	0.	0.
SB127	4.32E-02	1.77E-01	1.48E-01	8.66E-02	3.55E-02	5.92E-03	9.90E-04	2.77E-05	3.61E-09	6.17E-17	1.05E-24
TE127M	3.49E-10	2.70E-04	4.95E-04	9.61E-04	1.33E-03	1.46E-03	1.41E-03	1.25E-03	9.13E-04	4.82E-04	2.55E-04
TE127	2.44E-02	1.27E-01	1.25E-01	7.59E-02	3.21E-02	6.58E-03	2.25E-03	1.26E-03	9.01E-04	4.77E-04	2.52E-04
SB128	9.99E-01	1.70E-01	2.69E-02	1.05E-04	1.02E-08	9.55E-17	8.98E-25	7.91E-41	0.	0.	0.
SB129	5.12E+00	2.62E-01	5.47E-03	4.98E-08	1.98E-16	3.13E-33	4.93E-50	0.	0.	0.	0.
TE129M	9.67E-08	1.02E-02	1.02E-02	9.61E-03	8.69E-03	7.08E-03	5.76E-03	3.83E-03	1.38E-03	1.80E-04	2.34E-05
TE129	3.68E+00	3.07E-01	1.28E-02	6.16E-03	5.55E-03	4.53E-03	3.70E-03	2.46E-03	8.86E-04	1.16E-04	1.50E-05
I130	2.13E-02	5.57E-03	1.46E-03	2.61E-05	3.18E-08	4.74E-14	7.07E-20	1.57E-31	0.	0.	0.
TE131M	7.68E-05	2.69E-01	1.54E-01	2.92E-02	1.83E-03	7.12E-06	2.79E-08	4.25E-13	3.87E-25	0.	0.
TE131	7.07E+01	4.90E-02	2.81E-02	5.34E-03	3.33E-04	1.30E-06	5.08E-09	7.78E-14	7.07E-26	0.	0.
I131	1.03E-02	5.54E-01	5.24E-01	4.21E-01	2.77E-01	1.17E-01	4.95E-02	8.85E-03	1.20E-04	2.18E-08	3.97E-12
XE131M	2.79E-11	2.57E-04	4.88E-04	1.02E-03	1.45E-03	1.44E-03	1.07E-03	4.41E-04	2.94E-05	8.80E-08	2.48E-10
TE132	8.01E-01	1.59E+00	1.28E+00	6.75E-01	2.32E-01	2.76E-02	3.27E-03	4.59E-05	1.07E-09	5.87E-19	3.20E-28
I132	1.97E+00	1.64E+00	1.32E+00	6.94E-01	2.40E-01	2.84E-02	3.36E-03	4.73E-05	1.11E-09	6.02E-19	3.30E-28
I133	8.55E-01	4.77E+00	2.15E+00	2.00E-01	3.80E-03	1.38E-06	5.00E-10	6.59E-17	4.14E-34	0.	0.
XE133M	3.64E-08	4.50E-02	5.33E-02	3.13E-02	7.34E-03	3.44E-04	1.60E-05	3.48E-08	7.62E-15	3.64E-28	1.74E-41
XE133	6.36E-07	8.65E-01	1.16E+00	1.04E+00	5.66E-01	1.53E-01	4.11E-02	2.96E-03	4.12E-06	7.99E-12	1.55E-17
I135	1.42E+01	2.32E+00	1.94E-01	1.13E-04	4.58E-10	7.57E-21	1.24E-31	3.38E-53	0.	0.	0.
XE135M	1.58E-03	7.24E-01	6.06E-02	3.52E-05	1.43E-10	2.36E-21	3.88E-32	1.06E-53	0.	0.	0.
XE135	1.64E+00	6.26E+00	1.53E+00	8.76E-03	1.07E-06	1.51E-14	2.11E-22	4.17E-38	0.	0.	0.
CS136	5.07E-03	4.80E-03	4.55E-03	3.88E-03	2.98E-03	1.75E-03	1.03E-03	3.53E-04	2.45E-05	1.18E-07	5.73E-10
CS137	7.09E-05	7.64E-04	7.64E-04	7.64E-04	7.64E-04	7.64E-04	7.64E-04	7.64E-04	7.60E-04	7.55E-04	7.51E-04
BA137M	1.49E-07	7.13E-04	7.13E-04	7.13E-04	7.13E-04	7.13E-04	7.13E-04	7.13E-04	7.09E-04	7.04E-04	7.00E-04
BA139	9.27E+00	9.90E-04	5.84E-09	1.20E-24	0.	0.	0.	0.	0.	0.	0.
BA140	1.02E-01	6.03E-01	5.74E-01	4.86E-01	3.71E-01	2.16E-01	1.26E-01	4.26E-02	2.84E-03	1.26E-05	5.59E-08
LA140	2.43E-07	2.10E-01	3.38E-01	4.67E-01	4.15E-01	2.49E-01	1.44E-01	4.91E-02	3.26E-03	1.45E-05	6.47E-08
LA141	1.81E+00	7.18E-01	1.01E-02	2.79E-08	1.52E-17	4.55E-36	1.36E-54	0.	0.	0.	0.
CE141	2.24E-07	2.48E-01	2.46E-01	2.31E-01	2.08E-01	1.68E-01	1.35E-01	8.81E-02	3.03E-02	3.56E-03	4.20E-04
LA142	1.18E+01	2.58E-03	4.99E-08	3.67E-22	0.	0.	0.	0.	0.	0.	0.
CE143	7.91E-02	3.25E+00	1.96E+00	4.33E-01	3.48E-02	2.25E-04	1.46E-06	6.10E-11	6.89E-22	0.	0.
PR143	2.31E-08	2.08E-01	3.24E-01	4.18E-01	3.58E-01	2.18E-01	1.32E-01	4.76E-02	3.81E-03	2.42E-05	1.53E-07
CE144	3.21E-03	2.29E-02	2.28E-02	2.27E-02	2.24E-02	2.19E-02	2.13E-02	2.03E-02	1.80E-02	1.41E-02	1.11E-02
PR144	8.80E-07	2.29E-02	2.28E-02	2.27E-02	2.24E-02	2.19E-02	2.13E-02	2.03E-02	1.80E-02	1.41E-02	1.11E-02
PR145	1.26E-01	1.29E+00	7.98E-02	1.89E-05	1.73E-11	1.43E-23	1.19E-35	0.	0.	0.	0.
ND147	1.50E-05	2.52E-01	2.37E-01	1.96E-01	1.44E-01	7.72E-02	4.12E-02	1.18E-02	5.19E-04	1.01E-06	1.96E-09
PM147	4.16E-14	1.89E-04	3.65E-04	8.34E-04	1.44E-03	2.20E-03	2.60E-03	2.90E-03	2.92E-03	2.72E-03	2.53E-03
ND149	1.94E+01	1.88E-03	1.82E-07	1.66E-19	1.42E-39	0.	0.	0.	0.	0.	0.
PM149	2.71E-03	5.00E-01	3.66E-01	1.43E-01	2.98E-02	1.30E-03	5.66E-05	1.08E-07	1.70E-14	4.19E-28	1.04E-41
PM150	2.22E-01	4.68E-04	9.85E-07	9.25E-15	3.87E-28	0.	0.	0.	0.	0.	0.

1

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	4.35E-02	2.96E-01	1.64E-01	2.75E-02	1.41E-03	3.71E-06	9.77E-09	6.74E-14	8.45E-27	0.	0.	0.
SM153	1.43E-01	1.01E-01	7.08E-02	2.45E-02	4.16E-03	1.21E-04	3.51E-06	2.95E-09	6.09E-17	2.59E-32	1.10E-47	0.
SM156	9.15E-02	1.56E-02	2.66E-03	1.31E-05	1.89E-09	3.88E-17	8.01E-25	3.41E-40	0.	0.	0.	0.
EU155	1.10E-05	3.73E-04	3.72E-04	3.72E-04	3.71E-04	3.70E-04	3.68E-04	3.65E-04	3.58E-04	3.44E-04	3.31E-04	0.
EU156	2.67E-04	2.18E-03	2.41E-03	2.16E-03	1.72E-03	1.08E-03	6.80E-04	2.70E-04	2.67E-05	2.63E-07	2.60E-09	0.
EU157	1.43E-02	1.66E-02	5.57E-03	2.09E-04	8.77E-07	1.55E-11	2.74E-16	8.52E-26	0.	0.	0.	0.
GD159	1.92E-03	3.78E-03	1.51E-03	9.39E-05	9.24E-07	8.95E-11	8.68E-15	8.14E-23	6.95E-43	0.	0.	0.
TB161	3.23E-05	2.11E-04	1.91E-04	1.41E-04	8.54E-05	3.13E-05	1.14E-05	1.53E-06	1.01E-08	4.39E-13	1.91E-17	0.
TOTAL	2.87E+02	6.90E+01	3.12E+01	1.10E+01	4.75E+00	1.96E+00	1.22E+00	6.86E-01	3.10E-01	1.17E-01	5.81E-02	0.

1

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	3.57E-04	3.08E-06	2.86E-07	2.66E-08	2.14E-11	1.71E-14	1.28E-18	8.22E-25	0.	0.	0.	0.
MN 54	1.16E-04	4.98E-05	3.28E-05	2.16E-05	6.17E-06	1.76E-06	3.31E-07	2.71E-08	6.36E-12	2.30E-17	8.32E-23	0.
FE 59	5.12E-04	1.85E-06	1.11E-07	6.67E-09	1.45E-12	3.13E-16	4.07E-21	1.91E-28	0.	0.	0.	0.
CO 57	1.46E-06	5.75E-07	3.60E-07	2.26E-07	5.57E-08	1.37E-08	2.12E-10	1.29E-10	1.12E-14	9.23E-21	0.	0.
CO 58	1.06E-05	3.04E-07	5.16E-08	8.74E-09	4.26E-11	2.07E-13	1.71E-16	4.05E-21	1.55E-36	0.	0.	0.
CO 60	5.69E-05	4.99E-05	4.65E-05	4.35E-05	3.57E-05	2.93E-05	2.25E-05	1.52E-05	4.08E-06	5.66E-07	7.82E-08	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	2.74E-01	6.84E-10	6.66E-10	6.48E-10	6.06E-10	5.63E-10	5.12E-10	4.44E-10	2.76E-10	1.36E-10	6.66E-11	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	1.48E-05	3.13E-06	1.44E-06	6.62E-07	6.45E-08	6.29E-09	2.82E-10	2.66E-12	7.66E-17	7.14E-17	6.66E-17	0.
KR 85	4.26E-06	1.06E-04	1.02E-04	9.91E-05	9.04E-05	8.16E-05	7.17E-05	5.91E-05	3.13E-05	1.19E-05	4.56E-06	0.
SR 89	3.51E-06	8.22E-04	7.19E-05	6.32E-06	4.25E-09	2.87E-12	1.70E-16	7.71E-23	5.60E-44	0.	0.	0.
SR 90	6.90E-06	6.90E-04	6.84E-04	6.78E-04	6.53E-04	6.28E-04	5.98E-04	5.55E-04	4.34E-04	2.99E-04	2.07E-04	0.
Y 90	1.02E-11	6.90E-04	6.84E-04	6.78E-04	6.53E-04	6.28E-04	5.98E-04	5.55E-04	4.34E-04	2.99E-04	2.07E-04	0.
Y 91	2.53E-08	1.71E-03	1.99E-04	2.31E-05	3.63E-08	5.69E-11	1.04E-14	2.56E-20	5.17E-39	0.	0.	0.
ZR 95	1.05E-03	2.70E-03	3.85E-04	5.49E-05	1.60E-07	4.66E-10	1.93E-13	1.63E-18	1.99E-35	0.	0.	0.
NB 95M	2.24E-11	5.72E-05	8.16E-06	1.17E-06	3.39E-09	9.86E-12	4.08E-15	3.45E-20	4.23E-37	0.	0.	0.
NB 95	1.17E-10	5.81E-03	8.34E-04	1.19E-04	3.45E-07	1.00E-09	4.18E-13	3.53E-18	4.32E-35	0.	0.	0.
RU103	5.09E-05	1.98E-04	8.09E-06	3.33E-07	2.27E-11	1.56E-15	4.37E-21	2.06E-29	0.	0.	0.	0.
RH103M	3.39E-09	1.98E-04	8.09E-06	3.33E-07	2.27E-11	1.56E-15	4.37E-21	2.06E-29	0.	0.	0.	0.
RU106	2.29E-04	2.18E-03	1.54E-03	1.09E-03	3.89E-04	1.38E-04	3.48E-05	4.40E-06	4.44E-09	1.43E-13	4.59E-18	0.
RH106	2.48E-06	2.18E-03	1.54E-03	1.09E-03	3.89E-04	1.38E-04	3.48E-05	4.40E-06	4.44E-09	1.43E-13	4.59E-18	0.
SN123	1.11E-05	1.54E-04	5.58E-05	2.02E-05	9.72E-07	4.66E-08	8.12E-10	1.87E-12	3.00E-21	1.93E-34	1.24E-47	0.
SB125	1.52E-04	3.05E-04	2.68E-04	2.36E-04	1.61E-04	1.09E-04	6.53E-05	3.02E-05	2.33E-06	4.95E-08	1.05E-09	0.
TE125M	4.08E-12	1.24E-04	1.11E-04	9.75E-05	6.65E-05	4.53E-05	2.71E-05	1.25E-05	9.62E-07	2.05E-08	4.36E-10	0.
TE127M	3.49E-10	1.67E-04	5.23E-05	1.64E-05	5.04E-07	1.55E-08	1.49E-10	1.40E-13	1.15E-23	8.60E-39	6.41E-54	0.
TE127	2.44E-02	1.65E-04	5.17E-05	1.62E-05	4.98E-07	1.53E-08	1.47E-10	1.39E-13	1.14E-23	8.48E-39	6.35E-54	0.
CS137	7.09E-05	7.47E-04	7.38E-04	7.30E-04	7.04E-04	6.79E-04	6.49E-04	6.07E-04	4.79E-04	3.41E-04	2.41E-04	0.
BA137M	1.49E-07	7.00E-04	6.92E-04	6.83E-04	6.58E-04	6.36E-04	6.07E-04	5.69E-04	4.50E-04	3.18E-04	2.25E-04	0.
CE141	2.24E-07	9.65E-05	1.94E-06	3.90E-08	3.18E-13	2.58E-18	4.24E-25	2.81E-35	0.	0.	0.	0.
CE144	3.21E-03	9.42E-03	6.06E-03	3.86E-03	1.01E-03	2.67E-04	4.48E-05	3.10E-06	4.17E-10	6.54E-16	1.02E-21	0.
PR144	8.80E-07	9.42E-03	6.06E-03	3.86E-03	1.01E-03	2.67E-04	4.48E-05	3.10E-06	4.17E-10	6.54E-16	1.02E-21	0.
PM147	4.16E-14	2.42E-03	2.12E-03	1.85E-03	1.25E-03	8.38E-04	4.92E-04	2.24E-04	1.59E-05	3.00E-07	5.68E-09	0.
EU155	1.10E-05	3.22E-04	2.99E-04	2.78E-04	2.24E-04	1.80E-04	1.34E-04	8.67E-05	2.03E-05	2.28E-06	2.57E-07	0.
TOTAL	3.04E-01	4.15E-02	2.27E-02	1.56E-02	7.31E-03	4.67E-03	3.42E-03	2.73E-03	1.87E-03	1.27E-03	8.85E-04	0.

SMOKY
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.02E+02	9.96E+03
1.00E+00	3.37E+01	2.22E+03
2.00E+00	1.35E+01	8.85E+02
3.00E+00	7.21E+00	5.40E+02
4.00E+00	4.49E+00	3.93E+02
6.00E+00	2.35E+00	2.61E+02
9.00E+00	1.38E+00	1.76E+02
1.20E+01	1.00E+00	1.33E+02
1.50E+01	7.79E-01	1.06E+02
1.80E+01	6.32E-01	8.67E+01
2.10E+01	5.27E-01	7.32E+01
1.00E+00 DAYS	4.41E-01	6.21E+01
2.00E+00	1.91E-01	2.73E+01
5.00E+00	7.38E-02	9.99E+00
1.00E+01	3.55E-02	4.59E+00
2.00E+01	1.45E-02	1.93E+00
3.00E+01	8.25E-03	1.18E+00
5.00E+01	3.69E-03	6.48E-01
1.00E+02	1.22E-03	2.78E-01
2.00E+02	4.18E-04	9.71E-02
3.00E+02	1.63E-04	4.64E-02
1.00E+00 YEARS	9.52E-05	3.32E-02
1.50E+00	3.15E-05	1.87E-02
2.00E+00	1.98E-05	1.34E-02
3.50E+00	1.29E-05	7.03E-03
5.00E+00	1.05E-05	4.92E-03
7.00E+00	9.01E-06	3.88E-03
1.00E+01	7.85E-06	3.25E-03
2.00E+01	5.78E-06	2.35E-03
3.50E+01	4.03E-06	1.61E-03
5.00E+01	2.84E-06	1.12E-03

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BE 7	2.26E-04	2.26E-04	2.26E-04	2.26E-04	2.26E-04	2.26E-04	2.25E-04	2.25E-04	2.24E-04	2.24E-04	2.24E-04
NA 24	1.61E-01	1.53E-01	1.47E-01	1.40E-01	1.33E-01	1.22E-01	1.06E-01	9.24E-02	8.04E-02	7.01E-02	6.07E-02
MN 54	7.33E-05	7.33E-05	7.33E-05	7.33E-05	7.33E-05	7.33E-05	7.33E-05	7.27E-05	7.27E-05	7.27E-05	7.27E-05
FE 55	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04
FE 59	3.25E-04	3.25E-04	3.25E-04	3.25E-04	3.25E-04	3.24E-04	3.24E-04	3.23E-04	3.22E-04	3.22E-04	3.21E-04
CO 57	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07
CO 58	6.72E-06	6.72E-06	6.72E-06	6.72E-06	6.70E-06	6.70E-06	6.69E-06	6.69E-06	6.68E-06	6.68E-06	6.66E-06
CO 60	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05
CU 64	1.06E+00	1.00E+00	9.51E-01	9.02E-01	8.53E-01	7.66E-01	6.50E-01	5.53E-01	4.70E-01	4.00E-01	3.40E-01
CU 67	3.34E-05	3.32E-05	3.26E-05	3.23E-05	3.20E-05	3.12E-05	3.00E-05	2.92E-05	2.82E-05	2.72E-05	2.64E-05
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	4.40E-04	4.34E-04	4.28E-04	4.21E-04	4.15E-04	4.06E-04	3.91E-04	3.75E-04	3.60E-04	3.45E-04	3.32E-04
U237	1.74E-01	1.73E-01	1.72E-01	1.72E-01	1.71E-01	1.69E-01	1.67E-01	1.65E-01	1.63E-01	1.61E-01	1.59E-01
U239	8.85E+02	1.51E+02	2.58E+01	4.39E+00	7.46E-01	2.17E-02	1.08E-04	5.31E-07	2.63E-09	1.30E-11	6.43E-14
U240	1.45E+00	1.38E+00	1.32E+00	1.25E+00	1.19E+00	1.08E+00	9.33E-01	8.04E-01	6.94E-01	5.98E-01	5.16E-01
NP239	3.03E-03	5.08E+00	5.87E+00	5.96E+00	5.92E+00	5.78E+00	5.55E+00	5.36E+00	5.17E+00	4.99E+00	4.80E+00
NP240M	2.30E-03	1.39E+00	1.33E+00	1.27E+00	1.20E+00	1.09E+00	9.41E-01	8.12E-01	7.00E-01	6.04E-01	5.21E-01
NP240	5.82E-11	2.99E-11	1.55E-11	8.01E-12	4.14E-12	1.11E-12	1.53E-13	2.11E-14	2.91E-15	4.01E-16	5.54E-17
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	9.38E-06	9.38E-06	9.38E-06	9.38E-06	9.38E-06	9.38E-06	9.33E-06	9.33E-06	9.33E-06	9.33E-06	9.33E-06
GE 75	1.51E-05	7.32E-02	4.41E-02	2.65E-02	1.60E-02	5.79E-03	1.27E-03	2.77E-04	6.05E-05	1.32E-05	2.89E-06
GE 77	6.33E-03	1.63E-02	1.53E-02	1.44E-02	1.36E-02	1.20E-02	9.99E-03	8.30E-03	6.92E-03	5.75E-03	4.79E-03
AS 77	6.54E-05	1.03E-02	1.05E-02	1.05E-02	1.06E-02	1.07E-02	1.07E-02	1.06E-02	1.04E-02	1.02E-02	9.97E-03
SE 77M	2.58E-09	3.10E-05	3.14E-05	3.17E-05	3.17E-05	3.19E-05	3.21E-05	3.19E-05	3.14E-05	3.07E-05	2.98E-05
GE 78	8.30E-01	5.19E-01	3.23E-01	2.02E-01	1.26E-01	4.90E-02	1.19E-02	2.88E-03	7.03E-04	1.71E-04	4.15E-05
AS 78	1.49E-02	2.48E-01	3.06E-01	2.86E-01	2.39E-01	1.41E-01	5.25E-02	1.74E-02	5.39E-03	1.61E-03	4.67E-04
AS 79	1.59E+01	1.56E-01	1.54E-03	1.52E-05	1.49E-07	1.45E-11	1.38E-17	1.32E-23	1.26E-29	1.20E-35	1.14E-41
SE 79M	2.35E-02	2.76E-01	2.72E-03	2.68E-05	2.64E-07	2.55E-11	2.43E-17	2.32E-23	2.22E-29	2.12E-35	2.02E-41
BR 80	9.96E-02	9.40E-03	8.83E-04	8.31E-05	7.82E-06	6.94E-08	5.81E-11	4.84E-14	4.03E-17	3.37E-20	2.81E-23
SE 81M	8.18E-02	3.82E+00	1.84E+00	8.85E-01	4.26E-01	9.95E-02	1.11E-02	1.25E-03	1.40E-04	1.57E-05	1.76E-06
SE 81	9.99E-01	4.51E+00	2.61E+00	1.30E+00	6.32E-01	1.48E-01	1.65E-02	1.85E-03	2.07E-04	2.33E-05	2.61E-06
BR 82	5.02E-04	4.92E-04	4.83E-04	4.74E-04	4.64E-04	4.46E-04	4.21E-04	3.96E-04	3.74E-04	3.52E-04	3.33E-04
SE 83	4.80E+01	9.10E+00	4.72E+00	3.27E-01	6.18E-02	2.22E-03	1.51E-05	1.03E-07	7.02E-10	4.76E-12	3.02E-14
BR 83	3.99E-01	5.95E+00	5.51E+00	4.33E+00	3.29E+00	1.86E+00	7.86E-01	3.31E-01	1.40E-01	5.90E-02	2.49E-02
KR 83M	2.06E-05	1.35E+00	2.75E+00	3.42E+00	3.53E+00	2.94E+00	1.73E+00	8.93E-01	4.30E-01	1.99E-01	8.93E-02

1

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BR 84	1.03E-01	1.78E+01	4.82E+00	1.31E+00	3.52E-01	2.58E-02	5.10E-04	1.01E-05	1.99E-07	3.94E-09	7.78E-11	
KR 85M	5.22E-03	1.12E+01	9.53E+00	8.13E+00	6.95E+00	5.08E+00	3.16E+00	1.97E+00	1.23E+00	7.65E-01	4.78E-01	
KR 87	8.46E+01	4.88E+01	2.83E+01	1.63E+01	9.43E+00	3.16E+00	6.13E-01	1.19E-01	2.30E-02	4.45E-03	8.61E-04	
KR 88	4.91E+01	3.83E+01	2.99E+01	2.33E+01	1.83E+01	1.11E+01	5.29E+00	2.52E+00	1.20E+00	5.70E-01	2.71E-01	
RB 88	1.25E+01	3.88E+01	3.31E+01	2.61E+01	2.04E+01	1.24E+01	5.93E+00	2.82E+00	1.34E+00	6.39E-01	3.04E-01	
RB 89	5.82E+01	5.47E+01	3.68E+00	2.47E-01	1.66E-02	7.50E-05	2.27E-08	6.85E-12	2.09E-15	6.32E-19	1.92E-22	
SR 89	4.46E-06	1.57E-01	1.67E-01	1.67E-01	1.67E-01	1.67E-01	1.67E-01	1.66E-01	1.66E-01	1.66E-01	1.66E-01	
SR 90	8.77E-06	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	
SR 91	1.02E+00	1.90E+01	1.77E+01	1.65E+01	1.54E+01	1.33E+01	1.07E+01	8.67E+00	7.00E+00	5.62E+00	4.54E+00	
Y 91M	6.88E-05	6.55E+00	8.93E+00	9.57E+00	9.45E+00	8.48E+00	6.94E+00	5.58E+00	4.50E+00	3.63E+00	2.93E+00	
Y 91	2.81E-08	5.83E-03	1.34E-02	2.15E-02	2.93E-02	4.39E-02	6.23E-02	7.71E-02	8.93E-02	9.90E-02	1.07E-01	
SR 92	7.40E+00	3.30E+01	2.56E+01	1.98E+01	1.54E+01	9.19E+00	4.27E+00	1.98E+00	9.19E-01	4.27E-01	1.99E-01	
Y 92	3.41E-01	6.95E+00	1.09E+01	1.30E+01	1.38E+01	1.31E+01	1.01E+01	6.85E+00	4.41E+00	2.71E+00	1.64E+00	
SR 93	2.90E+02	4.99E+00	2.76E-02	1.52E-04	8.40E-07	2.57E-11	4.33E-18	7.31E-25	1.23E-31	2.08E-38	3.51E-45	
Y 93	3.54E-01	1.14E+01	1.07E+01	1.01E+01	9.39E+00	8.20E+00	6.68E+00	5.46E+00	4.43E+00	3.64E+00	2.96E+00	
Y 94	4.18E+01	5.72E+01	7.36E+00	9.48E-01	1.22E-01	2.03E-03	4.36E-06	9.34E-09	2.00E-11	4.36E-14	2.42E-15	
Y 95	1.78E+02	1.67E+01	3.69E-01	8.13E-03	1.79E-04	8.69E-08	9.30E-13	9.95E-18	1.06E-22	1.14E-27	1.21E-32	
ZR 95	6.67E-04	8.72E-02	8.89E-02	8.89E-02	8.89E-02	8.89E-02	8.89E-02	8.87E-02	8.87E-02	8.84E-02	8.84E-02	
NB 95	7.43E-11	5.38E-05	1.26E-04	1.97E-04	2.69E-04	4.13E-04	6.26E-04	8.43E-04	1.05E-03	1.27E-03	1.48E-03	
ZR 97	1.58E+00	6.88E+00	6.58E+00	6.33E+00	6.06E+00	5.60E+00	4.95E+00	4.38E+00	3.89E+00	3.42E+00	3.04E+00	
NB 97M	8.13E-03	6.60E+00	6.33E+00	6.09E+00	5.84E+00	5.38E+00	4.76E+00	4.21E+00	3.72E+00	3.29E+00	2.91E+00	
NB 97	7.91E-01	3.45E+00	4.86E+00	5.54E+00	5.82E+00	5.79E+00	5.27E+00	4.70E+00	4.16E+00	3.67E+00	3.26E+00	
NB 98	8.81E+00	3.90E+00	1.73E+00	7.63E-01	3.38E-01	6.62E-02	5.72E-03	4.94E-04	4.31E-05	3.73E-06	3.21E-07	
MO 99	4.57E-03	1.89E+00	1.87E+00	1.85E+00	1.83E+00	1.79E+00	1.74E+00	1.68E+00	1.63E+00	1.58E+00	1.53E+00	
TC 99M	4.25E-08	1.80E-01	3.38E-01	4.78E-01	6.00E-01	8.01E-01	1.02E+00	1.15E+00	1.24E+00	1.28E+00	1.30E+00	
MO 101	1.24E+02	5.61E+01	3.26E+00	1.89E-01	1.10E-02	3.67E-05	7.13E-09	1.39E-12	2.70E-16	5.25E-20	1.02E-23	
TC 101	5.25E+00	1.57E+02	1.72E+01	1.41E+00	1.03E-01	4.64E-04	1.16E-07	2.60E-11	5.51E-15	1.13E-18	2.29E-22	
MO 102	9.83E+02	2.24E+01	5.10E-01	1.17E-02	2.66E-04	1.38E-07	1.64E-12	1.95E-17	2.31E-22	2.74E-27	3.25E-32	
TC 102M	6.32E-01	1.90E+01	4.34E-01	9.92E-03	2.26E-04	1.17E-07	1.39E-12	1.65E-17	1.95E-22	2.32E-27	2.75E-32	
TC 102	2.96E+03	1.13E+01	2.57E-01	5.85E-03	1.34E-04	6.97E-08	8.28E-13	9.83E-18	1.17E-22	1.38E-27	1.64E-32	
RU 103	6.46E-05	1.50E-01	1.50E-01	1.50E-01	1.50E-01	1.49E-01	1.49E-01	1.49E-01	1.48E-01	1.48E-01	1.47E-01	
RH 103M	4.31E-09	7.75E-02	1.15E-01	1.33E-01	1.42E-01	1.47E-01	1.49E-01	1.49E-01	1.48E-01	1.48E-01	1.48E-01	
TC 104	5.10E+01	3.67E+01	3.67E+00	3.63E-01	3.59E-02	3.54E-04	3.45E-07	3.38E-10	3.30E-13	3.22E-16	3.15E-19	
RU 105	3.63E-01	1.26E+01	1.07E+01	9.20E+00	7.87E+00	5.75E+00	3.61E+00	2.25E+00	1.41E+00	8.83E-01	5.54E-01	
RH 105M	2.39E-03	1.26E+01	1.08E+01	9.23E+00	7.87E+00	5.78E+00	3.61E+00	2.26E+00	1.42E+00	8.86E-01	5.54E-01	
RH 105	3.92E-09	2.56E-01	4.75E-01	6.55E-01	8.06E-01	1.03E+00	1.23E+00	1.33E+00	1.35E+00	1.34E+00	1.30E+00	
RU 106	2.91E-04	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	
RH 106	3.15E-06	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	
RH 107	6.37E-02	8.65E+00	1.31E+00	1.97E-01	2.98E-02	6.79E-04	2.34E-06	8.07E-09	2.78E-11	9.50E-14	9.45E-18	
PD 107M	1.32E-04	1.76E+00	2.66E-01	4.02E-02	6.06E-03	1.38E-04	4.76E-07	1.64E-09	5.65E-12	1.95E-14	6.65E-17	

SMOKY MICROCURIES/SQ METER
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.500
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	8.48E-03	7.04E-01	6.69E-01	6.34E-01	6.02E-01	5.43E-01	4.67E-01	4.00E-01	3.43E-01	2.94E-01	2.53E-01
AG109M	4.89E-05	7.04E-01	6.69E-01	6.36E-01	6.04E-01	5.45E-01	4.67E-01	4.00E-01	3.43E-01	2.94E-01	2.53E-01
PD111M	1.31E+00	1.15E+00	1.02E+00	8.99E-01	7.92E-01	6.16E-01	4.21E-01	2.89E-01	1.98E-01	1.35E-01	9.29E-02
PD111	4.66E-01	8.41E-01	8.06E-01	7.19E-01	6.35E-01	4.94E-01	3.39E-01	2.32E-01	1.59E-01	1.09E-01	7.48E-02
AG111M	3.70E-03	1.13E+00	1.07E+00	9.53E-01	8.41E-01	6.50E-01	4.44E-01	3.05E-01	2.09E-01	1.43E-01	9.78E-02
AG111	1.32E-09	3.91E-03	8.21E-03	1.21E-02	1.55E-02	2.11E-02	2.71E-02	3.11E-02	3.37E-02	3.53E-02	3.63E-02
PD112	3.87E-01	3.75E-01	3.62E-01	3.50E-01	3.40E-01	3.17E-01	2.88E-01	2.61E-01	2.36E-01	2.13E-01	1.93E-01
AG112	1.17E-05	7.42E-02	1.31E-01	1.76E-01	2.09E-01	2.50E-01	2.75E-01	2.74E-01	2.61E-01	2.43E-01	2.24E-01
AG113	5.06E-03	1.08E+00	9.50E-01	8.34E-01	7.32E-01	5.63E-01	3.81E-01	2.57E-01	1.74E-01	1.17E-01	7.93E-02
AG115	2.08E+00	2.23E+00	2.78E-01	3.47E-02	4.35E-03	6.79E-05	1.33E-07	2.59E-10	5.02E-13	4.99E-162	4.63E-16
CD115M	1.70E-08	4.53E-04	5.09E-04	5.16E-04	5.16E-04	5.16E-04	5.14E-04	5.14E-04	5.12E-04	5.11E-04	5.11E-04
CD115	6.58E-06	1.24E-01	1.33E-01	1.33E-01	1.31E-01	1.28E-01	1.23E-01	1.18E-01	1.14E-01	1.10E-01	1.05E-01
IN115M	8.20E-11	1.37E-02	3.04E-02	4.51E-02	5.75E-02	7.67E-02	9.47E-02	1.04E-01	1.09E-01	1.10E-01	1.09E-01
CD117	1.47E-01	2.44E+00	1.84E+00	1.37E+00	1.03E+00	5.77E-01	2.42E-01	1.02E-01	4.29E-02	1.80E-02	7.59E-03
IN117M	7.04E-06	8.49E-01	1.23E+00	1.33E+00	1.29E+00	1.02E+00	5.81E-01	2.97E-01	1.43E-01	6.61E-02	2.99E-02
IN117	2.83E-10	1.55E-01	3.75E-01	5.21E-01	5.81E-01	5.34E-01	3.40E-01	1.82E-01	9.05E-02	4.26E-02	1.96E-02
CD118	9.77E+00	4.19E+00	1.80E+00	7.66E-01	3.28E-01	6.00E-02	4.71E-03	3.68E-04	2.89E-05	2.27E-06	1.78E-07
IN118	6.47E-01	4.19E+00	1.80E+00	7.67E-01	3.28E-01	6.02E-02	4.71E-03	3.70E-04	2.89E-05	2.27E-06	1.78E-07
CD119	2.44E+01	3.81E-01	5.95E-03	9.30E-05	1.45E-06	3.56E-10	1.36E-15	5.18E-21	1.97E-26	7.53E-32	2.88E-37
IN119M	3.68E-02	4.12E+00	4.49E-01	4.52E-02	4.50E-03	4.43E-05	4.32E-08	4.23E-11	4.12E-14	4.03E-17	3.94E-20
IN119	1.82E+00	2.17E-01	2.52E-02	2.55E-03	2.55E-04	2.50E-06	2.44E-09	2.39E-12	2.33E-15	2.28E-18	2.23E-21
SN121	3.04E-03	3.13E-01	3.04E-01	2.97E-01	2.89E-01	2.75E-01	2.54E-01	2.36E-01	2.18E-01	2.02E-01	1.88E-01
SN123M	1.50E+00	2.80E+00	9.93E-01	3.51E-01	1.24E-01	1.55E-02	6.86E-04	3.04E-05	1.34E-06	5.93E-08	2.62E-09
SN123	1.41E-05	1.47E-03	1.47E-03	1.47E-03	1.47E-03	1.47E-03	1.47E-03	1.47E-03	1.47E-03	1.47E-03	1.47E-03
SN125	3.20E-02	3.19E-02	3.19E-02	3.18E-02	3.16E-02	3.14E-02	3.12E-02	3.09E-02	3.06E-02	3.03E-02	3.00E-02
SB125	1.92E-04	1.93E-04	1.94E-04	1.95E-04	1.96E-04	1.97E-04	2.01E-04	2.03E-04	2.06E-04	2.08E-04	2.11E-04
SB126	4.29E-03	4.28E-03	4.27E-03	4.26E-03	4.25E-03	4.23E-03	4.20E-03	4.18E-03	4.14E-03	4.11E-03	4.09E-03
SN127	4.70E+00	3.37E+00	2.42E+00	1.75E+00	1.26E+00	6.48E-01	2.41E-01	8.96E-02	3.32E-02	1.23E-02	4.59E-03
SB127	5.48E-02	1.89E-01	2.09E-01	2.23E-01	2.33E-01	2.42E-01	2.46E-01	2.44E-01	2.40E-01	2.35E-01	2.30E-01
TE127	3.09E-02	3.85E-02	4.68E-02	5.56E-02	6.42E-02	8.06E-02	1.03E-01	1.20E-01	1.34E-01	1.45E-01	1.51E-01
SN128	3.01E+01	1.48E+01	7.34E+00	3.63E+00	1.79E+00	4.38E-01	5.29E-02	6.38E-03	7.69E-04	9.33E-05	1.12E-05
SB128M	1.53E-02	1.69E+01	8.77E+00	4.33E+00	2.14E+00	5.23E-01	6.30E-02	7.61E-03	9.17E-04	1.11E-04	1.34E-05
SB128	1.27E+00	1.22E+00	1.15E+00	1.08E+00	1.00E+00	8.61E-01	6.87E-01	5.45E-01	4.33E-01	3.44E-01	2.73E-01
SN129M	1.73E+01	8.62E+00	4.33E+00	2.16E+00	1.08E+00	2.70E-01	3.38E-02	4.23E-03	5.28E-04	6.61E-05	8.26E-06
SN129	1.15E+02	1.13E+00	1.12E-02	1.10E-04	1.08E-06	1.05E-10	1.00E-16	9.57E-23	9.13E-29	8.70E-35	8.33E-41
SB129	6.50E+00	1.09E+01	1.02E+01	9.13E+00	8.04E+00	5.97E+00	3.72E+00	2.30E+00	1.42E+00	8.77E-01	5.39E-01
TE129M	1.23E-07	1.36E-03	2.80E-03	4.11E-03	5.28E-03	7.16E-03	9.06E-03	1.02E-02	1.10E-02	1.14E-02	1.17E-02
TE129	4.68E+00	6.43E+00	7.53E+00	7.82E+00	7.53E+00	6.23E+00	4.15E+00	2.62E+00	1.63E+00	1.01E+00	6.26E-01
SB130M	5.67E-01	1.07E+00	2.81E-03	7.38E-06	1.94E-08	1.34E-13	2.44E-21	4.44E-29	8.05E-37	1.46E-44	2.66E-52
SB130	9.71E+01	2.94E+01	8.36E+00	2.37E+00	6.70E-01	5.39E-02	1.23E-03	2.80E-05	6.39E-07	1.46E-08	3.33E-10

1

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	2.71E-02	2.56E-02	2.42E-02	2.29E-02	2.16E-02	1.94E-02	1.64E-02	1.38E-02	1.17E-02	9.90E-03	8.36E-03	
SB131	2.03E+02	5.29E+01	8.65E+00	1.42E+00	2.33E-01	6.28E-03	2.76E-05	1.22E-07	5.37E-10	2.37E-12	1.18E-14	
TE131M	9.75E-05	5.10E-01	5.82E-01	5.82E-01	5.71E-01	5.46E-01	5.09E-01	4.75E-01	4.44E-01	4.14E-01	3.86E-01	
TE131	8.98E+01	9.75E+01	3.18E+01	8.26E+00	2.01E+00	1.89E-01	9.36E-02	8.65E-02	8.07E-02	7.55E-02	7.04E-02	
I131	1.30E-02	4.52E-01	6.65E-01	7.30E-01	7.43E-01	7.49E-01	7.49E-01	7.43E-01	7.43E-01	7.36E-01	7.36E-01	
TE132	1.02E+00	2.47E+00	2.45E+00	2.43E+00	2.40E+00	2.36E+00	2.30E+00	2.24E+00	2.18E+00	2.12E+00	2.06E+00	
I132	2.50E+00	2.49E+00	2.48E+00	2.47E+00	2.45E+00	2.42E+00	2.37E+00	2.30E+00	2.24E+00	2.19E+00	2.13E+00	
TE133M	1.25E-01	4.32E+01	1.88E+01	8.19E+00	3.56E+00	6.76E-01	5.57E-02	4.59E-03	3.79E-04	3.12E-05	2.58E-06	
TE133	7.00E+02	3.97E+01	4.41E+00	1.46E+00	6.17E-01	1.17E-01	9.67E-03	7.95E-04	6.59E-05	5.42E-06	4.47E-07	
I133	1.09E+00	1.17E+01	1.26E+01	1.26E+01	1.24E+01	1.17E+01	1.07E+01	9.67E+00	8.72E+00	7.95E+00	7.18E+00	
XE133M	4.62E-08	2.63E-03	6.35E-03	1.01E-02	1.38E-02	2.08E-02	3.01E-02	3.82E-02	4.50E-02	5.09E-02	5.57E-02	
XE133	8.07E-07	4.59E-02	1.12E-01	1.78E-01	2.44E-01	3.70E-01	5.43E-01	6.94E-01	8.31E-01	9.49E-01	1.06E+00	
TE134	2.14E+02	9.90E+01	3.69E+01	1.37E+01	5.09E+00	7.05E-01	3.60E-02	1.85E-03	9.46E-05	4.86E-06	2.49E-07	
I134	9.79E+01	1.31E+02	9.18E+01	5.38E+01	2.89E+01	7.33E+00	8.06E-01	8.22E-02	8.06E-03	7.72E-04	7.33E-05	
I135	1.81E+01	3.18E+01	2.87E+01	2.59E+01	2.34E+01	1.90E+01	1.39E+01	1.02E+01	7.48E+00	5.51E+00	4.02E+00	
XE135M	2.00E-03	9.20E+00	8.94E+00	8.10E+00	7.27E+00	5.92E+00	4.35E+00	3.18E+00	2.34E+00	1.71E+00	1.26E+00	
XE135	2.08E+00	4.12E+00	6.03E+00	7.58E+00	8.83E+00	1.06E+01	1.17E+01	1.18E+01	1.12E+01	1.02E+01	9.14E+00	
CS136	6.44E-03	6.42E-03	6.41E-03	6.40E-03	6.38E-03	6.35E-03	6.30E-03	6.26E-03	6.22E-03	6.18E-03	6.14E-03	
CS137	9.00E-05	9.70E-04	9.70E-04	9.70E-04	9.70E-04	9.70E-04	9.70E-04	9.70E-04	9.70E-04	9.70E-04	9.70E-04	
BA137M	1.90E-07	9.05E-04	9.05E-04	9.05E-04	9.05E-04	9.05E-04	9.05E-04	9.05E-04	9.05E-04	9.05E-04	9.05E-04	
XE138	7.27E+02	6.25E+01	5.44E+00	4.71E-01	4.08E-02	3.06E-04	1.99E-07	1.29E-10	8.39E-14	5.45E-17	3.54E-20	
CS138	1.08E+02	1.82E+02	6.31E+01	1.85E+01	5.19E+00	3.95E-01	8.22E-03	1.71E-04	3.54E-06	7.38E-08	1.53E-09	
CS139	6.37E+02	2.03E+01	2.55E-01	3.21E-03	4.02E-05	6.31E-09	1.26E-14	2.48E-20	4.92E-26	9.75E-32	1.92E-37	
BA139	1.18E+01	1.31E+02	8.09E+01	4.92E+01	2.97E+01	1.09E+01	2.42E+00	5.38E-01	1.20E-01	2.65E-02	5.88E-03	
BA140	1.10E-01	6.88E-01	6.88E-01	6.82E-01	6.82E-01	6.77E-01	6.77E-01	6.72E-01	6.67E-01	6.61E-01	6.56E-01	
LA140	2.62E-07	1.18E-02	2.33E-02	3.46E-02	4.57E-02	6.72E-02	9.82E-02	1.27E-01	1.54E-01	1.80E-01	2.04E-01	
BA141	1.65E+02	5.00E+01	4.96E+00	4.92E-01	4.88E-02	4.84E-04	4.72E-07	4.61E-10	4.49E-13	4.41E-16	4.29E-19	
LA141	1.53E+00	3.24E+01	3.02E+01	2.56E+01	2.15E+01	1.50E+01	8.82E+00	5.16E+00	3.04E+00	1.78E+00	1.04E+00	
CE141	1.89E-07	2.10E-02	4.92E-02	7.40E-02	9.49E-02	1.27E-01	1.58E-01	1.76E-01	1.86E-01	1.92E-01	1.95E-01	
BA142	3.25E+02	1.29E+01	2.95E-01	6.72E-03	1.53E-04	7.96E-08	9.45E-13	1.12E-17	1.33E-22	1.58E-27	1.87E-32	
LA142	7.47E+00	5.18E+01	3.42E+01	2.17E+01	1.38E+01	5.59E+00	1.44E+00	3.72E-01	9.59E-02	2.47E-02	6.37E-03	
LA143	1.26E+02	2.45E+01	1.26E+00	6.46E-02	3.32E-03	8.69E-06	1.17E-09	1.58E-13	2.13E-17	2.87E-21	3.87E-25	
CE143	5.02E-02	3.20E+00	3.32E+00	3.23E+00	3.17E+00	3.05E+00	2.86E+00	2.69E+00	2.52E+00	2.37E+00	2.22E+00	
PR143	1.47E-08	4.90E-03	1.18E-02	1.87E-02	2.54E-02	3.84E-02	5.66E-02	7.40E-02	8.98E-02	1.05E-01	1.19E-01	
CE144	2.03E-03	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	
PR144	5.58E-07	1.33E-02	1.45E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	1.46E-02	
PR145	8.01E-02	1.18E+01	1.05E+01	9.32E+00	8.31E+00	6.58E+00	4.64E+00	3.28E+00	2.32E+00	1.64E+00	1.16E+00	
CE146	2.27E+02	1.16E+01	5.96E-01	3.05E-02	1.57E-03	4.13E-06	5.56E-10	7.50E-14	1.01E-17	1.36E-21	1.84E-25	
PR146	4.69E+00	4.08E+01	9.25E+00	1.74E+00	3.13E-01	9.83E-03	5.43E-05	2.99E-07	1.66E-09	9.17E-12	5.01E-14	
PR147	2.67E+01	7.71E+00	2.41E-01	7.52E-03	2.35E-04	2.30E-07	7.01E-12	2.14E-16	6.53E-21	2.00E-25	6.08E-30	

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SMOKY MICROCURIES/SQ METER
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.500
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	9.52E-06	1.79E-01	1.84E-01	1.84E-01	1.83E-01	1.82E-01	1.81E-01	1.80E-01	1.78E-01	1.77E-01	1.75E-01	
ND149	1.23E+01	8.40E+00	5.72E+00	3.90E+00	2.64E+00	1.22E+00	3.85E-01	1.22E-01	3.83E-02	1.20E-02	3.80E-03	
PM149	1.72E-03	1.34E-01	2.23E-01	2.82E-01	3.20E-01	3.59E-01	3.73E-01	3.66E-01	3.57E-01	3.43E-01	3.31E-01	
PM150	1.41E-01	1.09E-01	8.42E-02	6.50E-02	5.02E-02	3.01E-02	1.40E-02	6.45E-03	2.99E-03	1.38E-03	6.41E-04	
ND151	4.35E+01	1.36E+00	4.26E-02	1.33E-03	4.16E-05	4.06E-08	1.24E-12	3.79E-17	1.15E-21	3.52E-26	1.08E-30	
PM151	2.76E-02	3.23E-01	3.25E-01	3.17E-01	3.09E-01	2.94E-01	2.72E-01	2.53E-01	2.35E-01	2.18E-01	2.02E-01	
PM152	6.83E+01	6.68E-02	6.51E-05	6.36E-08	6.22E-11	5.94E-17	5.53E-26	5.15E-35	4.80E-44	4.49E-53	4.17E-62	
SM153	9.10E-02	8.97E-02	8.85E-02	8.71E-02	8.59E-02	8.34E-02	7.98E-02	7.62E-02	7.30E-02	6.99E-02	6.69E-02	
SM155	9.50E+00	1.56E+00	2.56E-01	4.18E-02	6.86E-03	1.85E-04	8.15E-07	3.59E-09	1.58E-11	7.05E-14	1.73E-16	
EU155	6.98E-06	1.99E-04	2.31E-04	2.36E-04	2.37E-04	2.37E-04	2.37E-04	2.37E-04	2.37E-04	2.37E-04	2.37E-04	
SM156	5.81E-02	5.39E-02	5.01E-02	4.65E-02	4.32E-02	3.73E-02	2.99E-02	2.40E-02	1.92E-02	1.54E-02	1.23E-02	
EU156	1.70E-04	2.77E-04	3.76E-04	4.68E-04	5.54E-04	7.06E-04	8.99E-04	1.04E-03	1.16E-03	1.26E-03	1.32E-03	
EU157	9.09E-03	3.01E-02	2.88E-02	2.75E-02	2.62E-02	2.40E-02	2.09E-02	1.83E-02	1.59E-02	1.38E-02	1.21E-02	
EU158	2.15E-01	8.71E-02	3.52E-02	1.43E-02	5.77E-03	9.45E-04	6.30E-05	4.17E-06	2.77E-07	1.84E-08	1.22E-09	
EU159	2.85E-01	2.83E-02	2.80E-03	2.79E-04	2.76E-05	2.72E-07	2.66E-10	2.60E-13	2.53E-16	2.48E-19	2.42E-22	
GD159	1.22E-03	5.34E-03	5.56E-03	5.39E-03	5.19E-03	4.80E-03	4.28E-03	3.82E-03	3.40E-03	3.02E-03	2.70E-03	
TB161	2.05E-05	1.48E-04	1.47E-04	1.46E-04	1.46E-04	1.44E-04	1.43E-04	1.41E-04	1.39E-04	1.37E-04	1.36E-04	
TOTAL	9.96E+03	2.22E+03	8.85E+02	5.40E+02	3.93E+02	2.61E+02	1.76E+02	1.33E+02	1.06E+02	8.67E+01	7.32E+01	

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	2.26E-04	2.24E-04	2.21E-04	2.12E-04	1.99E-04	1.75E-04	1.53E-04	1.18E-04	6.18E-05	1.68E-05	4.56E-06	
NA 24	1.61E-01	5.30E-02	1.75E-02	6.27E-04	2.45E-06	3.75E-11	5.72E-16	1.33E-25	0.	0.	0.	0.
MN 54	7.33E-05	7.27E-05	7.27E-05	7.14E-05	7.07E-05	6.94E-05	6.81E-05	6.49E-05	5.80E-05	4.61E-05	3.67E-05	
FE 55	1.90E-04	1.90E-04	1.90E-04	1.89E-04	1.88E-04	1.87E-04	1.86E-04	1.83E-04	1.76E-04	1.64E-04	1.52E-04	
FE 59	3.25E-04	3.20E-04	3.15E-04	3.01E-04	2.79E-04	2.39E-04	2.05E-04	1.51E-04	6.99E-05	1.49E-05	3.20E-06	
CO 57	9.26E-07	9.26E-07	9.19E-07	9.19E-07	9.06E-07	8.78E-07	8.58E-07	8.16E-07	7.20E-07	5.56E-07	4.31E-07	
CO 58	6.72E-06	6.66E-06	6.59E-06	6.39E-06	6.10E-06	5.53E-06	5.02E-06	4.13E-06	2.54E-06	9.62E-07	3.63E-07	
CO 60	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.59E-05	3.59E-05	3.57E-05	3.55E-05	3.46E-05	3.36E-05	3.23E-05	
CU 64	1.06E+00	2.89E-01	7.88E-02	1.60E-03	2.40E-06	5.46E-12	1.24E-17	6.36E-29	0.	0.	0.	0.
CU 67	3.34E-05	2.55E-05	1.95E-05	8.66E-06	2.26E-06	1.52E-07	1.03E-08	4.66E-11	6.52E-17	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	3.20E-04	2.32E-04	8.89E-05	1.80E-05	7.41E-07	3.04E-08	5.11E-11	5.97E-18	0.	0.	0.	0.
U237	1.74E-01	1.57E-01	1.42E-01	1.04E-01	6.23E-02	2.23E-02	8.00E-03	1.02E-03	6.04E-06	6.49E-10	4.38E-10	
U240	1.45E+00	4.47E-01	1.37E-01	3.98E-03	1.09E-05	8.21E-11	6.18E-16	3.49E-26	0.	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	3.03E-03	4.62E+00	3.44E+00	1.42E+00	3.25E-01	1.70E-02	8.90E-04	2.44E-06	9.60E-13	2.29E-22	2.29E-22	
NP240M	2.30E-03	4.50E-01	1.38E-01	4.01E-03	1.10E-05	8.29E-11	6.23E-16	3.51E-26	0.	0.	0.	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	9.38E-06	9.33E-06	9.28E-06	9.19E-06	8.99E-06	8.60E-06	8.26E-06	7.58E-06	6.17E-06	4.01E-06	2.62E-06	
GE 77	6.33E-03	3.99E-03	9.13E-04	1.10E-05	7.01E-09	2.84E-15	1.14E-21	1.87E-34	0.	0.	0.	0.
AS 77	6.54E-05	9.66E-03	6.99E-03	2.02E-03	2.37E-04	3.21E-06	4.36E-08	8.05E-12	3.73E-21	8.00E-40	1.72E-58	
SE 77M	2.58E-09	2.91E-05	2.09E-05	6.08E-06	7.08E-07	9.64E-09	1.31E-10	2.42E-14	1.12E-23	2.39E-42	5.16E-61	
AS 78	1.49E-02	1.33E-04	3.89E-09	3.29E-23	0.	0.	0.	0.	0.	0.	0.	0.
BR 82	5.02E-04	3.13E-04	1.96E-04	4.76E-05	4.51E-06	4.05E-08	3.64E-10	2.94E-14	1.71E-24	5.88E-45	2.00E-65	
BR 83	3.99E-01	1.05E-02	1.06E-05	1.07E-14	1.09E-29	0.	0.	0.	0.	0.	0.	0.
KR 83M	2.06E-05	4.59E-02	5.22E-05	4.69E-14	4.81E-29	0.	0.	0.	0.	0.	0.	0.
KR 85M	5.22E-03	2.98E-01	6.79E-03	8.07E-08	4.97E-16	1.89E-32	7.16E-49	0.	0.	0.	0.	0.
KR 85	5.40E-06	1.42E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.44E-04	1.43E-04	1.40E-04	1.38E-04	
KR 87	8.46E+01	1.67E-04	3.30E-10	2.56E-27	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	4.91E+01	1.29E-01	3.39E-04	6.16E-12	7.76E-25	0.	0.	0.	0.	0.	0.	0.
RB 88	1.25E+01	1.44E-01	3.80E-04	6.89E-12	8.64E-25	0.	0.	0.	0.	0.	0.	0.
SR 89	4.46E-06	1.34E-01	1.32E-01	1.27E-01	1.19E-01	1.04E-01	9.06E-02	6.98E-02	3.57E-02	9.39E-03	2.48E-03	
SR 90	8.77E-06	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	8.92E-04	8.92E-04	8.85E-04	
Y 90	1.30E-11	2.06E-04	3.65E-04	6.56E-04	8.37E-04	8.92E-04	9.00E-04	9.00E-04	8.92E-04	8.92E-04	8.85E-04	
SR 91	1.02E+00	3.66E+00	6.55E-01	3.76E-03	6.88E-07	2.33E-14	7.90E-22	9.00E-37	0.	0.	0.	0.

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
Y 91M	6.88E-05	2.36E+00	4.23E-01	2.43E-03	4.46E-07	1.50E-14	5.09E-22	5.81E-37	0.	0.	0.
Y 91	2.81E-08	1.12E-01	1.33E-01	1.33E-01	1.25E-01	1.11E-01	9.90E-02	7.84E-02	4.34E-02	1.34E-02	4.11E-03
SR 92	7.40E+00	9.23E-02	1.99E-04	2.00E-12	9.36E-26	0.	0.	0.	0.	0.	0.
Y 92	3.41E-01	9.67E-01	1.07E-02	8.26E-09	4.82E-19	1.65E-39	5.65E-60	0.	0.	0.	0.
Y 93	3.54E-01	2.39E+00	4.66E-01	3.51E-03	1.01E-06	8.33E-14	6.88E-21	4.70E-35	0.	0.	0.
ZR 95	6.67E-04	8.34E-02	8.25E-02	7.99E-02	7.58E-02	6.79E-02	6.11E-02	4.94E-02	2.90E-02	9.98E-03	3.42E-03
NB 95M	1.42E-11	2.82E-04	5.15E-04	9.83E-04	1.33E-03	1.40E-03	1.29E-03	1.05E-03	6.14E-04	2.12E-04	7.29E-05
NB 95	7.43E-11	1.61E-03	3.19E-03	7.64E-03	1.42E-02	2.45E-02	3.16E-02	3.92E-02	3.77E-02	1.81E-02	6.96E-03
ZR 97	1.58E+00	2.69E+00	1.01E+00	5.35E-02	4.02E-04	2.26E-08	1.27E-12	4.02E-21	2.27E-42	0.	0.
NB 97M	8.13E-03	2.58E+00	9.70E-01	5.16E-02	3.86E-04	2.17E-08	1.22E-12	3.86E-21	2.18E-42	0.	0.
NB 97	7.91E-01	2.70E+00	1.01E+00	5.38E-02	4.05E-04	2.44E-08	1.37E-12	4.35E-21	2.45E-42	0.	0.
MO 99	4.57E-03	1.49E+00	1.16E+00	5.50E-01	1.59E-01	1.33E-02	1.11E-03	7.74E-06	3.14E-11	5.18E-22	8.53E-33
TC 99M	4.25E-08	1.31E+00	1.10E+00	5.27E-01	1.52E-01	1.27E-02	1.06E-03	7.40E-06	3.00E-11	4.95E-22	8.15E-33
RU103	6.46E-05	1.47E-01	1.45E-01	1.37E-01	1.26E-01	1.06E-01	8.87E-02	6.26E-02	2.60E-02	4.52E-03	7.87E-04
RH103M	4.31E-09	1.47E-01	1.45E-01	1.38E-01	1.26E-01	1.06E-01	8.87E-02	6.26E-02	2.61E-02	4.52E-03	7.87E-04
RU105	3.63E-01	3.47E-01	8.17E-03	1.07E-07	7.85E-16	4.19E-32	2.25E-48	0.	0.	0.	0.
RH105M	2.39E-03	3.47E-01	8.19E-03	1.08E-07	7.87E-16	4.22E-32	2.25E-48	0.	0.	0.	0.
RH105	3.92E-09	1.25E+00	8.19E-01	2.04E-01	2.01E-02	1.96E-04	1.90E-06	1.80E-10	1.56E-20	1.17E-40	8.78E-61
RU106	2.91E-04	5.51E-03	5.49E-03	5.47E-03	5.42E-03	5.32E-03	5.20E-03	5.01E-03	4.56E-03	3.77E-03	3.13E-03
RH106	3.15E-06	5.51E-03	5.49E-03	5.47E-03	5.42E-03	5.32E-03	5.20E-03	5.01E-03	4.56E-03	3.77E-03	3.13E-03
PD109	8.48E-03	2.16E-01	6.29E-02	1.56E-03	3.29E-06	1.47E-11	6.53E-17	1.29E-27	0.	0.	0.
AG109M	4.89E-05	2.16E-01	6.31E-02	1.56E-03	3.30E-06	1.47E-11	6.53E-17	1.29E-27	0.	0.	0.
PD111M	1.31E+00	6.35E-02	3.09E-03	3.54E-07	9.58E-14	6.99E-27	5.13E-40	0.	0.	0.	0.
PD111	4.66E-01	5.13E-02	2.48E-03	2.85E-07	7.72E-14	5.62E-27	4.12E-40	0.	0.	0.	0.
AG111M	3.70E-03	6.70E-02	3.26E-03	3.75E-07	1.01E-13	7.43E-27	5.43E-40	0.	0.	0.	0.
AG111	1.32E-09	3.64E-02	3.50E-02	2.66E-02	1.68E-02	6.65E-03	2.64E-03	4.16E-04	4.09E-06	3.96E-10	3.84E-14
PD112	3.87E-01	1.76E-01	7.95E-02	7.38E-03	1.40E-04	5.09E-08	1.85E-11	2.43E-18	1.53E-35	0.	0.
AG112	1.17E-05	2.04E-01	9.38E-02	8.70E-03	1.66E-04	6.01E-08	2.18E-11	2.88E-18	1.80E-35	0.	0.
AG113	5.06E-03	5.35E-02	2.32E-03	1.88E-07	2.88E-14	6.74E-28	1.57E-41	0.	0.	0.	0.
CD115M	1.70E-08	4.92E-04	4.84E-04	4.61E-04	4.26E-04	3.62E-04	3.09E-04	2.23E-04	9.98E-05	1.98E-05	3.97E-06
CD115	6.58E-06	9.90E-02	7.25E-02	2.86E-02	6.03E-03	2.69E-04	1.20E-05	2.40E-08	4.23E-15	1.33E-28	4.15E-42
IN115M	8.20E-11	1.04E-01	7.92E-02	3.12E-02	6.58E-03	2.94E-04	1.31E-05	2.61E-08	4.63E-15	1.45E-28	4.53E-42
CD117	1.47E-01	3.20E-03	3.11E-06	2.90E-15	2.58E-30	0.	0.	0.	0.	0.	0.
IN117M	7.04E-06	1.33E-02	1.54E-05	1.48E-14	1.32E-29	0.	0.	0.	0.	0.	0.
IN117	2.83E-10	8.74E-03	1.04E-05	1.00E-14	8.90E-30	0.	0.	0.	0.	0.	0.
SN121	3.04E-03	1.73E-01	9.35E-02	1.47E-02	6.75E-04	1.43E-06	3.00E-09	1.34E-14	5.59E-28	0.	0.
SN123	1.41E-05	1.47E-03	1.46E-03	1.43E-03	1.39E-03	1.32E-03	1.25E-03	1.12E-03	8.47E-04	4.87E-04	2.80E-04
SN125	3.20E-02	2.98E-02	2.77E-02	2.22E-02	1.53E-02	7.33E-03	3.50E-03	8.02E-04	2.01E-05	1.26E-08	7.91E-12
SB125	1.92E-04	2.13E-04	2.33E-04	2.85E-04	3.50E-04	4.23E-04	4.56E-04	4.75E-04	4.66E-04	4.35E-04	4.06E-04
SB126	4.29E-03	4.06E-03	3.84E-03	3.25E-03	2.46E-03	1.41E-03	8.15E-04	2.68E-04	1.68E-05	8.15E-08	1.64E-08

1
SMOKY MICROCURIES/SQ METER
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.500
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
SN127	4.70E+00	1.70E-03	6.18E-07	2.95E-17	1.85E-34	0.	0.	0.	0.	0.	0.	0.
SB127	5.48E-02	2.25E-01	1.88E-01	1.10E-01	4.50E-02	7.52E-03	1.26E-03	3.52E-05	4.59E-09	7.83E-17	1.33E-24	0.
TE127M	4.43E-10	3.43E-04	6.29E-04	1.22E-03	1.69E-03	1.86E-03	1.79E-03	1.59E-03	1.16E-03	6.12E-04	3.24E-04	0.
TE127	3.09E-02	1.61E-01	1.58E-01	9.64E-02	4.07E-02	8.36E-03	2.86E-03	1.60E-03	1.14E-03	6.05E-04	3.20E-04	0.
SB128	1.27E+00	2.16E-01	3.41E-02	1.33E-04	1.29E-08	1.21E-16	1.14E-24	1.00E-40	0.	0.	0.	0.
SB129	6.50E+00	3.32E-01	6.94E-03	6.32E-08	2.51E-16	3.97E-33	6.26E-50	0.	0.	0.	0.	0.
TE129M	1.23E-07	1.29E-02	1.29E-02	1.22E-02	1.10E-02	8.99E-03	7.31E-03	4.87E-03	1.75E-03	2.29E-04	2.97E-05	0.
TE129	4.68E+00	3.89E-01	1.62E-02	7.82E-03	7.05E-03	5.75E-03	4.69E-03	3.12E-03	1.13E-03	1.47E-04	1.91E-05	0.
I130	2.71E-02	7.07E-03	1.85E-03	3.31E-05	4.04E-08	6.02E-14	8.98E-20	2.00E-31	0.	0.	0.	0.
TE131M	9.75E-05	3.41E-01	1.96E-01	3.71E-02	2.32E-03	9.04E-06	3.54E-08	5.40E-13	4.91E-25	0.	0.	0.
TE131	8.98E+01	6.22E-02	3.57E-02	6.78E-03	4.23E-04	1.65E-06	6.45E-09	9.88E-14	8.98E-26	0.	0.	0.
I131	1.30E-02	7.04E-01	6.65E-01	5.35E-01	3.52E-01	1.49E-01	6.29E-02	1.12E-02	1.52E-04	2.76E-08	5.04E-12	0.
XE131M	3.54E-11	3.26E-04	6.19E-04	1.29E-03	1.85E-03	1.83E-03	1.36E-03	5.60E-04	3.73E-05	1.12E-07	3.15E-10	0.
TE132	1.02E+00	2.01E+00	1.63E+00	8.56E-01	2.95E-01	3.50E-02	4.15E-03	5.82E-05	1.36E-09	7.46E-19	4.07E-28	0.
I132	2.50E+00	2.08E+00	1.68E+00	8.81E-01	3.04E-01	3.60E-02	4.27E-03	6.00E-05	1.40E-09	7.64E-19	4.19E-28	0.
I133	1.09E+00	6.05E+00	2.73E+00	2.53E-01	4.83E-03	1.75E-06	6.35E-10	8.37E-17	5.26E-34	0.	0.	0.
XE133M	4.62E-08	5.71E-02	6.76E-02	3.97E-02	9.32E-03	4.37E-04	2.04E-05	4.41E-08	9.67E-15	4.62E-28	2.21E-41	0.
XE133	8.07E-07	1.10E+00	1.47E+00	1.32E+00	7.18E-01	1.94E-01	5.22E-02	3.76E-03	5.23E-06	1.01E-11	1.97E-17	0.
I135	1.81E+01	2.95E+00	2.46E-01	1.43E-04	5.82E-10	9.61E-21	1.58E-31	4.29E-53	0.	0.	0.	0.
XE135M	2.00E-03	9.20E-01	7.69E-02	4.47E-05	1.82E-10	2.99E-21	4.93E-32	1.34E-53	0.	0.	0.	0.
XE135	2.08E+00	7.95E+00	1.94E+00	1.11E-02	1.36E-06	1.91E-14	2.68E-22	5.30E-38	0.	0.	0.	0.
CS136	6.44E-03	6.10E-03	5.78E-03	4.93E-03	3.78E-03	2.22E-03	1.30E-03	4.48E-04	3.11E-05	1.50E-07	7.27E-10	0.
CS137	9.00E-05	9.70E-04	9.70E-04	9.70E-04	9.70E-04	9.70E-04	9.70E-04	9.70E-04	9.64E-04	9.59E-04	9.53E-04	0.
BA137M	1.90E-07	9.05E-04	9.05E-04	9.05E-04	9.05E-04	9.05E-04	9.05E-04	9.05E-04	9.00E-04	8.94E-04	8.89E-04	0.
BA139	1.18E+01	1.26E-03	7.42E-09	1.53E-24	0.	0.	0.	0.	0.	0.	0.	0.
BA140	1.10E-01	6.51E-01	6.19E-01	5.25E-01	4.01E-01	2.33E-01	1.35E-01	4.59E-02	3.07E-03	1.36E-05	6.04E-08	0.
LA140	2.62E-07	2.27E-01	3.65E-01	5.04E-01	4.48E-01	2.68E-01	1.56E-01	5.30E-02	3.52E-03	1.57E-05	6.98E-08	0.
LA141	1.53E+00	6.06E-01	8.50E-03	2.35E-08	1.29E-17	3.84E-36	1.15E-54	0.	0.	0.	0.	0.
CE141	1.89E-07	2.09E-01	2.08E-01	1.95E-01	1.75E-01	1.42E-01	1.14E-01	7.44E-02	2.56E-02	3.01E-03	3.54E-04	0.
LA142	7.47E+00	1.64E-03	3.17E-08	2.33E-22	0.	0.	0.	0.	0.	0.	0.	0.
CE143	5.02E-02	2.06E+00	1.25E+00	2.75E-01	2.21E-02	1.43E-04	9.24E-07	3.87E-11	4.37E-22	0.	0.	0.
PR143	1.47E-08	1.32E-01	2.05E-01	2.65E-01	2.27E-01	1.39E-01	8.36E-02	3.02E-02	2.42E-03	1.53E-05	9.74E-08	0.
CE144	2.03E-03	1.46E-02	1.45E-02	1.44E-02	1.42E-02	1.39E-02	1.35E-02	1.29E-02	1.14E-02	8.94E-03	7.02E-03	0.
PR144	5.58E-07	1.46E-02	1.45E-02	1.44E-02	1.42E-02	1.39E-02	1.35E-02	1.29E-02	1.14E-02	8.94E-03	7.02E-03	0.
PR145	8.01E-02	8.19E-01	5.07E-02	1.20E-05	1.10E-11	9.07E-24	7.53E-36	0.	0.	0.	0.	0.
ND147	9.52E-06	1.60E-01	1.50E-01	1.25E-01	9.12E-02	4.90E-02	2.62E-02	7.52E-03	3.29E-04	6.42E-07	1.24E-09	0.
PM147	2.64E-14	1.20E-04	2.32E-04	5.29E-04	9.15E-04	1.40E-03	1.65E-03	1.84E-03	1.86E-03	1.73E-03	1.61E-03	0.
ND149	1.23E+01	1.19E-03	1.16E-07	1.05E-19	9.01E-40	0.	0.	0.	0.	0.	0.	0.
PM149	1.72E-03	3.17E-01	2.32E-01	9.08E-02	1.89E-02	8.26E-04	3.59E-05	6.84E-08	1.08E-14	2.66E-28	6.63E-42	0.
PM150	1.41E-01	2.97E-04	6.25E-07	5.87E-15	2.46E-28	0.	0.	0.	0.	0.	0.	0.

1

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	2.76E-02	1.88E-01	1.04E-01	1.75E-02	8.96E-04	2.35E-06	6.20E-09	4.28E-14	5.37E-27	0.	0.	0.
SM153	9.10E-02	6.40E-02	4.49E-02	1.55E-02	2.64E-03	7.67E-05	2.23E-06	1.87E-09	3.86E-17	1.65E-32	6.99E-48	0.
SM156	5.81E-02	9.90E-03	1.69E-03	8.32E-06	1.20E-09	2.46E-17	5.08E-25	2.16E-40	0.	0.	0.	0.
EU155	6.98E-06	2.37E-04	2.36E-04	2.36E-04	2.36E-04	2.35E-04	2.34E-04	2.32E-04	2.27E-04	2.18E-04	2.10E-04	0.
EU156	1.70E-04	1.38E-03	1.53E-03	1.37E-03	1.09E-03	6.85E-04	4.32E-04	1.71E-04	1.70E-05	1.67E-07	1.65E-09	0.
EU157	9.09E-03	1.05E-02	3.54E-03	1.33E-04	5.57E-07	9.82E-12	1.74E-16	5.41E-26	0.	0.	0.	0.
GD159	1.22E-03	2.40E-03	9.56E-04	5.96E-05	5.87E-07	5.68E-11	5.51E-15	5.17E-23	4.41E-43	0.	0.	0.
TB161	2.05E-05	1.34E-04	1.21E-04	8.96E-05	5.42E-05	1.98E-05	7.26E-06	9.73E-07	6.44E-09	2.78E-13	1.21E-17	0.
TOTAL	3.29E+02	6.21E+01	2.73E+01	9.99E+00	4.59E+00	1.93E+00	1.18E+00	6.48E-01	2.78E-01	9.71E-02	4.64E-02	0.

1

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	2.26E-04	1.96E-06	1.82E-07	1.69E-08	1.36E-11	1.09E-14	8.13E-19	5.21E-25	0.	0.	0.	0.
MN 54	7.33E-05	3.16E-05	2.08E-05	1.37E-05	3.91E-06	1.12E-06	2.10E-07	1.72E-08	4.04E-12	1.46E-17	5.28E-23	0.
FE 59	3.25E-04	1.17E-06	7.04E-08	4.23E-09	9.19E-13	1.98E-16	2.59E-21	1.21E-28	0.	0.	0.	0.
CO 57	9.26E-07	3.65E-07	2.28E-07	1.43E-07	3.53E-08	8.71E-09	1.34E-10	8.16E-11	7.14E-15	5.86E-21	0.	0.
CO 58	6.72E-06	1.93E-07	3.27E-08	5.55E-09	2.70E-11	1.32E-13	1.08E-16	2.57E-21	9.83E-37	0.	0.	0.
CO 60	3.61E-05	3.16E-05	2.95E-05	2.76E-05	2.27E-05	1.86E-05	1.43E-05	9.64E-06	2.59E-06	3.59E-07	4.96E-08	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.74E-01	4.34E-10	4.23E-10	4.11E-10	3.85E-10	3.57E-10	3.25E-10	2.82E-10	1.75E-10	8.60E-11	4.23E-11	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	9.38E-06	1.99E-06	9.14E-07	4.20E-07	4.10E-08	3.99E-09	1.79E-10	1.69E-12	4.86E-17	4.53E-17	4.23E-17	0.
KR 85	5.40E-06	1.34E-04	1.30E-04	1.26E-04	1.15E-04	1.04E-04	9.11E-05	7.51E-05	3.97E-05	1.52E-05	5.79E-06	0.
SR 89	4.46E-06	1.04E-03	9.13E-05	8.02E-06	5.40E-09	3.65E-12	2.15E-16	9.78E-23	7.11E-44	0.	0.	0.
SR 90	8.77E-06	8.77E-04	8.69E-04	8.61E-04	8.29E-04	7.97E-04	7.59E-04	7.04E-04	5.51E-04	3.80E-04	2.63E-04	0.
Y 90	1.30E-11	8.77E-04	8.69E-04	8.61E-04	8.29E-04	7.97E-04	7.59E-04	7.04E-04	5.51E-04	3.80E-04	2.63E-04	0.
Y 91	2.81E-08	1.90E-03	2.21E-04	2.57E-05	4.03E-08	6.32E-11	1.16E-14	2.84E-20	5.74E-39	0.	0.	0.
ZR 95	6.67E-04	1.71E-03	2.45E-04	3.48E-05	1.02E-07	2.96E-10	1.22E-13	1.03E-18	1.26E-35	0.	0.	0.
NB 95M	1.42E-11	3.63E-05	5.18E-06	7.40E-07	2.15E-09	6.26E-12	2.59E-15	2.19E-20	2.68E-37	0.	0.	0.
NB 95	7.43E-11	3.69E-03	5.30E-04	7.55E-05	2.19E-07	6.35E-10	2.65E-13	2.24E-18	2.74E-35	0.	0.	0.
RU103	6.46E-05	2.51E-04	1.03E-05	4.23E-07	2.88E-11	1.98E-15	5.55E-21	2.61E-29	0.	0.	0.	0.
RH103M	4.31E-09	2.51E-04	1.03E-05	4.23E-07	2.89E-11	1.98E-15	5.55E-21	2.61E-29	0.	0.	0.	0.
RU106	2.91E-04	2.77E-03	1.96E-03	1.39E-03	4.94E-04	1.75E-04	4.42E-05	5.58E-06	5.63E-09	1.81E-13	5.82E-18	0.
RH106	3.15E-06	2.77E-03	1.96E-03	1.39E-03	4.94E-04	1.75E-04	4.42E-05	5.58E-06	5.63E-09	1.81E-13	5.82E-18	0.
SN123	1.41E-05	1.95E-04	7.08E-05	2.57E-05	1.23E-06	5.92E-08	1.03E-09	2.38E-12	3.81E-21	2.45E-34	1.58E-47	0.
SB125	1.92E-04	3.87E-04	3.40E-04	2.99E-04	2.04E-04	1.39E-04	8.30E-05	3.84E-05	2.95E-06	6.28E-08	1.34E-09	0.
TE125M	5.18E-12	1.58E-04	1.40E-04	1.24E-04	8.45E-05	5.74E-05	3.44E-05	1.59E-05	1.22E-06	2.60E-08	5.54E-10	0.
TE127M	4.43E-10	2.12E-04	6.64E-05	2.08E-05	6.39E-07	1.97E-08	1.89E-10	1.78E-13	1.46E-23	1.09E-38	8.13E-54	0.
TE127	3.09E-02	2.10E-04	6.57E-05	2.06E-05	6.32E-07	1.94E-08	1.87E-10	1.76E-13	1.45E-23	1.08E-38	8.06E-54	0.
CS137	9.00E-05	9.48E-04	9.37E-04	9.27E-04	8.94E-04	8.62E-04	8.24E-04	7.70E-04	6.09E-04	4.33E-04	3.05E-04	0.
BA137M	1.90E-07	8.89E-04	8.78E-04	8.67E-04	8.35E-04	8.08E-04	7.70E-04	7.22E-04	5.71E-04	4.04E-04	2.86E-04	0.
CE141	1.89E-07	8.15E-05	1.64E-06	3.29E-08	2.68E-13	2.18E-18	3.58E-25	2.37E-35	0.	0.	0.	0.
CE144	2.03E-03	5.98E-03	3.84E-03	2.45E-03	6.44E-04	1.69E-04	2.85E-05	1.96E-06	2.64E-10	4.15E-16	6.47E-22	0.
PR144	5.58E-07	5.98E-03	3.84E-03	2.45E-03	6.44E-04	1.69E-04	2.85E-05	1.96E-06	2.64E-10	4.15E-16	6.47E-22	0.
PM147	2.64E-14	1.53E-03	1.34E-03	1.18E-03	7.91E-04	5.32E-04	3.13E-04	1.42E-04	1.01E-05	1.91E-07	3.60E-09	0.
EU155	6.98E-06	2.04E-04	1.90E-04	1.77E-04	1.42E-04	1.14E-04	8.52E-05	5.50E-05	1.29E-05	1.45E-06	1.63E-07	0.
TOTAL	2.09E-01	3.32E-02	1.87E-02	1.34E-02	7.03E-03	4.92E-03	3.88E-03	3.25E-03	2.35E-03	1.61E-03	1.12E-03	0.

SMOKY
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.100
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.657E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.06E+02	1.03E+04
1.00E+00	3.74E+01	2.28E+03
2.00E+00	1.48E+01	9.24E+02
3.00E+00	7.61E+00	5.49E+02
4.00E+00	4.57E+00	3.86E+02
6.00E+00	2.31E+00	2.43E+02
9.00E+00	1.36E+00	1.59E+02
1.20E+01	1.00E+00	1.18E+02
1.50E+01	7.82E-01	9.25E+01
1.80E+01	6.34E-01	7.55E+01
2.10E+01	5.25E-01	6.32E+01
1.00E+00 DAYS	4.37E-01	5.31E+01
2.00E+00	1.89E-01	2.23E+01
5.00E+00	8.02E-02	8.67E+00
1.00E+01	3.91E-02	4.38E+00
2.00E+01	1.53E-02	1.90E+00
3.00E+01	8.21E-03	1.13E+00
5.00E+01	3.19E-03	5.99E-01
1.00E+02	6.70E-04	2.37E-01
2.00E+02	1.70E-04	7.09E-02
3.00E+02	7.08E-05	3.14E-02
1.00E+00 YEARS	4.76E-05	2.24E-02
1.50E+00	2.61E-05	1.35E-02
2.00E+00	2.07E-05	1.05E-02
3.50E+00	1.49E-05	6.67E-03
5.00E+00	1.24E-05	5.25E-03
7.00E+00	1.08E-05	4.46E-03
1.00E+01	9.58E-06	3.93E-03
2.00E+01	7.26E-06	2.97E-03
3.50E+01	5.12E-06	2.06E-03
5.00E+01	3.61E-06	1.43E-03

1

SMOKY MICROCURIES/SQ METER
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.100
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BE 7	5.77E-05	5.76E-05	5.76E-05	5.76E-05	5.76E-05	5.76E-05	5.76E-05	5.75E-05	5.73E-05	5.72E-05	5.71E-05	5.70E-05
NA 24	4.09E-02	3.91E-02	3.74E-02	3.57E-02	3.40E-02	3.11E-02	2.70E-02	2.36E-02	2.05E-02	1.79E-02	1.55E-02	1.35E-02
MN 54	1.87E-05	1.87E-05	1.87E-05	1.87E-05	1.87E-05	1.87E-05	1.87E-05	1.87E-05	1.85E-05	1.85E-05	1.85E-05	1.85E-05
FE 55	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05
FE 59	8.29E-05	8.28E-05	8.28E-05	8.28E-05	8.28E-05	8.26E-05	8.25E-05	8.24E-05	8.21E-05	8.20E-05	8.19E-05	8.19E-05
CO 57	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07
CO 58	1.71E-06	1.71E-06	1.71E-06	1.71E-06	1.71E-06	1.71E-06	1.71E-06	1.71E-06	1.71E-06	1.70E-06	1.70E-06	1.70E-06
CO 60	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06
CU 64	2.70E-01	2.56E-01	2.42E-01	2.30E-01	2.18E-01	1.95E-01	1.66E-01	1.41E-01	1.20E-01	1.02E-01	8.67E-02	7.35E-02
CU 67	8.53E-06	8.46E-06	8.31E-06	8.24E-06	8.16E-06	7.95E-06	7.65E-06	7.44E-06	7.20E-06	6.92E-06	6.73E-06	6.55E-06
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	5.61E-04	5.53E-04	5.45E-04	5.37E-04	5.29E-04	5.18E-04	4.98E-04	4.78E-04	4.59E-04	4.39E-04	4.24E-04	4.05E-04
U237	4.44E-02	4.42E-02	4.40E-02	4.38E-02	4.36E-02	4.32E-02	4.26E-02	4.21E-02	4.16E-02	4.10E-02	4.05E-02	3.99E-02
U239	2.26E+02	3.85E+01	6.57E+00	1.12E+00	1.90E-01	5.54E-03	2.74E-05	1.35E-07	6.70E-10	3.31E-12	1.64E-14	7.85E-17
U240	3.70E-01	3.53E-01	3.36E-01	3.20E-01	3.04E-01	2.76E-01	2.38E-01	2.05E-01	1.77E-01	1.53E-01	1.32E-01	1.12E-01
NP239	7.72E-04	1.30E+00	1.50E+00	1.52E+00	1.51E+00	1.47E+00	1.41E+00	1.37E+00	1.32E+00	1.27E+00	1.22E+00	1.17E+00
NP240M	5.86E-04	3.54E-01	3.39E-01	3.23E-01	3.07E-01	2.78E-01	2.40E-01	2.07E-01	1.78E-01	1.54E-01	1.33E-01	1.12E-01
NP240	1.48E-11	7.63E-12	3.96E-12	2.04E-12	1.06E-12	2.83E-13	3.90E-14	5.38E-15	7.42E-16	1.02E-16	1.41E-17	1.91E-18
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	2.39E-06	2.39E-06	2.39E-06	2.39E-06	2.39E-06	2.39E-06	2.38E-06	2.38E-06	2.38E-06	2.38E-06	2.38E-06	2.38E-06
GE 75	1.92E-05	9.33E-02	5.62E-02	3.38E-02	2.04E-02	7.39E-03	1.61E-03	3.53E-04	7.71E-05	1.68E-05	3.68E-06	8.05E-07
GE 77	8.07E-03	2.08E-02	1.96E-02	1.84E-02	1.73E-02	1.53E-02	1.27E-02	1.06E-02	8.82E-03	7.33E-03	6.10E-03	5.05E-03
AS 77	8.34E-05	1.32E-02	1.33E-02	1.34E-02	1.35E-02	1.36E-02	1.36E-02	1.35E-02	1.33E-02	1.30E-02	1.27E-02	1.24E-02
SE 77M	3.29E-09	3.95E-05	4.01E-05	4.04E-05	4.04E-05	4.07E-05	4.10E-05	4.07E-05	4.01E-05	3.92E-05	3.80E-05	3.68E-05
GE 78	1.06E+00	6.61E-01	4.12E-01	2.57E-01	1.61E-01	6.25E-02	1.52E-02	3.67E-03	8.97E-04	2.18E-04	5.29E-05	1.32E-05
AS 78	1.90E-02	3.16E-01	3.90E-01	3.65E-01	3.05E-01	1.80E-01	6.69E-02	2.22E-02	6.87E-03	2.05E-03	5.95E-04	1.65E-04
AS 79	2.02E+01	1.99E-01	1.96E-03	1.93E-05	1.90E-07	1.84E-11	1.76E-17	1.68E-23	1.60E-29	1.53E-35	1.46E-41	1.39E-47
SE 79M	3.00E-02	3.52E-01	3.47E-03	3.42E-05	3.36E-07	3.25E-11	3.10E-17	2.96E-23	2.83E-29	2.70E-35	2.57E-41	2.44E-47
BR 80	1.27E-01	1.20E-02	1.13E-03	1.06E-04	9.97E-06	8.84E-08	7.40E-11	6.17E-14	5.14E-17	4.29E-20	3.58E-23	2.97E-26
SE 81M	1.04E-01	4.86E+00	2.35E+00	1.13E+00	5.43E-01	1.27E-01	1.42E-02	1.59E-03	1.78E-04	2.00E-05	2.24E-06	2.50E-07
SE 81	1.27E+00	5.75E+00	3.33E+00	1.66E+00	8.06E-01	1.88E-01	2.11E-02	2.36E-03	2.64E-04	2.97E-05	3.32E-06	3.70E-07
BR 82	6.40E-04	6.28E-04	6.15E-04	6.04E-04	5.91E-04	5.69E-04	5.36E-04	5.05E-04	4.77E-04	4.49E-04	4.24E-04	4.00E-04
SE 83	6.12E+01	1.16E+01	2.20E+00	4.17E-01	7.87E-02	2.83E-03	1.93E-05	1.31E-07	8.95E-10	6.06E-12	3.85E-14	2.40E-16
BR 83	5.08E-01	7.59E+00	7.02E+00	5.53E+00	4.19E+00	2.37E+00	1.00E+00	4.22E-01	1.78E-01	7.52E-02	3.17E-02	1.24E-02
KR 83M	2.63E-05	1.72E+00	3.51E+00	4.36E+00	4.50E+00	3.75E+00	2.21E+00	1.14E+00	5.48E-01	2.53E-01	1.14E-01	5.00E-02

SMOKY
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.100
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BR 84	1.32E-01	2.27E+01	6.14E+00	1.66E+00	4.49E-01	3.29E-02	6.50E-04	1.28E-05	2.54E-07	5.02E-09	9.91E-11
KR 85M	6.66E-03	1.43E+01	1.21E+01	1.04E+01	8.86E+00	6.47E+00	4.03E+00	2.52E+00	1.57E+00	9.75E-01	6.09E-01
KR 87	1.08E+02	6.23E+01	3.60E+01	2.08E+01	1.20E+01	4.03E+00	7.81E-01	1.51E-01	2.93E-02	5.68E-03	1.10E-03
KR 88	6.26E+01	4.89E+01	3.81E+01	2.98E+01	2.33E+01	1.41E+01	6.74E+00	3.21E+00	1.53E+00	7.27E-01	3.46E-01
RB 88	1.59E+01	4.95E+01	4.22E+01	3.33E+01	2.60E+01	1.58E+01	7.55E+00	3.60E+00	1.71E+00	8.15E-01	3.87E-01
RB 89	7.42E+01	6.98E+01	4.69E+00	3.15E-01	2.11E-02	9.56E-05	2.89E-08	8.73E-12	2.66E-15	8.06E-19	2.44E-22
SR 89	5.69E-06	2.00E-01	2.13E-01	2.13E-01	2.13E-01	2.13E-01	2.13E-01	2.12E-01	2.12E-01	2.11E-01	2.11E-01
SR 90	1.12E-05	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03
SR 91	1.15E+00	2.15E+01	2.00E+01	1.86E+01	1.73E+01	1.50E+01	1.21E+01	9.80E+00	7.91E+00	6.35E+00	5.12E+00
Y 91M	7.76E-05	7.40E+00	1.01E+01	1.08E+01	1.07E+01	9.58E+00	7.84E+00	6.31E+00	5.09E+00	4.10E+00	3.31E+00
Y 91	3.18E-08	6.58E-03	1.52E-02	2.42E-02	3.31E-02	4.96E-02	7.04E-02	8.71E-02	1.01E-01	1.12E-01	1.20E-01
SR 92	1.89E+00	8.43E+00	6.53E+00	5.06E+00	3.91E+00	2.34E+00	1.09E+00	5.06E-01	2.34E-01	1.09E-01	5.06E-02
Y 92	8.70E-02	1.77E+00	2.78E+00	3.31E+00	3.51E+00	3.34E+00	2.56E+00	1.75E+00	1.12E+00	6.92E-01	4.17E-01
SR 93	7.40E+01	1.27E+00	7.03E-03	3.89E-05	2.14E-07	6.55E-12	1.10E-18	1.86E-25	3.15E-32	5.30E-39	8.94E-46
Y 93	9.02E-02	2.92E+00	2.74E+00	2.56E+00	2.39E+00	2.09E+00	1.70E+00	1.39E+00	1.13E+00	9.28E-01	7.54E-01
Y 94	1.07E+01	1.46E+01	1.88E+00	2.42E-01	3.12E-02	5.18E-04	1.11E-06	2.38E-09	5.09E-12	1.11E-14	6.16E-16
Y 95	4.53E+01	4.27E+00	9.40E-02	2.07E-03	4.57E-05	2.22E-08	2.37E-13	2.54E-18	2.71E-23	2.89E-28	3.10E-33
ZR 95	1.70E-04	2.22E-02	2.27E-02	2.27E-02	2.27E-02	2.27E-02	2.27E-02	2.26E-02	2.26E-02	2.25E-02	2.25E-02
NB 95	1.89E-11	1.37E-05	3.20E-05	5.03E-05	6.86E-05	1.05E-04	1.60E-04	2.15E-04	2.69E-04	3.23E-04	3.77E-04
ZR 97	4.03E-01	1.75E+00	1.68E+00	1.61E+00	1.55E+00	1.43E+00	1.26E+00	1.12E+00	9.91E-01	8.73E-01	7.76E-01
NB 97M	2.07E-03	1.68E+00	1.61E+00	1.55E+00	1.49E+00	1.37E+00	1.21E+00	1.07E+00	9.49E-01	8.38E-01	7.41E-01
NB 97	2.02E-01	8.80E-01	1.24E+00	1.41E+00	1.48E+00	1.48E+00	1.34E+00	1.20E+00	1.06E+00	9.35E-01	8.32E-01
NB 98	2.25E+00	9.95E-01	4.40E-01	1.95E-01	8.62E-02	1.69E-02	1.46E-03	1.26E-04	1.10E-05	9.50E-07	8.18E-08
MO 99	1.17E-03	4.81E-01	4.76E-01	4.71E-01	4.66E-01	4.57E-01	4.43E-01	4.29E-01	4.16E-01	4.04E-01	3.91E-01
TC 99M	1.08E-08	4.59E-02	8.61E-02	1.22E-01	1.53E-01	2.04E-01	2.59E-01	2.94E-01	3.16E-01	3.27E-01	3.33E-01
MO101	1.58E+02	7.15E+01	4.15E+00	2.41E-01	1.40E-02	4.68E-05	9.09E-09	1.77E-12	3.44E-16	6.69E-20	1.30E-23
TC101	6.69E+00	2.01E+02	2.19E+01	1.80E+00	1.31E-01	5.91E-04	1.48E-07	3.31E-11	7.02E-15	1.44E-18	2.92E-22
MO102	1.25E+03	2.86E+01	6.50E-01	1.49E-02	3.39E-04	1.76E-07	2.09E-12	2.48E-17	2.94E-22	3.49E-27	4.15E-32
TC102M	8.05E-01	2.42E+01	5.54E-01	1.26E-02	2.88E-04	1.49E-07	1.77E-12	2.10E-17	2.49E-22	2.95E-27	3.51E-32
TC102	3.77E+03	1.44E+01	3.28E-01	7.46E-03	1.71E-04	8.89E-08	1.06E-12	1.25E-17	1.49E-22	1.76E-27	2.09E-32
RU103	8.24E-05	1.91E-01	1.91E-01	1.91E-01	1.91E-01	1.90E-01	1.90E-01	1.90E-01	1.89E-01	1.89E-01	1.88E-01
RH103M	5.49E-09	9.88E-02	1.46E-01	1.70E-01	1.81E-01	1.88E-01	1.90E-01	1.90E-01	1.89E-01	1.89E-01	1.89E-01
TC104	6.51E+01	4.67E+01	4.67E+00	4.63E-01	4.58E-02	4.51E-04	4.40E-07	4.30E-10	4.20E-13	4.11E-16	4.01E-19
RU105	4.63E-01	1.60E+01	1.37E+01	1.17E+01	1.00E+01	7.34E+00	4.60E+00	2.87E+00	1.80E+00	1.13E+00	7.06E-01
RH105M	3.05E-03	1.61E+01	1.37E+01	1.18E+01	1.00E+01	7.37E+00	4.60E+00	2.88E+00	1.81E+00	1.13E+00	7.06E-01
RH105	5.00E-09	3.26E-01	6.05E-01	8.35E-01	1.03E+00	1.31E+00	1.57E+00	1.69E+00	1.72E+00	1.71E+00	1.66E+00
RU106	3.71E-04	7.03E-03	7.03E-03	7.03E-03	7.03E-03	7.03E-03	7.03E-03	7.03E-03	7.03E-03	7.03E-03	7.03E-03
RH106	4.02E-06	7.03E-03	7.03E-03	7.03E-03	7.03E-03	7.03E-03	7.03E-03	7.03E-03	7.03E-03	7.03E-03	7.03E-03
RH107	8.12E-02	1.10E+01	1.67E+00	2.52E-01	3.80E-02	8.66E-04	2.98E-06	1.03E-08	3.54E-11	1.21E-14	1.20E-17
PD107M	1.69E-04	2.24E+00	3.39E-01	5.12E-02	7.73E-03	1.76E-04	6.07E-07	2.09E-09	7.20E-12	2.48E-14	8.48E-17

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	1.08E-02	8.97E-01	8.53E-01	8.08E-01	7.68E-01	6.93E-01	5.96E-01	5.10E-01	4.38E-01	3.75E-01	3.22E-01
AG109M	6.24E-05	8.97E-01	8.53E-01	8.10E-01	7.70E-01	6.95E-01	5.96E-01	5.10E-01	4.38E-01	3.75E-01	3.22E-01
PD111M	1.67E+00	1.47E+00	1.30E+00	1.15E+00	1.01E+00	7.85E-01	5.37E-01	3.68E-01	2.52E-01	1.73E-01	1.18E-01
PD111	5.94E-01	1.07E+00	1.03E+00	9.16E-01	8.10E-01	6.29E-01	4.32E-01	2.96E-01	2.03E-01	1.39E-01	9.53E-02
AG111M	4.72E-03	1.45E+00	1.36E+00	1.22E+00	1.07E+00	8.29E-01	5.66E-01	3.88E-01	2.66E-01	1.83E-01	1.25E-01
AG111	1.68E-09	4.98E-03	1.05E-02	1.54E-02	1.98E-02	2.69E-02	3.46E-02	3.96E-02	4.29E-02	4.50E-02	4.62E-02
PD112	4.93E-01	4.78E-01	4.62E-01	4.47E-01	4.33E-01	4.04E-01	3.67E-01	3.32E-01	3.01E-01	2.72E-01	2.47E-01
AG112	1.49E-05	9.46E-02	1.67E-01	2.24E-01	2.66E-01	3.19E-01	3.50E-01	3.49E-01	3.32E-01	3.10E-01	2.86E-01
AG113	6.46E-03	1.38E+00	1.21E+00	1.06E+00	9.33E-01	7.17E-01	4.86E-01	3.28E-01	2.21E-01	1.49E-01	1.01E-01
AG115	2.65E+00	2.84E+00	3.54E-01	4.42E-02	5.54E-03	8.66E-05	1.69E-07	3.31E-10	6.40E-13	6.36E-162	5.90E-16
CD115M	2.17E-08	5.77E-04	6.49E-04	6.57E-04	6.57E-04	6.57E-04	6.55E-04	6.55E-04	6.53E-04	6.51E-04	6.51E-04
CD115	8.38E-06	1.58E-01	1.70E-01	1.70E-01	1.67E-01	1.63E-01	1.57E-01	1.51E-01	1.45E-01	1.40E-01	1.34E-01
IN115M	1.04E-10	1.74E-02	3.88E-02	5.75E-02	7.33E-02	9.78E-02	1.21E-01	1.33E-01	1.39E-01	1.40E-01	1.39E-01
CD117	1.87E-01	3.11E+00	2.34E+00	1.75E+00	1.31E+00	7.36E-01	3.09E-01	1.30E-01	5.48E-02	2.30E-02	9.68E-03
IN117M	8.98E-06	1.08E+00	1.57E+00	1.70E+00	1.64E+00	1.29E+00	7.40E-01	3.79E-01	1.82E-01	8.43E-02	3.81E-02
IN117	3.61E-10	1.97E-01	4.77E-01	6.64E-01	7.40E-01	6.81E-01	4.34E-01	2.32E-01	1.15E-01	5.43E-02	2.50E-02
CD118	1.25E+01	5.34E+00	2.29E+00	9.76E-01	4.18E-01	7.65E-02	6.00E-03	4.69E-04	3.69E-05	2.89E-06	2.27E-07
IN118	8.25E-01	5.34E+00	2.29E+00	9.78E-01	4.18E-01	7.67E-02	6.00E-03	4.71E-04	3.69E-05	2.89E-06	2.27E-07
CD119	3.12E+01	4.86E-01	7.58E-03	1.19E-04	1.85E-06	4.53E-10	1.73E-15	6.60E-21	2.51E-26	9.60E-32	3.67E-37
IN119M	4.70E-02	5.25E+00	5.72E-01	5.77E-02	5.74E-03	5.65E-05	5.51E-08	5.39E-11	5.25E-14	5.14E-17	5.02E-20
IN119	2.32E+00	2.77E-01	3.21E-02	3.26E-03	3.26E-04	3.19E-06	3.12E-09	3.05E-12	2.98E-15	2.91E-18	2.84E-21
SN121	3.87E-03	3.99E-01	3.87E-01	3.78E-01	3.69E-01	3.51E-01	3.24E-01	3.01E-01	2.78E-01	2.57E-01	2.39E-01
SN123M	1.91E+00	3.57E+00	1.27E+00	4.48E-01	1.58E-01	1.98E-02	8.74E-04	3.87E-05	1.71E-06	7.56E-08	3.34E-09
SN123	1.79E-05	1.88E-03	1.88E-03	1.88E-03	1.88E-03	1.88E-03	1.88E-03	1.88E-03	1.88E-03	1.88E-03	1.88E-03
SN125	4.08E-02	4.07E-02	4.06E-02	4.05E-02	4.03E-02	4.01E-02	3.98E-02	3.93E-02	3.90E-02	3.86E-02	3.83E-02
SB125	2.45E-04	2.46E-04	2.47E-04	2.48E-04	2.49E-04	2.52E-04	2.56E-04	2.59E-04	2.62E-04	2.65E-04	2.69E-04
SB126	5.47E-03	5.45E-03	5.44E-03	5.44E-03	5.42E-03	5.39E-03	5.36E-03	5.32E-03	5.28E-03	5.24E-03	5.21E-03
SN127	5.99E+00	4.30E+00	3.09E+00	2.23E+00	1.60E+00	8.26E-01	3.07E-01	1.14E-01	4.23E-02	1.57E-02	5.85E-03
SB127	6.99E-02	2.41E-01	2.67E-01	2.84E-01	2.97E-01	3.09E-01	3.14E-01	3.11E-01	3.06E-01	2.99E-01	2.94E-01
TE127	3.94E-02	4.91E-02	5.97E-02	7.08E-02	8.19E-02	1.03E-01	1.31E-01	1.54E-01	1.71E-01	1.84E-01	1.93E-01
SN128	3.83E+01	1.89E+01	9.36E+00	4.63E+00	2.29E+00	5.58E-01	6.74E-02	8.13E-03	9.81E-04	1.19E-04	1.43E-05
SB128M	1.95E-02	2.16E+01	1.12E+01	5.52E+00	2.72E+00	6.67E-01	8.03E-02	9.70E-03	1.17E-03	1.41E-04	1.71E-05
SB128	1.62E+00	1.56E+00	1.46E+00	1.37E+00	1.28E+00	1.10E+00	8.76E-01	6.95E-01	5.52E-01	4.38E-01	3.48E-01
SN129M	2.21E+01	1.10E+01	5.52E+00	2.76E+00	1.38E+00	3.45E-01	4.31E-02	5.39E-03	6.74E-04	8.42E-05	1.05E-05
SN129	1.47E+02	1.44E+00	1.43E-02	1.41E-04	1.38E-06	1.34E-10	1.28E-16	1.22E-22	1.16E-28	1.11E-34	1.06E-40
SB129	8.28E+00	1.39E+01	1.30E+01	1.16E+01	1.02E+01	7.61E+00	4.74E+00	2.93E+00	1.81E+00	1.12E+00	6.88E-01
TE129M	1.57E-07	1.73E-03	3.57E-03	5.24E-03	6.74E-03	9.13E-03	1.16E-02	1.30E-02	1.40E-02	1.45E-02	1.49E-02
TE129	5.96E+00	8.20E+00	9.60E+00	9.97E+00	9.60E+00	7.95E+00	5.29E+00	3.34E+00	2.08E+00	1.29E+00	7.97E-01
SB130M	7.23E-01	1.36E+00	3.58E-03	9.41E-06	2.48E-08	1.71E-13	3.11E-21	5.66E-29	1.03E-36	1.87E-44	3.39E-52
SB130	1.24E+02	3.75E+01	1.07E+01	3.02E+00	8.54E-01	6.87E-02	1.57E-03	3.57E-05	8.15E-07	1.86E-08	4.24E-10

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	3.45E-02	3.26E-02	3.09E-02	2.92E-02	2.76E-02	2.47E-02	2.08E-02	1.76E-02	1.49E-02	1.26E-02	1.07E-02	1.07E-02
SB131	2.58E+02	6.75E+01	1.10E+01	1.81E+00	2.97E-01	8.00E-03	3.52E-05	1.56E-07	6.85E-10	3.02E-12	1.51E-14	1.51E-14
TE131M	1.24E-04	6.50E-01	7.42E-01	7.42E-01	7.29E-01	6.96E-01	6.49E-01	6.06E-01	5.66E-01	5.28E-01	4.92E-01	4.92E-01
TE131	1.14E+02	1.24E+02	4.05E+01	1.05E+01	2.56E+00	2.40E-01	1.19E-01	1.10E-01	1.03E-01	9.63E-02	8.97E-02	8.97E-02
I131	1.66E-02	5.76E-01	8.48E-01	9.30E-01	9.47E-01	9.55E-01	9.55E-01	9.47E-01	9.47E-01	9.38E-01	9.38E-01	9.38E-01
TE132	1.30E+00	3.15E+00	3.12E+00	3.09E+00	3.06E+00	3.01E+00	2.93E+00	2.85E+00	2.78E+00	2.70E+00	2.63E+00	2.63E+00
I132	3.18E+00	3.17E+00	3.17E+00	3.15E+00	3.13E+00	3.09E+00	3.02E+00	2.94E+00	2.86E+00	2.79E+00	2.72E+00	2.72E+00
TE133M	1.59E-01	5.51E+01	2.40E+01	1.04E+01	4.54E+00	8.62E-01	7.10E-02	5.85E-03	4.83E-04	3.98E-05	3.28E-06	3.28E-06
TE133	8.93E+02	5.06E+01	5.63E+00	1.86E+00	7.87E-01	1.49E-01	1.23E-02	1.01E-03	8.40E-05	6.91E-06	5.70E-07	5.70E-07
I133	1.38E+00	1.49E+01	1.61E+01	1.61E+01	1.58E+01	1.50E+01	1.36E+01	1.23E+01	1.11E+01	1.01E+01	9.15E+00	9.15E+00
XE133M	5.89E-08	3.35E-03	8.09E-03	1.29E-02	1.76E-02	2.65E-02	3.84E-02	4.86E-02	5.73E-02	6.48E-02	7.10E-02	7.10E-02
XE133	1.03E-06	5.85E-02	1.42E-01	2.27E-01	3.12E-01	4.72E-01	6.92E-01	8.85E-01	1.06E+00	1.21E+00	1.35E+00	1.35E+00
TE134	2.72E+02	1.26E+02	4.70E+01	1.75E+01	6.48E+00	8.99E-01	4.59E-02	2.35E-03	1.21E-04	6.19E-06	3.17E-07	3.17E-07
I134	1.25E+02	1.67E+02	1.17E+02	6.85E+01	3.68E+01	9.34E+00	1.03E+00	1.05E-01	1.03E-02	9.84E-04	9.34E-05	9.34E-05
I135	2.30E+01	4.06E+01	3.66E+01	3.30E+01	2.98E+01	2.42E+01	1.77E+01	1.30E+01	9.54E+00	7.02E+00	5.13E+00	5.13E+00
XE135M	2.55E-03	1.17E+01	1.14E+01	1.03E+01	9.27E+00	7.55E+00	5.54E+00	4.06E+00	2.98E+00	2.19E+00	1.60E+00	1.60E+00
XE135	2.66E+00	5.25E+00	7.68E+00	9.67E+00	1.13E+01	1.35E+01	1.50E+01	1.50E+01	1.43E+01	1.30E+01	1.17E+01	1.17E+01
CS136	8.21E-03	8.18E-03	8.17E-03	8.15E-03	8.13E-03	8.09E-03	8.04E-03	7.98E-03	7.93E-03	7.88E-03	7.83E-03	7.83E-03
CS137	1.15E-04	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03
BA137M	2.42E-07	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03
XE138	9.26E+02	7.97E+01	6.93E+00	6.00E-01	5.20E-02	3.90E-04	2.54E-07	1.64E-10	1.07E-13	6.95E-17	4.52E-20	4.52E-20
CS138	1.38E+02	2.32E+02	8.04E+01	2.36E+01	6.62E+00	5.04E-01	1.05E-02	2.18E-04	4.52E-06	9.41E-08	1.95E-09	1.95E-09
CS139	8.13E+02	2.59E+01	3.25E-01	4.09E-03	5.13E-05	8.05E-09	1.60E-14	3.16E-20	6.27E-26	1.24E-31	2.45E-37	2.45E-37
BA139	1.50E+01	1.67E+02	1.03E+02	6.27E+01	3.79E+01	1.39E+01	3.09E+00	6.85E-01	1.52E-01	3.38E-02	7.50E-03	7.50E-03
BA140	1.21E-01	7.53E-01	7.53E-01	7.47E-01	7.47E-01	7.41E-01	7.41E-01	7.36E-01	7.30E-01	7.24E-01	7.18E-01	7.18E-01
LA140	2.87E-07	1.29E-02	2.55E-02	3.79E-02	5.00E-02	7.36E-02	1.07E-01	1.39E-01	1.69E-01	1.97E-01	2.24E-01	2.24E-01
BA141	1.26E+02	3.81E+01	3.78E+00	3.75E-01	3.72E-02	3.69E-04	3.60E-07	3.51E-10	3.42E-13	3.36E-16	3.27E-19	3.27E-19
LA141	1.16E+00	2.46E+01	2.30E+01	1.95E+01	1.63E+01	1.14E+01	6.71E+00	3.93E+00	2.31E+00	1.35E+00	7.94E-01	7.94E-01
CE141	1.44E-07	1.60E-02	3.75E-02	5.63E-02	7.22E-02	9.68E-02	1.20E-01	1.34E-01	1.41E-01	1.46E-01	1.48E-01	1.48E-01
BA142	8.29E+01	3.30E+00	7.52E-02	1.71E-03	3.91E-05	2.03E-08	2.41E-13	2.86E-18	3.39E-23	4.03E-28	4.78E-33	4.78E-33
LA142	1.90E+00	1.32E+01	8.71E+00	5.54E+00	3.53E+00	1.43E+00	3.68E-01	9.48E-02	2.44E-02	6.29E-03	1.62E-03	1.62E-03
LA143	3.20E+01	6.25E+00	3.20E-01	1.65E-02	8.46E-04	2.21E-06	2.99E-10	4.03E-14	5.42E-18	7.32E-22	9.88E-26	9.88E-26
CE143	1.28E-02	8.16E-01	8.46E-01	8.23E-01	8.08E-01	7.78E-01	7.29E-01	6.85E-01	6.43E-01	6.03E-01	5.66E-01	5.66E-01
PR143	3.74E-09	1.25E-03	3.02E-03	4.77E-03	6.48E-03	9.80E-03	1.44E-02	1.89E-02	2.29E-02	2.67E-02	3.02E-02	3.02E-02
CE144	5.19E-04	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.71E-03	3.71E-03	3.71E-03	3.71E-03	3.71E-03
PR144	1.42E-07	3.38E-03	3.69E-03	3.71E-03	3.72E-03	3.72E-03	3.72E-03	3.72E-03	3.71E-03	3.71E-03	3.71E-03	3.71E-03
PR145	2.04E-02	3.00E+00	2.67E+00	2.38E+00	2.12E+00	1.68E+00	1.18E+00	8.36E-01	5.92E-01	4.18E-01	2.96E-01	2.96E-01
CE146	5.78E+01	2.97E+00	1.52E-01	7.77E-03	4.00E-04	1.05E-06	1.42E-10	1.91E-14	2.57E-18	3.47E-22	4.68E-26	4.68E-26
PR146	1.20E+00	1.04E+01	2.36E+00	4.43E-01	7.97E-02	2.51E-03	1.38E-05	7.63E-08	4.23E-10	2.34E-12	1.28E-14	1.28E-14
PR147	6.80E+00	1.97E+00	6.14E-02	1.92E-03	6.00E-05	5.86E-08	1.79E-12	5.46E-17	1.67E-21	5.09E-26	1.55E-30	1.55E-30

1

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	2.43E-06	4.57E-02	4.69E-02	4.69E-02	4.67E-02	4.65E-02	4.62E-02	4.58E-02	4.54E-02	4.51E-02	4.47E-02	
ND149	3.15E+00	2.14E+00	1.46E+00	9.94E-01	6.72E-01	3.12E-01	9.82E-02	3.10E-02	9.76E-03	3.07E-03	9.70E-04	
PM149	4.38E-04	3.43E-02	5.69E-02	7.20E-02	8.15E-02	9.16E-02	9.52E-02	9.34E-02	9.10E-02	8.75E-02	8.45E-02	
PM150	3.59E-02	2.77E-02	2.15E-02	1.66E-02	1.28E-02	7.68E-03	3.56E-03	1.65E-03	7.63E-04	3.53E-04	1.63E-04	
ND151	1.11E+01	3.47E-01	1.09E-02	3.39E-04	1.06E-05	1.04E-08	3.16E-13	9.67E-18	2.94E-22	8.97E-27	2.75E-31	
PM151	7.04E-03	8.23E-02	8.28E-02	8.08E-02	7.88E-02	7.49E-02	6.94E-02	6.44E-02	6.00E-02	5.55E-02	5.16E-02	
PM152	1.74E+01	1.70E-02	1.66E-05	1.62E-08	1.58E-11	1.51E-17	1.41E-26	1.31E-35	1.22E-44	1.14E-53	1.06E-62	
SM153	2.32E-02	2.29E-02	2.26E-02	2.22E-02	2.19E-02	2.13E-02	2.03E-02	1.94E-02	1.86E-02	1.78E-02	1.71E-02	
SM155	2.42E+00	3.98E-01	6.52E-02	1.07E-02	1.75E-03	4.71E-05	2.08E-07	9.14E-10	4.03E-12	1.80E-14	4.41E-17	
EU155	1.78E-06	5.08E-05	5.88E-05	6.01E-05	6.03E-05	6.03E-05	6.03E-05	6.03E-05	6.03E-05	6.03E-05	6.03E-05	
SM156	1.48E-02	1.37E-02	1.28E-02	1.19E-02	1.10E-02	9.50E-03	7.62E-03	6.11E-03	4.90E-03	3.92E-03	3.14E-03	
EU156	4.33E-05	7.06E-05	9.59E-05	1.19E-04	1.41E-04	1.80E-04	2.29E-04	2.65E-04	2.97E-04	3.20E-04	3.37E-04	
EU157	2.32E-03	7.69E-03	7.34E-03	7.01E-03	6.68E-03	6.11E-03	5.33E-03	4.66E-03	4.06E-03	3.53E-03	3.08E-03	
EU158	5.48E-02	2.22E-02	8.97E-03	3.64E-03	1.47E-03	2.41E-04	1.61E-05	1.06E-06	7.07E-08	4.69E-09	3.12E-10	
EU159	7.26E-02	7.21E-03	7.15E-04	7.10E-05	7.04E-06	6.94E-08	6.78E-11	6.62E-14	6.46E-17	6.32E-20	6.17E-23	
GD159	3.11E-04	1.36E-03	1.42E-03	1.37E-03	1.32E-03	1.22E-03	1.09E-03	9.73E-04	8.66E-04	7.71E-04	6.88E-04	
TB161	5.23E-06	3.76E-05	3.74E-05	3.73E-05	3.72E-05	3.68E-05	3.64E-05	3.59E-05	3.54E-05	3.51E-05	3.46E-05	
TOTAL	1.03E+04	2.28E+03	9.24E+02	5.49E+02	3.86E+02	2.43E+02	1.59E+02	1.18E+02	9.25E+01	7.55E+01	6.32E+01	

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	5.77E-05	5.70E-05	5.62E-05	5.41E-05	5.07E-05	4.45E-05	3.91E-05	3.01E-05	1.57E-05	4.28E-06	1.16E-06	
NA 24	4.09E-02	1.35E-02	4.46E-03	1.60E-04	6.25E-07	9.55E-12	1.46E-16	3.39E-26	0.	0.	0.	
MA 54	1.87E-05	1.85E-05	1.85E-05	1.82E-05	1.80E-05	1.77E-05	1.74E-05	1.65E-05	1.48E-05	1.17E-05	9.37E-06	
FE 55	4.84E-05	4.84E-05	4.84E-05	4.82E-05	4.80E-05	4.78E-05	4.73E-05	4.67E-05	4.49E-05	4.19E-05	3.88E-05	
FE 59	8.29E-05	8.16E-05	8.04E-05	7.68E-05	7.10E-05	6.10E-05	5.22E-05	3.84E-05	1.78E-05	3.80E-06	8.16E-07	
CO 57	2.36E-07	2.36E-07	2.34E-07	2.34E-07	2.31E-07	2.24E-07	2.19E-07	2.08E-07	1.84E-07	1.42E-07	1.10E-07	
CO 58	1.71E-06	1.70E-06	1.68E-06	1.63E-06	1.56E-06	1.41E-06	1.28E-06	1.05E-06	6.49E-07	2.45E-07	9.26E-08	
CO 60	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.16E-06	9.16E-06	9.11E-06	9.05E-06	8.83E-06	8.56E-06	8.23E-06	
CU 64	2.70E-01	7.36E-02	2.01E-02	4.08E-04	6.12E-07	1.39E-12	3.15E-18	1.62E-29	0.	0.	0.	
CU 67	8.53E-06	6.50E-06	4.96E-06	2.21E-06	5.75E-07	3.88E-08	2.62E-09	1.19E-11	1.66E-17	0.	0.	
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
PB203	4.08E-04	2.96E-04	1.13E-04	2.30E-05	9.45E-07	3.87E-08	6.51E-11	7.61E-18	0.	0.	0.	
U237	4.44E-02	4.00E-02	3.61E-02	2.66E-02	1.59E-02	5.69E-03	2.04E-03	2.61E-04	1.54E-06	1.65E-10	1.12E-10	
U240	3.70E-01	1.14E-01	3.50E-02	1.01E-03	2.79E-06	2.09E-11	1.57E-16	8.89E-27	0.	0.	0.	
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
NP239	7.72E-04	1.18E+00	8.78E-01	3.62E-01	8.29E-02	4.34E-03	2.27E-04	6.23E-07	2.45E-13	5.85E-23	5.85E-23	
NP240M	5.86E-04	1.15E-01	3.53E-02	1.02E-03	2.81E-06	2.11E-11	1.59E-16	8.96E-27	0.	0.	0.	
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CM242	2.39E-06	2.38E-06	2.37E-06	2.34E-06	2.29E-06	2.19E-06	2.11E-06	1.93E-06	1.57E-06	1.02E-06	6.69E-07	
GE 77	8.07E-03	5.08E-03	1.16E-03	1.41E-05	8.94E-09	3.62E-15	1.46E-21	2.38E-34	0.	0.	0.	
AS 77	8.34E-05	1.23E-02	8.91E-03	2.58E-03	3.02E-04	4.10E-06	5.56E-08	1.03E-11	4.76E-21	1.02E-39	2.19E-58	
SE 77M	3.29E-09	3.71E-05	2.67E-05	7.75E-06	9.03E-07	1.23E-08	1.67E-10	3.08E-14	1.43E-23	3.05E-42	6.56E-61	
AS 78	1.90E-02	1.69E-04	4.96E-09	4.19E-23	0.	0.	0.	0.	0.	0.	0.	
BR 82	6.40E-04	3.99E-04	2.49E-04	6.06E-05	5.75E-06	5.16E-08	4.63E-10	3.74E-14	2.18E-24	7.50E-45	2.55E-65	
BR 83	5.08E-01	1.34E-02	1.35E-05	1.37E-14	1.40E-29	0.	0.	0.	0.	0.	0.	
KR 83M	2.63E-05	5.85E-02	6.65E-05	5.98E-14	6.13E-29	0.	0.	0.	0.	0.	0.	
KR 85M	6.66E-03	3.80E-01	8.66E-03	1.03E-07	6.34E-16	2.41E-32	9.13E-49	0.	0.	0.	0.	
KR 85	6.89E-06	1.81E-04	1.84E-04	1.84E-04	1.84E-04	1.84E-04	1.84E-04	1.83E-04	1.82E-04	1.78E-04	1.75E-04	
KR 87	1.08E+02	2.13E-04	4.21E-10	3.26E-27	0.	0.	0.	0.	0.	0.	0.	
KR 88	6.26E+01	1.65E-01	4.32E-04	7.86E-12	9.89E-25	0.	0.	0.	0.	0.	0.	
RD 88	1.59E+01	1.84E-01	4.84E-04	8.79E-12	1.10E-24	0.	0.	0.	0.	0.	0.	
SR 89	5.69E-06	1.70E-01	1.68E-01	1.61E-01	1.51E-01	1.32E-01	1.16E-01	8.90E-02	4.55E-02	1.20E-02	3.16E-03	
SR 90	1.12E-05	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.14E-03	1.14E-03	1.13E-03	
Y 90	1.66E-11	2.63E-04	4.65E-04	8.36E-04	1.07E-03	1.14E-03	1.15E-03	1.15E-03	1.14E-03	1.14E-03	1.13E-03	
SR 91	1.15E+00	4.13E+00	7.40E-01	4.24E-03	7.76E-07	2.63E-14	8.92E-22	1.02E-36	0.	0.	0.	

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
Y 91M	7.76E-05	2.67E+00	4.77E-01	2.74E-03	5.04E-07	1.70E-14	5.75E-22	6.56E-37	0.	0.	0.
Y 91	3.18E-08	1.27E-01	1.50E-01	1.50E-01	1.41E-01	1.26E-01	1.12E-01	8.85E-02	4.90E-02	1.51E-02	4.64E-03
SR 92	1.89E+00	2.35E-02	5.07E-05	5.10E-13	2.39E-26	0.	0.	0.	0.	0.	0.
Y 92	8.70E-02	2.47E-01	2.74E-03	2.11E-09	1.23E-19	4.20E-40	1.44E-60	0.	0.	0.	0.
Y 93	9.02E-02	6.10E-01	1.19E-01	8.94E-04	2.57E-07	2.12E-14	1.75E-21	1.20E-35	0.	0.	0.
ZR 95	1.70E-04	2.13E-02	2.10E-02	2.04E-02	1.93E-02	1.73E-02	1.56E-02	1.26E-02	7.39E-03	2.54E-03	8.73E-04
NB 95M	3.62E-12	7.20E-05	1.31E-04	2.51E-04	3.38E-04	3.57E-04	3.29E-04	2.67E-04	1.57E-04	5.39E-05	1.86E-05
NB 95	1.89E-11	4.11E-04	8.13E-04	1.95E-03	3.62E-03	6.24E-03	8.06E-03	1.00E-02	9.62E-03	4.63E-03	1.78E-03
ZR 97	4.03E-01	6.85E-01	2.58E-01	1.37E-02	1.03E-04	5.77E-09	3.24E-13	1.03E-21	5.79E-43	0.	0.
NB 97M	2.07E-03	6.58E-01	2.47E-01	1.32E-02	9.84E-05	5.54E-09	3.12E-13	9.84E-22	5.56E-43	0.	0.
NB 97	2.02E-01	6.88E-01	2.58E-01	1.37E-02	1.03E-04	6.22E-09	3.49E-13	1.11E-21	6.24E-43	0.	0.
MO 99	1.17E-03	3.79E-01	2.96E-01	1.40E-01	4.06E-02	3.39E-03	2.83E-04	1.97E-06	8.02E-12	1.32E-22	2.18E-33
TC 99M	1.08E-08	3.33E-01	2.81E-01	1.34E-01	3.88E-02	3.24E-03	2.70E-04	1.89E-06	7.65E-12	1.26E-22	2.08E-33
RU103	8.24E-05	1.88E-01	1.84E-01	1.75E-01	1.61E-01	1.35E-01	1.13E-01	7.98E-02	3.32E-02	5.76E-03	1.00E-03
RH103M	5.49E-09	1.88E-01	1.85E-01	1.75E-01	1.61E-01	1.35E-01	1.13E-01	7.88E-02	3.32E-02	5.76E-03	1.00E-03
RU105	4.63E-01	4.43E-01	1.04E-02	1.37E-07	1.00E-15	5.34E-32	2.86E-48	0.	0.	0.	0.
RH105M	3.05E-03	4.43E-01	1.04E-02	1.37E-07	1.00E-15	5.37E-32	2.87E-48	0.	0.	0.	0.
RH105	5.00E-09	1.60E+00	1.04E+00	2.60E-01	2.57E-02	2.49E-04	2.42E-06	2.29E-10	1.98E-20	1.49E-40	1.12E-60
RU106	3.71E-04	7.03E-03	7.00E-03	6.97E-03	6.91E-03	6.79E-03	6.63E-03	6.39E-03	5.81E-03	4.81E-03	3.99E-03
RH106	4.02E-06	7.03E-03	7.00E-03	6.97E-03	6.91E-03	6.79E-03	6.63E-03	6.39E-03	5.81E-03	4.81E-03	3.99E-03
PD109	1.08E-02	2.75E-01	8.02E-02	1.99E-03	4.19E-06	1.87E-11	8.33E-17	1.65E-27	0.	0.	0.
AG109M	6.24E-05	2.75E-01	8.04E-02	1.99E-03	4.21E-06	1.87E-11	8.33E-17	1.65E-27	0.	0.	0.
PD111M	1.67E+00	8.10E-02	3.94E-03	4.52E-07	1.22E-13	8.91E-27	6.54E-40	0.	0.	0.	0.
PD111	5.94E-01	6.54E-02	3.17E-03	3.63E-07	9.85E-14	7.17E-27	5.25E-40	0.	0.	0.	0.
AG111M	4.72E-03	8.54E-02	4.16E-03	4.78E-07	1.29E-13	9.47E-27	6.92E-40	0.	0.	0.	0.
AG111	1.68E-09	4.64E-02	4.46E-02	3.40E-02	2.14E-02	8.47E-03	3.36E-03	5.30E-04	5.22E-06	5.05E-10	4.90E-14
PD112	4.93E-01	2.24E-01	1.01E-01	9.41E-03	1.79E-04	6.49E-08	2.36E-11	3.10E-18	1.95E-35	0.	0.
AG112	1.49E-05	2.60E-01	1.20E-01	1.11E-02	2.12E-04	7.67E-08	2.78E-11	3.67E-18	2.30E-35	0.	0.
AG113	6.46E-03	6.83E-02	2.95E-03	2.40E-07	3.67E-14	8.59E-28	2.01E-41	0.	0.	0.	0.
CD115M	2.17E-08	6.28E-04	6.17E-04	5.88E-04	5.44E-04	4.61E-04	3.94E-04	2.84E-04	1.27E-04	2.53E-05	5.06E-06
CD115	8.38E-06	1.26E-01	9.25E-02	3.64E-02	7.69E-03	3.43E-04	1.53E-05	3.05E-08	5.39E-15	1.69E-28	5.29E-42
IN115M	1.04E-10	1.33E-01	1.01E-01	3.98E-02	8.38E-03	3.75E-04	1.67E-05	3.33E-08	5.90E-15	1.85E-28	5.77E-42
CD117	1.87E-01	4.07E-03	3.96E-06	3.70E-15	3.29E-30	0.	0.	0.	0.	0.	0.
IN117M	8.98E-06	1.69E-02	1.96E-05	1.89E-14	1.68E-29	0.	0.	0.	0.	0.	0.
IN117	3.61E-10	1.11E-02	1.32E-05	1.28E-14	1.13E-29	0.	0.	0.	0.	0.	0.
SN121	3.87E-03	2.21E-01	1.19E-01	1.88E-02	8.61E-04	1.82E-06	3.83E-09	1.71E-14	7.13E-28	0.	0.
SN123	1.79E-05	1.88E-03	1.86E-03	1.83E-03	1.78E-03	1.68E-03	1.59E-03	1.43E-03	1.08E-03	6.21E-04	3.57E-04
SN125	4.08E-02	3.80E-02	3.53E-02	2.83E-02	1.95E-02	9.35E-03	4.47E-03	1.02E-03	2.56E-05	1.61E-08	1.01E-11
SB125	2.45E-04	2.72E-04	2.97E-04	3.64E-04	4.46E-04	5.39E-04	5.81E-04	6.06E-04	5.94E-04	5.54E-04	5.17E-04
SB126	5.47E-03	5.18E-03	4.90E-03	4.15E-03	3.14E-03	1.80E-03	1.04E-03	3.42E-04	2.14E-05	1.04E-07	2.09E-08

SMOKY
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.100
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
SN127	5.99E+00	2.17E-03	7.88E-07	3.76E-17	2.36E-34	0.	0.	0.	0.	0.	0.
SB127	6.99E-02	2.87E-01	2.40E-01	1.40E-01	5.74E-02	9.59E-03	1.60E-03	4.48E-05	5.85E-09	9.98E-17	1.70E-24
TE127M	5.65E-10	4.38E-04	8.01E-04	1.55E-03	2.15E-03	2.37E-03	2.28E-03	2.03E-03	1.48E-03	7.80E-04	4.13E-04
TE127	3.94E-02	2.05E-01	2.02E-01	1.23E-01	5.19E-02	1.07E-02	3.65E-03	2.04E-03	1.46E-03	7.72E-04	4.08E-04
SB128	1.62E+00	2.75E-01	4.35E-02	1.70E-04	1.65E-08	1.55E-16	1.45E-24	1.28E-40	0.	0.	0.
SB129	8.28E+00	4.24E-01	8.85E-03	8.06E-08	3.20E-16	5.06E-33	7.98E-50	0.	0.	0.	0.
TE129M	1.57E-07	1.65E-02	1.65E-02	1.56E-02	1.41E-02	1.15E-02	9.32E-03	6.20E-03	2.24E-03	2.92E-04	3.79E-05
TE129	5.96E+00	4.97E-01	2.07E-02	9.97E-03	8.99E-03	7.33E-03	5.98E-03	3.98E-03	1.43E-03	1.87E-04	2.43E-05
I130	3.45E-02	9.01E-03	2.36E-03	4.22E-05	5.15E-08	7.67E-14	1.14E-19	2.55E-31	0.	0.	0.
TE131M	1.24E-04	4.35E-01	2.49E-01	4.72E-02	2.96E-03	1.15E-05	4.51E-08	6.88E-13	6.26E-25	0.	0.
TE131	1.14E+02	7.93E-02	4.55E-02	8.64E-03	5.39E-04	2.11E-06	8.22E-09	1.26E-13	1.14E-25	0.	0.
I131	1.66E-02	8.97E-01	8.48E-01	6.82E-01	4.49E-01	1.89E-01	8.02E-02	1.43E-02	1.93E-04	3.52E-08	6.42E-12
XE131M	4.51E-11	4.16E-04	7.89E-04	1.65E-03	2.35E-03	2.33E-03	1.73E-03	7.14E-04	4.76E-05	1.42E-07	4.02E-10
TE132	1.30E+00	2.57E+00	2.07E+00	1.09E+00	3.76E-01	4.46E-02	5.29E-03	7.42E-05	1.74E-09	9.50E-19	5.18E-28
I132	3.18E+00	2.65E+00	2.14E+00	1.12E+00	3.88E-01	4.60E-02	5.44E-03	7.65E-05	1.79E-09	9.74E-19	5.34E-28
I133	1.38E+00	7.72E+00	3.48E+00	3.23E-01	6.16E-03	2.23E-06	8.09E-10	1.07E-16	6.70E-34	0.	0.
XE133M	5.89E-08	7.28E-02	8.62E-02	5.06E-02	1.19E-02	5.58E-04	2.59E-05	5.63E-08	1.23E-14	5.89E-28	2.82E-41
XE133	1.03E-06	1.40E+00	1.88E+00	1.68E+00	9.15E-01	2.47E-01	6.65E-02	4.79E-03	6.67E-06	1.29E-11	2.51E-17
I135	2.30E+01	3.76E+00	3.14E-01	1.83E-04	7.42E-10	1.23E-20	2.01E-31	5.47E-53	0.	0.	0.
XE135M	2.55E-03	1.17E+00	9.80E-02	5.70E-05	2.32E-10	3.81E-21	6.29E-32	1.71E-53	0.	0.	0.
XE135	2.66E+00	1.01E+01	2.48E+00	1.42E-02	1.74E-06	2.44E-14	3.42E-22	6.76E-38	0.	0.	0.
CS136	8.21E-03	7.78E-03	7.37E-03	6.28E-03	4.82E-03	2.83E-03	1.66E-03	5.71E-04	3.97E-05	1.91E-07	9.27E-10
CS137	1.15E-04	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.24E-03	1.23E-03	1.22E-03	1.22E-03
BA137M	2.42E-07	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.14E-03	1.13E-03
BA139	1.50E+01	1.60E-03	9.45E-09	1.95E-24	0.	0.	0.	0.	0.	0.	0.
BA140	1.21E-01	7.13E-01	6.78E-01	5.75E-01	4.39E-01	2.55E-01	1.48E-01	5.03E-02	3.36E-03	1.49E-05	6.61E-08
LA140	2.87E-07	2.48E-01	3.99E-01	5.52E-01	4.91E-01	2.94E-01	1.71E-01	5.80E-02	3.86E-03	1.72E-05	7.64E-08
LA141	1.16E+00	4.61E-01	6.47E-03	1.79E-08	9.80E-18	2.92E-36	8.72E-55	0.	0.	0.	0.
CE141	1.44E-07	1.59E-01	1.58E-01	1.49E-01	1.33E-01	1.08E-01	8.69E-02	5.66E-02	1.94E-02	2.29E-03	2.70E-04
LA142	1.90E+00	4.17E-04	8.08E-09	5.94E-23	0.	0.	0.	0.	0.	0.	0.
CE143	1.28E-02	5.26E-01	3.18E-01	7.00E-02	5.63E-03	3.64E-05	2.36E-07	9.88E-12	1.11E-22	0.	0.
PR143	3.74E-09	3.37E-02	5.24E-02	6.76E-02	5.80E-02	3.53E-02	2.13E-02	7.71E-03	6.17E-04	3.91E-06	2.48E-08
CE144	5.19E-04	3.71E-03	3.69E-03	3.67E-03	3.62E-03	3.54E-03	3.45E-03	3.29E-03	2.91E-03	2.28E-03	1.79E-03
PR144	1.42E-07	3.71E-03	3.69E-03	3.67E-03	3.62E-03	3.54E-03	3.45E-03	3.29E-03	2.91E-03	2.28E-03	1.79E-03
PR145	2.04E-02	2.09E-01	1.29E-02	3.06E-06	2.79E-12	2.31E-24	1.92E-36	0.	0.	0.	0.
ND147	2.43E-06	4.08E-02	3.83E-02	3.18E-02	2.33E-02	1.25E-02	6.67E-03	1.92E-03	8.40E-05	1.64E-07	3.17E-10
PM147	6.73E-15	3.05E-05	5.91E-05	1.35E-04	2.33E-04	3.56E-04	4.21E-04	4.69E-04	4.73E-04	4.41E-04	4.10E-04
ND149	3.15E+00	3.05E-04	2.95E-08	2.69E-20	2.30E-40	0.	0.	0.	0.	0.	0.
PM149	4.38E-04	8.09E-02	5.93E-02	2.31E-02	4.83E-03	2.11E-04	9.16E-06	1.74E-08	2.75E-15	6.78E-29	1.69E-42
PM150	3.59E-02	7.57E-05	1.59E-07	1.50E-15	6.26E-29	0.	0.	0.	0.	0.	0.

1

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	7.04E-03	4.80E-02	2.65E-02	4.46E-03	2.29E-04	6.00E-07	1.58E-09	1.09E-14	1.37E-27	0.	0.	0.
SM153	2.32E-02	1.63E-02	1.15E-02	3.96E-03	6.73E-04	1.96E-05	5.68E-07	4.77E-10	9.85E-18	4.20E-33	1.78E-48	0.
SM156	1.48E-02	2.52E-03	4.31E-04	2.12E-06	3.05E-10	6.28E-18	1.30E-25	5.52E-41	0.	0.	0.	0.
EU155	1.78E-06	6.03E-05	6.02E-05	6.02E-05	6.01E-05	5.98E-05	5.96E-05	5.91E-05	5.80E-05	5.57E-05	5.35E-05	5.35E-05
EU156	4.33E-05	3.52E-04	3.90E-04	3.50E-04	2.78E-04	1.75E-04	1.10E-04	4.37E-05	4.33E-06	4.26E-08	4.20E-10	0.
EU157	2.32E-03	2.68E-03	9.01E-04	3.38E-05	1.42E-07	2.50E-12	4.43E-17	1.38E-26	0.	0.	0.	0.
GD159	3.11E-04	6.12E-04	2.44E-04	1.52E-05	1.50E-07	1.45E-11	1.40E-15	1.32E-23	1.13E-43	0.	0.	0.
TB161	5.23E-06	3.42E-05	3.09E-05	2.28E-05	1.38E-05	5.06E-06	1.85E-06	2.48E-07	1.64E-09	7.10E-14	3.09E-18	0.
TOTAL	3.84E+02	5.31E+01	2.23E+01	8.67E+00	4.38E+00	1.90E+00	1.13E+00	5.99E-01	2.37E-01	7.09E-02	3.14E-02	0.

1

SMOKY
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.100
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	5.77E-05	4.99E-07	4.64E-08	4.30E-09	3.46E-12	2.77E-15	2.07E-19	1.33E-25	0.	0.	0.	0.
MN 54	1.87E-05	8.06E-06	5.31E-06	3.49E-06	9.98E-07	2.85E-07	5.36E-08	4.38E-09	1.03E-12	3.72E-18	1.35E-23	0.
FE 59	8.29E-05	2.99E-07	1.79E-08	1.08E-09	2.34E-13	5.06E-17	6.59E-22	3.09E-29	0.	0.	0.	0.
CO 57	2.36E-07	9.31E-08	5.83E-08	3.66E-08	9.01E-09	2.22E-09	3.43E-11	2.08E-11	1.82E-15	1.49E-21	0.	0.
CO 58	1.71E-06	4.92E-08	8.35E-09	1.41E-09	6.89E-12	3.35E-14	2.77E-17	6.56E-22	2.51E-37	0.	0.	0.
CO 60	9.21E-06	8.07E-06	7.52E-06	7.03E-06	5.78E-06	4.75E-06	3.65E-06	2.46E-06	6.60E-07	9.16E-08	1.26E-08	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	4.44E-02	1.11E-10	1.08E-10	1.05E-10	9.81E-11	9.11E-11	8.28E-11	7.19E-11	4.47E-11	2.19E-11	1.08E-11	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	2.39E-06	5.07E-07	2.33E-07	1.07E-07	1.04E-08	1.02E-09	4.56E-11	4.31E-13	1.24E-17	1.15E-17	1.08E-17	0.
KR 85	6.89E-06	1.71E-04	1.66E-04	1.60E-04	1.46E-04	1.32E-04	1.16E-04	9.57E-05	5.06E-05	1.93E-05	7.38E-06	0.
SR 89	5.69E-06	1.33E-03	1.16E-04	1.02E-05	6.88E-09	4.65E-12	2.74E-16	1.25E-22	9.06E-44	0.	0.	0.
SR 90	1.12E-05	1.12E-03	1.11E-03	1.10E-03	1.06E-03	1.02E-03	9.67E-04	8.98E-04	7.02E-04	4.85E-04	3.35E-04	0.
Y 90	1.66E-11	1.12E-03	1.11E-03	1.10E-03	1.06E-03	1.02E-03	9.67E-04	8.98E-04	7.02E-04	4.85E-04	3.35E-04	0.
Y 91	3.18E-08	2.15E-03	2.50E-04	2.90E-05	4.55E-08	7.14E-11	1.31E-14	3.21E-20	6.48E-39	0.	0.	0.
ZR 95	1.70E-04	4.37E-04	6.24E-05	8.88E-06	2.59E-08	7.53E-11	3.12E-14	2.63E-19	3.22E-36	0.	0.	0.
NB 95M	3.62E-12	9.25E-06	1.32E-06	1.89E-07	5.48E-10	1.60E-12	6.61E-16	5.58E-21	6.84E-38	0.	0.	0.
NB 95	1.89E-11	9.40E-04	1.35E-04	1.92E-05	5.58E-08	1.62E-10	6.76E-14	5.71E-19	6.99E-36	0.	0.	0.
RU103	8.24E-05	3.20E-04	1.31E-05	5.39E-07	3.68E-11	2.52E-15	7.08E-21	3.33E-29	0.	0.	0.	0.
RH103M	5.49E-09	3.21E-04	1.31E-05	5.39E-07	3.68E-11	2.52E-15	7.08E-21	3.33E-29	0.	0.	0.	0.
RH106	3.71E-04	3.53E-03	2.50E-03	1.77E-03	6.30E-04	2.24E-04	5.63E-05	7.12E-06	7.18E-09	2.31E-13	7.42E-18	0.
SN123	4.02E-06	3.53E-03	2.50E-03	1.77E-03	6.30E-04	2.24E-04	5.63E-05	7.12E-06	7.18E-09	2.31E-13	7.42E-18	0.
SB125	1.79E-05	2.49E-04	9.02E-05	3.28E-05	1.57E-06	7.54E-08	1.31E-09	3.03E-12	4.86E-21	3.13E-34	2.01E-47	0.
TE125M	2.45E-04	4.94E-04	4.34E-04	3.82E-04	2.60E-04	1.77E-04	1.06E-04	4.89E-05	3.76E-06	8.01E-08	1.71E-09	0.
TE127M	6.60E-12	2.01E-04	1.79E-04	1.58E-04	1.08E-04	7.32E-05	4.38E-05	2.03E-05	1.56E-06	3.32E-08	7.06E-10	0.
TE127	5.65E-10	2.71E-04	8.47E-05	2.65E-05	8.15E-07	2.51E-08	2.41E-10	2.27E-13	1.86E-23	1.39E-38	1.04E-53	0.
CS137	3.94E-02	2.68E-04	8.37E-05	2.62E-05	8.05E-07	2.48E-08	2.38E-10	2.25E-13	1.84E-23	1.37E-38	1.03E-53	0.
BA137M	1.15E-04	1.21E-03	1.19E-03	1.18E-03	1.14E-03	1.10E-03	1.05E-03	9.82E-04	7.76E-04	5.51E-04	3.89E-04	0.
CE141	2.42E-07	1.13E-03	1.12E-03	1.11E-03	1.06E-03	1.03E-03	9.82E-04	9.20E-04	7.28E-04	5.15E-04	3.65E-04	0.
CE144	1.44E-07	6.20E-05	1.25E-06	2.50E-08	2.04E-13	1.66E-18	2.72E-25	1.81E-35	0.	0.	0.	0.
PR144	5.19E-04	1.52E-03	9.80E-04	6.25E-04	1.64E-04	4.32E-05	7.26E-06	5.01E-07	6.74E-11	1.06E-16	1.65E-22	0.
PM147	1.42E-07	1.52E-03	9.80E-04	6.25E-04	1.64E-04	4.32E-05	7.26E-06	5.01E-07	6.74E-11	1.06E-16	1.65E-22	0.
EU155	6.73E-15	3.91E-04	3.42E-04	3.00E-04	2.02E-04	1.36E-04	7.97E-05	3.62E-05	2.57E-06	4.86E-08	9.19E-10	0.
	1.78E-06	5.21E-05	4.84E-05	4.51E-05	3.63E-05	2.91E-05	2.17E-05	1.40E-05	3.28E-06	3.69E-07	4.15E-08	0.
TOTAL	8.55E-02	2.24E-02	1.35E-02	1.05E-02	6.67E-03	5.25E-03	4.46E-03	3.93E-03	2.97E-03	2.06E-03	1.43E-03	0.

APPENDIX 5
SMOKY EVENT

mR/hr

Page

Fraction of refractories present = 1.0

5-1

Fraction of refractories present = 0.5

5-11

Fraction of refractories present = 0.1

5-21

1

ZERO TIME 1.00E+00 2.00E+00 3.00E+00 4.00E+00 6.00E+00 9.00E+00 1.20E+01 1.50E+01 1.80E+01 2.10E+01

BE	7	2.97E-07	2.97E-07	2.97E-07	2.97E-07	2.97E-07	2.97E-07	2.96E-07	2.95E-07	2.95E-07	2.94E-07	2.94E-07
NA	24	1.32E-02	1.26E-02	1.21E-02	1.15E-02	1.10E-02	1.00E-02	8.71E-03	7.60E-03	6.62E-03	5.77E-03	4.99E-03
MN	54	1.55E-06	1.55E-06	1.55E-06	1.55E-06	1.55E-06	1.55E-06	1.55E-06	1.53E-06	1.53E-06	1.53E-06	1.53E-06
FE	55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE	59	9.27E-06	9.26E-06	9.26E-06	9.26E-06	9.26E-06	9.24E-06	9.23E-06	9.21E-06	9.19E-06	9.17E-06	9.16E-06
CO	57	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09	2.67E-09
CO	58	1.67E-07	1.67E-07	1.67E-07	1.67E-07	1.67E-07	1.67E-07	1.67E-07	1.67E-07	1.66E-07	1.66E-07	1.66E-07
CO	60	2.15E-06	2.15E-06	2.15E-06	2.15E-06	2.15E-06	2.15E-06	2.15E-06	2.15E-06	2.15E-06	2.15E-06	2.15E-06
CU	64	5.28E-03	5.00E-03	4.73E-03	4.49E-03	4.25E-03	3.81E-03	3.24E-03	2.75E-03	2.34E-03	1.99E-03	1.69E-03
CU	67	9.22E-08	9.14E-08	8.99E-08	8.91E-08	8.83E-08	8.59E-08	8.28E-08	8.04E-08	7.79E-08	7.49E-08	7.27E-08
W	181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB	203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1	37E-06	1.35E-06	1.33E-06	1.31E-06	1.29E-06	1.26E-06	1.22E-06	1.17E-06	1.12E-06	1.07E-06	1.03E-06
U239	5	70E-04	5.68E-04	5.65E-04	5.63E-04	5.60E-04	5.55E-04	5.48E-04	5.42E-04	5.34E-04	5.27E-04	5.21E-04
U240	1	03E+00	1.76E-01	3.00E-02	5.10E-03	8.67E-04	2.52E-05	1.25E-07	6.18E-10	3.06E-12	1.51E-14	7.48E-17
NP239	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP240M	1	22E-05	2.05E-02	2.37E-02	2.41E-02	2.39E-02	2.33E-02	2.24E-02	2.16E-02	2.09E-02	2.01E-02	1.94E-02
NP240	1	93E-05	1.16E-02	1.11E-02	1.06E-02	1.01E-02	9.13E-03	7.89E-03	6.81E-03	5.87E-03	5.06E-03	4.37E-03
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE75	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE77	9.	03E-05	2.32E-04	2.19E-04	2.06E-04	1.94E-04	1.71E-04	1.42E-04	1.18E-04	9.87E-05	8.19E-05	6.82E-05
AS77	8.	15E-09	1.29E-06	1.30E-06	1.31E-06	1.32E-06	1.33E-06	1.33E-06	1.32E-06	1.30E-06	1.27E-06	1.24E-06
SE77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE78	2.	82E-03	1.77E-03	1.10E-03	6.87E-04	4.29E-04	1.67E-04	4.05E-05	9.81E-06	2.39E-06	5.82E-07	1.41E-07
AS78	2.	14E-04	3.55E-03	4.38E-03	4.10E-03	3.43E-03	2.02E-03	7.52E-04	2.50E-04	7.73E-05	2.31E-05	6.69E-06
AS79	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SE79M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
BR80	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SE81M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SE81	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
BR82	1.	66E-05	1.63E-05	1.60E-05	1.57E-05	1.54E-05	1.48E-05	1.40E-05	1.31E-05	1.24E-05	1.17E-05	1.10E-05
SE83	1.	43E+00	2.71E-01	5.13E-02	9.73E-03	1.84E-03	6.62E-05	4.50E-07	3.06E-09	2.09E-11	1.42E-13	8.99E-16
BR83	3.	96E-05	5.91E-04	5.47E-04	4.30E-04	3.27E-04	1.84E-04	7.80E-05	3.28E-05	1.39E-05	5.85E-06	2.47E-06
KR83M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.

1

ZERO TIME 1.00E+00 2.00E+00 3.00E+00 4.00E+00 6.00E+00 9.00E+00 1.20E+01 1.50E+01 1.80E+01 2.10E+01

BR 84	1.99E-03	3.43E-01	9.26E-02	2.51E-02	6.77E-03	4.95E-04	9.79E-06	1.93E-07	3.83E-09	7.57E-11	1.49E-12
KR 85M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 87	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RB 88	8.89E-02	2.76E-01	2.36E-01	1.86E-01	1.45E-01	8.84E-02	4.22E-02	2.01E-02	9.58E-03	4.55E-03	2.16E-03
RB 89	1.39E+00	1.31E+00	8.78E-02	5.90E-03	3.95E-04	1.79E-06	5.42E-10	1.63E-13	4.98E-17	1.51E-20	4.58E-24
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 91	1.01E-02	1.88E-01	1.76E-01	1.64E-01	1.52E-01	1.32E-01	1.06E-01	8.59E-02	6.94E-02	5.57E-02	4.49E-02
Y 91M	5.47E-07	5.22E-02	7.11E-02	7.62E-02	7.52E-02	6.75E-02	5.52E-02	4.44E-02	3.58E-02	2.89E-02	2.33E-02
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 92	2.31E-01	1.03E+00	7.99E-01	6.19E-01	4.79E-01	2.87E-01	1.33E-01	6.19E-02	2.87E-02	1.33E-02	6.20E-03
Y 92	2.10E-03	4.28E-02	6.72E-02	7.99E-02	8.48E-02	8.08E-02	6.19E-02	4.22E-02	2.71E-02	1.67E-02	1.01E-02
SR 93	1.60E+01	2.75E-01	1.52E-03	8.41E-06	4.63E-08	1.42E-12	2.39E-19	4.03E-26	6.80E-33	1.15E-39	1.93E-46
Y 93	7.30E-04	2.36E-02	2.22E-02	2.07E-02	1.94E-02	1.69E-02	1.38E-02	1.13E-02	9.15E-03	7.51E-03	6.10E-03
Y 94	7.91E-01	1.08E+00	1.39E-01	1.79E-02	2.31E-03	3.84E-05	8.24E-08	1.77E-10	3.78E-13	8.24E-16	4.57E-17
Y 95	4.92E+00	4.64E-01	1.02E-02	2.26E-04	4.96E-06	2.41E-09	2.58E-14	2.76E-19	2.94E-24	3.15E-29	3.37E-34
ZR 95	1.26E-05	1.65E-03	1.68E-03	1.68E-03	1.68E-03	1.68E-03	1.68E-03	1.68E-03	1.68E-03	1.67E-03	1.67E-03
NB 95	1.45E-12	1.05E-06	2.45E-06	3.85E-06	5.26E-06	8.06E-06	1.22E-05	1.65E-05	2.06E-05	2.47E-05	2.89E-05
ZR 97	6.89E-03	3.00E-02	2.87E-02	2.76E-02	2.64E-02	2.44E-02	2.16E-02	1.91E-02	1.70E-02	1.49E-02	1.33E-02
NB 97M	1.52E-04	1.24E-01	1.19E-01	1.14E-01	1.10E-01	1.01E-01	8.92E-02	7.90E-02	6.98E-02	6.17E-02	5.45E-02
NB 97	1.35E-02	5.87E-02	8.28E-02	9.43E-02	9.90E-02	9.85E-02	8.97E-02	8.00E-02	7.08E-02	6.24E-02	5.55E-02
NB 98	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MO 99	1.87E-05	7.70E-03	7.62E-03	7.54E-03	7.46E-03	7.31E-03	7.09E-03	6.87E-03	6.66E-03	6.46E-03	6.26E-03
TC 99M	1.29E-10	5.44E-04	1.02E-03	1.44E-03	1.81E-03	2.42E-03	3.07E-03	3.49E-03	3.74E-03	3.88E-03	3.95E-03
MO101	2.32E+00	1.05E+00	6.08E-02	3.53E-03	2.05E-04	6.85E-07	1.33E-10	2.59E-14	5.04E-18	9.79E-22	1.91E-25
TC101	2.27E-02	6.80E-01	7.44E-02	6.10E-03	4.45E-04	2.01E-06	5.01E-10	1.12E-13	2.38E-17	4.90E-21	9.91E-25
MO102	5.10E+00	1.16E-01	2.65E-03	6.05E-05	1.38E-06	7.17E-10	8.53E-15	1.01E-19	1.20E-24	1.42E-29	1.69E-34
TC102M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TC102	2.08E+01	7.93E-02	1.81E-03	4.11E-05	9.42E-07	4.91E-10	5.83E-15	6.91E-20	8.20E-25	9.71E-30	1.15E-34
RU103	4.00E-07										

SMOKY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD111M	5.86E-03	5.16E-03	4.55E-03	4.02E-03	3.54E-03	2.76E-03	1.89E-03	1.29E-03	8.86E-04	6.06E-04	4.16E-04	
PD111	1.48E-04	2.66E-04	2.55E-04	2.28E-04	2.01E-04	1.56E-04	1.07E-04	7.35E-05	5.03E-05	3.45E-05	2.37E-05	
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AG111	4.03E-13	1.20E-06	2.51E-06	3.69E-06	4.74E-06	6.45E-06	8.29E-06	9.50E-06	1.03E-05	1.08E-05	1.11E-05	
PD112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AG112	9.27E-08	5.90E-04	1.04E-03	1.40E-03	1.66E-03	1.99E-03	2.19E-03	2.18E-03	2.07E-03	1.93E-03	1.78E-03	
AG113	4.51E-06	9.65E-04	8.46E-04	7.43E-04	6.51E-04	5.01E-04	3.39E-04	2.29E-04	1.55E-04	1.04E-04	7.06E-05	
AG115	1.66E-02	1.77E-02	2.21E-03	2.76E-04	3.46E-05	5.40E-07	1.06E-09	2.06E-12	4.00E-15	3.97E-16	3.68E-18	
CD115M	4.60E-12	1.22E-07	1.38E-07	1.39E-07	1.39E-07	1.39E-07	1.39E-07	1.39E-07	1.38E-07	1.38E-07	1.38E-07	
CD115	2.01E-08	3.78E-04	4.07E-04	4.06E-04	4.00E-04	3.90E-04	3.76E-04	3.61E-04	3.48E-04	3.35E-04	3.21E-04	
IN115M	1.69E-13	2.81E-05	6.25E-05	9.28E-05	1.18E-04	1.58E-04	1.95E-04	2.14E-04	2.24E-04	2.26E-04	2.24E-04	
CD117	1.87E-03	3.11E-02	2.35E-02	1.75E-02	1.31E-02	7.37E-03	3.09E-03	1.30E-03	5.48E-04	2.30E-04	9.69E-05	
IN117M	6.77E-09	8.16E-04	1.18E-03	1.28E-03	1.24E-03	9.76E-04	5.58E-04	2.86E-04	1.37E-04	6.36E-05	2.87E-05	
IN117	2.52E-12	1.38E-03	3.33E-03	4.63E-03	5.17E-03	4.76E-03	3.03E-03	1.62E-03	8.06E-04	3.79E-04	1.74E-04	
CD118	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
IN118	2.03E-03	1.32E-02	5.65E-03	2.41E-03	1.03E-03	1.89E-04	1.48E-05	1.16E-06	9.10E-08	7.13E-09	5.59E-10	
CD119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
IN119M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
IN119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN121	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN123M	2.51E-03	4.70E-03	1.67E-03	5.89E-04	2.08E-04	2.60E-05	1.15E-06	5.09E-08	2.25E-09	9.95E-11	4.40E-12	
SN123	1.20E-09	1.25E-07	1.25E-07	1.25E-07	1.25E-07	1.25E-07	1.25E-07	1.25E-07	1.25E-07	1.25E-07	1.25E-07	
SN125	1.19E-04	1.19E-04	1.19E-04	1.18E-04	1.18E-04	1.17E-04	1.16E-04	1.15E-04	1.14E-04	1.13E-04	1.12E-04	
SB125	1.05E-06	1.05E-06	1.06E-06	1.06E-06	1.07E-06	1.07E-06	1.09E-06	1.11E-06	1.12E-06	1.13E-06	1.15E-06	
SB126	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN127	1.07E-01	7.65E-02	5.50E-02	3.96E-02	2.85E-02	1.47E-02	5.47E-03	2.03E-03	7.53E-04	2.80E-04	1.04E-04	
SB127	4.88E-04	1.68E-03	1.86E-03	1.98E-03	2.07E-03	2.16E-03	2.19E-03	2.17E-03	2.14E-03	2.09E-03	2.05E-03	
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN128	2.51E-01	1.24E-01	6.13E-02	3.03E-02	1.50E-02	3.66E-03	4.41E-04	5.33E-05	6.42E-06	7.79E-07	9.39E-08	
SB128M	3.76E-04	4.15E-01	2.16E-01	1.06E-01	5.25E-02	1.29E-02	1.55E-03	1.87E-04	2.25E-05	2.72E-06	3.29E-07	
SB128	5.07E-02	4.88E-02	4.59E-02	4.31E-02	4.02E-02	3.45E-02	2.75E-02	2.18E-02	1.73E-02	1.38E-02	1.09E-02	
SN129M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN129	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SB129	1.11E-01	1.85E-01	1.74E-01	1.55E-01	1.37E-01	1.02E-01	6.33E-02	3.92E-02	2.41E-02	1.49E-02	9.18E-03	
TE129M	4.71E-11	5.21E-07	1.07E-06	1.58E-06	2.03E-06	2.75E-06	3.48E-06	3.92E-06	4.20E-06	4.37E-06	4.49E-06	
TE129	3.36E-03	4.62E-03	5.41E-03	5.62E-03	5.41E-03	4.48E-03	2.98E-03	1.88E-03	1.17E-03	7.24E-04	4.49E-04	
SB130M	1.88E-02	3.54E-02	9.30E-05	2.44E-07	6.43E-10	4.43E-15	8.07E-23	1.47E-30	2.66E-38	4.84E-46	8.81E-54	
SB130	3.98E+00	1.20E+00	3.42E-01	9.70E-02	2.74E-02	2.21E-03	5.04E-05	1.15E-06	2.62E-08	5.97E-10	1.36E-11	

SMOKY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	7.48E-04	7.07E-04	6.70E-04	6.32E-04	5.98E-04	5.35E-04	4.52E-04	3.82E-04	3.23E-04	2.74E-04	2.31E-04	
SB131	4.68E+00	1.22E+00	2.00E-01	3.28E-02	5.38E-03	1.45E-04	6.38E-07	2.82E-09	1.24E-11	5.47E-14	2.73E-16	
TE131M	1.73E-06	9.04E-03	1.03E-02	1.03E-02	1.01E-02	9.68E-03	9.03E-03	8.42E-03	7.86E-03	7.34E-03	6.84E-03	
TE131	4.66E-01	5.06E-01	1.65E-01	4.29E-02	1.04E-02	9.79E-04	4.86E-04	4.49E-04	4.19E-04	3.92E-04	3.65E-04	
I131	6.49E-05	2.25E-03	3.31E-03	3.63E-03	3.70E-03	3.73E-03	3.73E-03	3.70E-03	3.70E-03	3.66E-03	3.66E-03	
TE132	2.71E-03	6.58E-03	6.51E-03	6.46E-03	6.40E-03	6.28E-03	6.12E-03	5.96E-03	5.81E-03	5.64E-03	5.50E-03	
I132	7.19E-02	7.18E-02	7.16E-02	7.12E-02	7.07E-02	6.98E-02	6.82E-02	6.64E-02	6.47E-02	6.31E-02	6.15E-02	
TE133M	3.53E-03	1.22E+00	5.33E-01	2.32E-01	1.01E-01	1.92E-02	1.58E-03	1.30E-04	1.07E-05	8.85E-07	7.30E-08	
TE133	8.05E+00	4.57E-01	5.08E-02	1.68E-02	7.10E-03	1.34E-03	1.11E-04	9.14E-06	7.57E-07	6.23E-08	5.14E-09	
I133	8.55E-03	9.21E-02	9.96E-02	9.96E-02	9.77E-02	9.25E-02	8.41E-02	7.62E-02	6.87E-02	6.26E-02	5.66E-02	
XE133M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE133	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
TE134	2.34E+00	1.08E+00	4.04E-01	1.50E-01	5.57E-02	7.72E-03	3.95E-04	2.02E-05	1.04E-06	5.32E-08	2.73E-09	
I134	3.19E+00	4.26E+00	2.99E+00	1.75E+00	9.39E-01	2.38E-01	2.62E-02	2.68E-03	2.62E-04	2.51E-05	2.38E-06	
I135	3.32E-01	5.84E-01	5.27E-01	4.75E-01	4.29E-01	3.48E-01	2.56E-01	1.87E-01	1.37E-01	1.01E-01	7.38E-02	
XE135M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE135	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS136	1.73E-04	1.73E-04	1.73E-04	1.72E-04	1.72E-04	1.71E-04	1.70E-04	1.69E-04	1.68E-04	1.67E-04	1.65E-04	
CS137	6.58E-07	7.09E-06	7.09E-06	7.09E-06	7.09E-06	7.09E-06	7.09E-06	7.09E-06	7.09E-06	7.09E-06	7.09E-06	
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE138	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS138	2.89E+00	4.86E+00	1.68E+00	4.95E-01	1.39E-01	1.06E-02	2.20E-04	4.56E-06	9.46E-08	1.97E-09	4.08E-11	
CS139	2.15E+00	6.86E-02	8.60E-04	1.08E-05	1.36E-07	2.13E-11	4.24E-17	8.37E-23	1.66E-28	3.29E-34	6.49E-40	
BA139	5.29E-03	5.90E-02	3.64E-02	2.21E-02	1.34E-02	4.91E-03	1.09E-03	2.42E-04	5.38E-05	1.19E-05	2.65E-06	
BA140	2.46E-04	1.54E-03	1.54E-03	1.52E-03	1.52E-03	1.51E-03	1.51E-03	1.50E-03	1.49E-03	1.48E-03	1.47E-03	
LA140	8.08E-09	3.63E-04	7.19E-04	1.07E-03	1.41E-03	2.07E-03	3.03E-03	3.92E-03	4.76E-03	5.56E-03	6.30E-03	
BA141	2.59E+00	7.82E-01	7.76E-02	7.69E-03	7.63E-04	7.57E-06	7.39E-09	7.20E-12	7.02E-15	6.89E-18	6.71E-21	
LA141	1.12E-03	2.37E-02	2.21E-02	1.88E-02	1.57E-02	1.10E-02	6.47E-03	3.78E-03	2.23E-03	1.30E-03	7.65E-04	
CE141	2.44E-10	2.71E-05	6.35E-05	9.56E-05	1.23E-04	1.64E-04	2.04E-04	2.27E-04	2.40E-04	2.48E-04	2.52E-04	
BA142	8.35E+00	3.32E-01	7.57E-03	1.73E-04	3.93E-06	2.04E-09	2.43E-14	2.88E-19	3.42E-24	4.05E-29	4.81E-34	
LA142	4.16E-01	2.89E+00	1.91E+00	1.21E+00	7.71E-01	3.12E-01	8.05E-02	2.07E-02	5.35E-03	1.38E-03	3.55E-04	
LA143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE143	3.34E-04	2.13E-02	2.21E-02	2.15E-02	2.11E-02	2.03E-02	1.90E-02	1.79E-02	1.68E-02	1.58E-02	1.48E-02	
PR143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE144	8.11E-07	5.81E-06	5.81E-06	5.81E-06	5.81E-06	5.81E-06	5.80E-06	5.80E-06	5.80E-06	5.80E-06	5.80E-06	
PR144	3.97E-10	9.43E-06	1.03E-05	1.03E-05	1.04E-05	1.04E-05	1.04E-05	1.04E-05	1.03E-05	1.03E-05	1.03E-05	
PR145	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE146	1.80E+00	9.25E-02	4.74E-03	2.42E-04	1.25E-05	3.29E-08	4.43E-12	5.97E-16	8.03E-20	1.08E-23	1.46E-27	
PR146	1.27E-01	1.11E+00	2.51E-01	4.71E-02	8.47E-03	2.66E-04	1.47E-06	8.11E-09	4.49E-11	2.48E-13	1.36E-15	
PR147	4.79E-01	1.39E-01	4.32E-03	1.35E-04	4.23E-06	4.13E-09	1.26E-13	3.85E-18	1.17E-22	3.59E-27	1.09E-31	

SMOKY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	3.33E-08	6.26E-04	6.44E-04	6.43E-04	6.41E-04	6.38E-04	6.33E-04	6.28E-04	6.23E-04	6.18E-04	6.13E-04	6.13E-04
ND149	1.17E-01	7.99E-02	5.44E-02	3.71E-02	2.51E-02	1.17E-02	3.66E-03	1.16E-03	3.64E-04	1.15E-04	3.62E-05	3.62E-05
PM149	5.09E-07	3.98E-05	6.61E-05	8.36E-05	9.47E-05	1.06E-04	1.11E-04	1.09E-04	1.06E-04	1.02E-04	9.81E-05	9.81E-05
PM150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ND151	6.26E-01	1.96E-02	6.12E-04	1.91E-05	5.98E-07	5.84E-10	1.78E-14	5.45E-19	1.66E-23	5.06E-28	1.55E-32	1.55E-32
PM151	2.23E-04	2.61E-03	2.62E-03	2.56E-03	2.50E-03	2.37E-03	2.20E-03	2.04E-03	1.90E-03	1.76E-03	1.63E-03	1.63E-03
PM152	5.10E-01	4.99E-04	4.86E-07	4.75E-10	4.64E-13	4.43E-19	4.13E-28	3.85E-37	3.59E-46	3.35E-55	3.11E-64	3.11E-64
SM153	1.22E-04	1.20E-04	1.18E-04	1.16E-04	1.15E-04	1.11E-04	1.07E-04	1.02E-04	9.75E-05	9.34E-05	8.93E-05	8.93E-05
SM155	2.33E-02	3.83E-03	6.28E-04	1.03E-04	1.69E-05	4.54E-07	2.00E-09	8.81E-12	3.89E-14	1.73E-16	4.25E-19	4.25E-19
EU155	9.46E-09	2.70E-07	3.12E-07	3.19E-07	3.20E-07	3.20E-07	3.20E-07	3.20E-07	3.20E-07	3.20E-07	3.20E-07	3.20E-07
SM156	1.61E-04	1.49E-04	1.39E-04	1.29E-04	1.20E-04	1.03E-04	8.28E-05	6.64E-05	5.33E-05	4.27E-05	3.41E-05	3.41E-05
EU156	5.27E-06	8.60E-06	1.17E-05	1.45E-05	1.72E-05	2.19E-05	2.79E-05	3.23E-05	3.61E-05	3.90E-05	4.11E-05	4.11E-05
EU157	5.56E-05	1.84E-04	1.76E-04	1.68E-04	1.60E-04	1.46E-04	1.28E-04	1.12E-04	9.72E-05	8.46E-05	7.38E-05	7.38E-05
EU158	7.21E-03	2.92E-03	1.18E-03	4.79E-04	1.94E-04	3.17E-05	2.11E-06	1.40E-07	9.30E-09	6.18E-10	4.10E-11	4.10E-11
EU159	2.01E-03	2.00E-04	1.98E-05	1.97E-06	1.95E-07	1.93E-09	1.88E-12	1.84E-15	1.79E-18	1.75E-21	1.71E-24	1.71E-24
GD159	1.26E-06	5.53E-06	5.75E-06	5.58E-06	5.37E-06	4.97E-06	4.43E-06	3.95E-06	3.51E-06	3.13E-06	2.79E-06	2.79E-06
TB161	4.01E-09	2.88E-08	2.87E-08	2.86E-08	2.85E-08	2.82E-08	2.79E-08	2.75E-08	2.71E-08	2.69E-08	2.65E-08	2.65E-08
TOTAL	9.91E+01	3.09E+01	1.25E+01	6.90E+00	4.43E+00	2.39E+00	1.40E+00	1.00E+00	7.77E-01	6.31E-01	5.28E-01	5.28E-01

1

SMOKY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	2.97E-07	2.94E-07	2.90E-07	2.79E-07	2.61E-07	2.29E-07	2.01E-07	1.55E-07	8.11E-08	2.20E-08	6.00E-09	
NA 24	1.32E-02	4.36E-03	1.44E-03	5.15E-05	2.02E-07	3.08E-12	4.70E-17	1.09E-26	0.	0.	0.	0.
MN 54	1.55E-06	1.53E-06	1.53E-06	1.51E-06	1.49E-06	1.47E-06	1.44E-06	1.37E-06	1.22E-06	9.73E-07	7.75E-07	
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	9.27E-06	9.13E-06	8.99E-06	8.59E-06	7.95E-06	6.82E-06	5.84E-06	4.29E-06	1.99E-06	4.25E-07	9.13E-08	
CO 57	2.67E-09	2.67E-09	2.65E-09	2.65E-09	2.61E-09	2.53E-09	2.47E-09	2.35E-09	2.08E-09	1.60E-09	1.24E-09	
CO 58	1.67E-07	1.66E-07	1.64E-07	1.59E-07	1.52E-07	1.38E-07	1.25E-07	1.03E-07	6.33E-08	2.39E-08	9.04E-09	
CO 60	2.15E-06	2.15E-06	2.15E-06	2.15E-06	2.13E-06	2.13E-06	2.12E-06	2.11E-06	2.06E-06	1.99E-06	1.92E-06	
CU 64	5.28E-03	1.44E-03	3.92E-04	7.97E-06	1.20E-08	2.72E-14	6.16E-20	3.17E-31	0.	0.	0.	0.
CU 67	9.22E-08	7.03E-08	5.37E-08	2.39E-08	6.22E-09	4.19E-10	2.83E-11	1.28E-13	1.80E-19	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	9.95E-07	7.22E-07	2.77E-07	5.61E-08	2.31E-09	9.46E-11	1.59E-13	1.86E-20	0.	0.	0.	0.
U237	5.70E-04	5.14E-04	4.64E-04	3.41E-04	2.04E-04	7.31E-05	2.62E-05	3.35E-06	1.98E-08	2.13E-12	1.43E-12	
U240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	1.22E-05	1.86E-02	1.39E-02	5.73E-03	1.31E-03	6.86E-05	3.59E-06	9.85E-09	3.87E-15	9.25E-25	9.25E-25	
NP240M	1.93E-05	3.77E-03	1.16E-03	3.36E-05	9.22E-08	6.95E-13	5.22E-18	2.94E-28	0.	0.	0.	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 77	9.03E-05	5.69E-05	1.30E-05	1.57E-07	1.00E-10	4.05E-17	1.63E-23	2.67E-36	0.	0.	0.	0.
AS 77	8.15E-09	1.20E-06	8.70E-07	2.52E-07	2.95E-08	4.00E-10	5.43E-12	1.00E-15	4.64E-25	9.96E-44	2.14E-62	
SE 77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AS 78	2.14E-04	1.90E-06	5.58E-11	4.71E-25	0.	0.	0.	0.	0.	0.	0.	0.
BR 82	1.66E-05	1.04E-05	6.49E-06	1.58E-06	1.49E-07	1.34E-09	1.21E-11	9.73E-16	5.68E-26	1.95E-46	6.64E-67	
BR 83	3.96E-05	1.04E-06	1.05E-09	1.06E-18	1.09E-33	0.	0.	0.	0.	0.	0.	0.
KR 83M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 87	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RB 88	8.89E-02	1.03E-03	2.70E-06	4.91E-14	6.16E-27	0.	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 91	1.01E-02	3.62E-02	6.49E-03	3.72E-05	6.81E-09	2.31E-16	7.83E-24	8.91E-39	0.	0.	0.	0.

DEBRIS DECAY FROM 1 TO 300 DAYS

ZERO TIME 1.00E+00 2.00E+00 5.00E+00 1.00E+01 2.00E+01 3.00E+01 5.00E+01 1.00E+02 2.00E+02 3.00E+02

Y 91M	5.47E-07	1.88E-02	3.36E-03	1.93E-05	3.55E-09	1.20E-16	4.05E-24	4.62E-39	0.	0.	0.
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 92	2.31E-01	2.88E-03	6.21E-06	6.24E-14	2.92E-27	0.	0.	0.	0.	0.	0.
Y 92	2.10E-03	5.96E-03	6.62E-05	5.09E-11	2.97E-21	1.02E-41	3.48E-62	0.	0.	0.	0.
Y 93	7.30E-04	4.93E-03	9.62E-04	7.23E-06	2.08E-09	1.72E-16	1.42E-23	9.69E-38	0.	0.	0.
ZR 95	1.26E-05	1.58E-03	1.56E-03	1.51E-03	1.43E-03	1.28E-03	1.16E-03	9.35E-04	5.48E-04	1.89E-04	6.47E-05
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	1.45E-12	3.15E-05	6.23E-05	1.49E-04	2.77E-04	4.78E-04	6.17E-04	7.66E-04	7.37E-04	3.54E-04	1.36E-04
ZR 97	6.89E-03	1.17E-02	4.41E-03	2.34E-04	1.76E-06	9.88E-11	5.55E-15	1.76E-23	9.90E-45	0.	0.
NB 97M	1.52E-04	4.84E-02	1.82E-02	9.68E-04	7.24E-06	4.08E-10	2.29E-14	7.24E-23	4.09E-44	0.	0.
NB 97	1.35E-02	4.59E-02	1.72E-02	9.16E-04	6.89E-06	4.15E-10	2.33E-14	7.40E-23	4.16E-44	0.	0.
MC 99	1.87E-05	6.07E-03	4.74E-03	2.25E-03	6.50E-04	5.43E-05	4.53E-06	3.16E-08	1.28E-13	2.11E-24	3.48E-35
TC 99M	1.29E-10	3.95E-03	3.33E-03	1.59E-03	4.60E-04	3.84E-05	3.21E-06	2.24E-08	9.07E-14	1.50E-24	2.47E-35
RU103	4.00E-07	9.12E-04	8.94E-04	8.48E-04	7.79E-04	6.53E-04	5.48E-04	3.87E-04	1.61E-04	2.79E-05	4.87E-06
RH103M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU105	3.61E-03	3.45E-03	8.11E-05	1.07E-09	7.79E-18	4.16E-34	2.23E-50	0.	0.	0.	0.
RH105M	7.62E-07	1.11E-04	2.61E-06	3.43E-11	2.51E-19	1.34E-35	7.18E-52	0.	0.	0.	0.
RH105	3.96E-12	1.26E-03	8.26E-04	2.06E-04	2.03E-05	1.97E-07	1.92E-09	1.81E-13	1.57E-23	1.18E-43	8.85E-64
RU106	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RH106	8.36E-09	1.46E-05	1.46E-05	1.45E-05	1.44E-05	1.41E-05	1.38E-05	1.33E-05	1.21E-05	1.00E-05	8.30E-06
PD109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD111M	5.86E-03	2.84E-04	1.38E-05	1.59E-09	4.29E-16	3.13E-29	2.30E-42	0.	0.	0.	0.
PD111	1.48E-04	1.63E-05	7.86E-07	9.02E-11	2.45E-17	1.78E-30	1.30E-43	0.	0.	0.	0.
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG111	4.03E-13	1.11E-05	1.07E-05	8.14E-06	5.12E-06	2.03E-06	8.07E-07	1.27E-07	1.25E-09	1.21E-13	1.17E-17
PD112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG112	9.27E-08	1.62E-03	7.46E-04	6.92E-05	1.32E-06	4.78E-10	1.74E-13	2.29E-20	7.44E-37	0.	0.
AG113	4.51E-06	4.77E-05	2.06E-06	1.67E-10	2.56E-17	6.00E-31	1.40E-44	0.	0.	0.	0.
CD115M	4.60E-12	1.33E-07	1.31E-07	1.25E-07	1.15E-07	9.78E-08	8.35E-08	6.03E-08	2.70E-08	5.36E-09	1.07E-09
CD115	2.01E-08	3.02E-04	2.21E-04	8.72E-05	1.84E-05	8.21E-07	3.66E-08	7.30E-11	1.29E-17	4.04E-31	1.26E-44
IN115M	1.69E-13	2.15E-04	1.63E-04	6.42E-05	1.35E-05	6.05E-07	2.69E-08	5.37E-11	9.51E-18	2.98E-31	9.31E-45
CD117	1.										

DEBRIS DECAY FROM 1 TO 300 DAYS

ZERO TIME 1.00E+00 2.00E+00 5.00E+00 1.00E+01 2.00E+01 3.00E+01 5.00E+01 1.00E+02 2.00E+02 3.00E+02

[illegible]

1

SMOKY
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	2.23E-04	1.52E-03	8.39E-04	1.41E-04	7.24E-06	1.90E-08	5.01E-11	3.46E-16	4.34E-29	0.	0.	0.
SM153	1.22E-04	8.55E-05	6.00E-05	2.07E-05	3.52E-06	1.03E-07	2.98E-09	2.50E-12	5.16E-20	2.20E-35	9.34E-51	0.
SM156	1.61E-04	2.75E-05	4.68E-06	2.31E-08	3.32E-12	6.83E-20	1.41E-27	6.00E-43	0.	0.	0.	0.
EU155	9.46E-09	3.20E-07	3.20E-07	3.20E-07	3.19E-07	3.18E-07	3.17E-07	3.14E-07	3.08E-07	2.96E-07	2.84E-07	0.
EU156	5.27E-06	4.29E-05	4.75E-05	4.26E-05	3.38E-05	2.13E-05	1.34E-05	5.32E-06	5.27E-07	5.19E-09	5.11E-11	0.
EU157	5.56E-05	6.42E-05	2.16E-05	8.10E-07	3.40E-09	6.00E-14	1.06E-18	3.31E-28	0.	0.	0.	0.
GD159	1.26E-06	2.49E-06	9.89E-07	6.17E-08	6.07E-10	5.88E-14	5.70E-18	5.35E-26	4.57E-46	0.	0.	0.
TB161	4.01E-09	2.62E-08	2.36E-08	1.75E-08	1.06E-08	3.88E-09	1.42E-09	1.90E-10	1.26E-12	5.44E-17	2.36E-21	0.
TOTAL	2.08E+00	4.44E-01	1.93E-01	6.89E-02	3.27E-02	1.39E-02	8.29E-03	4.08E-03	1.64E-03	6.09E-04	2.34E-04	0.

1

SMOKY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	2.97E-07	2.57E-09	2.39E-10	2.22E-11	1.78E-14	1.43E-17	1.07E-21	6.85E-28	0.	0.	0.
MN 54	1.55E-06	6.67E-07	4.40E-07	2.89E-07	8.26E-08	2.36E-08	4.44E-09	3.63E-10	8.52E-14	3.08E-19	1.12E-24
FE 59	9.27E-06	3.35E-08	2.01E-09	1.21E-10	2.62E-14	5.66E-18	7.37E-23	3.46E-30	0.	0.	0.
CO 57	2.67E-09	1.05E-09	6.59E-10	4.13E-10	1.02E-10	2.51E-11	3.88E-13	2.35E-13	2.06E-17	1.69E-23	0.
CO 58	1.67E-07	4.80E-09	8.15E-10	1.38E-10	6.72E-13	3.27E-15	2.70E-18	6.40E-23	2.45E-38	0.	0.
CO 60	2.15E-06	1.88E-06	1.75E-06	1.64E-06	1.35E-06	1.11E-06	8.50E-07	5.73E-07	1.54E-07	2.13E-08	2.95E-09
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	5.70E-04	1.42E-12	1.38E-12	1.35E-12	1.26E-12	1.17E-12	1.06E-12	9.24E-13	5.75E-13	2.82E-13	1.38E-13
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZR 95	1.26E-05	3.24E-05	4.62E-06	6.58E-07	1.92E-09	5.59E-12	2.31E-15	1.95E-20	2.39E-37	0.	0.
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	1.45E-12	7.20E-05	1.03E-05	1.47E-06	4.28E-09	1.24E-11	5.18E-15	4.37E-20	5.36E-37	0.	0.
RU103	4.00E-07	1.55E-06	6.35E-08	2.61E-09	1.78E-13	1.22E-17	3.43E-23	1.61E-31	0.	0.	0.
RH103M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU106	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RH106	8.36E-09	7.35E-06	5.20E-06	3.69E-06	1.31E-06	4.66E-07	1.17E-07	1.48E-08	1.50E-11	4.81E-16	1.55E-20
SN123	1.20E-09	1.66E-08	6.02E-09	2.19E-09	1.05E-10	5.03E-12	8.77E-14	2.02E-16	3.24E-25	2.09E-38	1.34E-51
SB125	1.05E-06	2.11E-06	1.85E-06	1.63E-06	1.11E-06	7.56E-07	4.52E-07	2.09E-07	1.61E-08	3.42E-10	7.28E-12
TE125M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS137	6.58E-07	6.93E-06	6.85E-06	6.77E-06	6.54E-06	6.30E-06	6.02E-06	5.63E-06	4.45E-06	3.16E-06	2.23E-06
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE141	2.44E-10	1.05E-07	2.11E-09	4.25E-11	3.46E-16	2.82E-21	4.62E-28	3.07E-38	0.	0.	0.
CE144	8.11E-07	2.38E-06	1.53E-06	9.78E-07	2.57E-07	6.75E-08	1.13E-08	7.83E-10	1.05E-13	1.65E-19	2.58E-25
PR144	3.97E-10	4.25E-06	2.73E-06	1.74E-06	4.57E-07	1.20E-07	2.02E-08	1.40E-09	1.88E-13	2.95E-19	4.60E-25
PM147	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EU155	9.46E-09	2.77E-07	2.57E-07	2.40E-07	1.93E-07	1.55E-07	1.15E-07	7.46E-08	1.74E-08	1.96E-09	2.21E-10
TOTAL	5.99E-04	1.32E-04	3.57E-05	1.91E-05	1.13E-05	8.99E-06	7.59E-06	6.50E-06	4.64E-06	3.19E-06	2.24E-06

DEBRIS DECAY FROM 1 TO 21 HOURS

BE	7	1.89E-07	1.89E-07	1.89E-07	1.89E-07	1.89E-07	1.88E-07	1.88E-07	1.87E-07	1.87E-07	1.87E-07	1.87E-07
NA	24	8.38E-03	8.01E-03	7.66E-03	7.30E-03	6.96E-03	6.36E-03	5.53E-03	4.82E-03	4.20E-03	3.66E-03	3.17E-03
MN	54	9.83E-07	9.83E-07	9.83E-07	9.83E-07	9.83E-07	9.83E-07	9.83E-07	9.74E-07	9.74E-07	9.74E-07	9.74E-07
FE	55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE	59	5.88E-06	5.88E-06	5.88E-06	5.88E-06	5.88E-06	5.87E-06	5.86E-06	5.85E-06	5.83E-06	5.82E-06	5.81E-06
CO	57	1.70E-09	1.70E-09	1.70E-09	1.70E-09	1.70E-09	1.70E-09	1.70E-09	1.70E-09	1.70E-09	1.70E-09	1.70E-09
CO	58	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.06E-07	1.05E-07	1.05E-07	1.05E-07
CO	60	1.36E-06	1.36E-06	1.36E-06	1.36E-06	1.36E-06	1.36E-06	1.36E-06	1.36E-06	1.36E-06	1.36E-06	1.36E-06
CU	64	3.35E-03	3.17E-03	3.00E-03	2.85E-03	2.70E-03	2.42E-03	2.06E-03	1.75E-03	1.49E-03	1.26E-03	1.08E-03
CU	67	5.85E-08	5.80E-08	5.70E-08	5.65E-08	5.60E-08	5.45E-08	5.25E-08	5.10E-08	4.94E-08	4.75E-08	4.62E-08
W	181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB	203	1.74E-06	1.71E-06	1.69E-06	1.66E-06	1.64E-06	1.60E-06	1.54E-06	1.48E-06	1.42E-06	1.36E-06	1.31E-06
U	237	3.62E-04	3.60E-04	3.59E-04	3.57E-04	3.56E-04	3.52E-04	3.48E-04	3.44E-04	3.39E-04	3.34E-04	3.30E-04
U	239	6.53E-01	1.11E-01	1.90E-02	3.24E-03	5.50E-04	1.60E-05	7.94E-08	3.92E-10	1.94E-12	9.59E-15	4.75E-17
U	240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP	239	7.75E-06	1.30E-02	1.50E-02	1.53E-02	1.52E-02	1.48E-02	1.42E-02	1.37E-02	1.32E-02	1.28E-02	1.23E-02
NP	240M	1.22E-05	7.39E-03	7.07E-03	6.73E-03	6.41E-03	5.80E-03	5.01E-03	4.32E-03	3.72E-03	3.21E-03	2.77E-03
NP	240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AM	241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM	242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE	75	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE	77	1.15E-04	2.95E-04	2.78E-04	2.61E-04	2.46E-04	2.17E-04	1.81E-04	1.50E-04	1.25E-04	1.04E-04	8.66E-05
AS	77	1.03E-08	1.63E-06	1.65E-06	1.66E-06	1.68E-06	1.69E-06	1.69E-06	1.68E-06	1.65E-06	1.62E-06	1.58E-06
SE	77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE	78	3.59E-03	2.24E-03	1.39E-03	8.72E-04	5.44E-04	2.12E-04	5.14E-05	1.25E-05	3.04E-06	7.38E-07	1.79E-07
AS	78	2.72E-04	4.51E-03	5.56E-03	5.21E-03	4.35E-03	2.57E-03	9.55E-04	3.17E-04	9.81E-05	2.93E-05	8.50E-06
AS	79	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SE	79M	0.	0.	0.								

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BR 84	2.52E-03	4.35E-01	1.18E-01	3.18E-02	8.60E-03	6.29E-04	1.24E-05	2.45E-07	4.86E-09	9.61E-11	1.90E-12	
KR 85M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
KR 87	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
KR 88	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
RB 88	1.13E-01	3.51E-01	2.99E-01	2.36E-01	1.84E-01	1.12E-01	5.36E-02	2.55E-02	1.22E-02	5.78E-03	2.75E-03	
RB 89	1.76E+00	1.66E+00	1.11E-01	7.49E-03	5.02E-04	2.27E-06	6.88E-10	2.07E-13	6.32E-17	1.91E-20	5.81E-24	
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SR 91	1.12E-02	2.09E-01	1.95E-01	1.82E-01	1.69E-01	1.46E-01	1.18E-01	9.54E-02	7.70E-02	6.18E-02	4.99E-02	
Y 91M	6.08E-07	5.79E-02	7.90E-02	8.46E-02	8.35E-02	7.50E-02	6.13E-02	4.94E-02	3.98E-02	3.21E-02	2.59E-02	
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SR 92	1.47E-01	6.54E-01	5.07E-01	3.93E-01	3.04E-01	1.82E-01	8.45E-02	3.93E-02	1.82E-02	8.45E-03	3.93E-03	
Y 92	1.33E-03	2.72E-02	4.27E-02	5.07E-02	5.38E-02	5.13E-02	3.93E-02	2.68E-02	1.72E-02	1.06E-02	6.39E-03	
SR 93	1.02E+01	1.75E-01	9.65E-04	5.34E-06	2.94E-08	8.99E-13	1.52E-19	2.56E-26	4.32E-33	7.28E-40	1.23E-46	
Y 93	4.64E-04	1.50E-02	1.41E-02	1.32E-02	1.23E-02	1.07E-02	8.75E-03	7.15E-03	5.81E-03	4.77E-03	3.87E-03	
Y 94	5.02E-01	6.86E-01	8.83E-02	1.14E-02	1.47E-03	2.44E-05	5.23E-08	1.12E-10	2.40E-13	5.23E-16	2.90E-17	
Y 95	3.13E+00	2.95E-01	6.49E-03	1.43E-04	3.15E-06	1.53E-09	1.64E-14	1.75E-19	1.87E-24	2.00E-29	2.14E-34	
ZR 95	8.01E-06	1.05E-03	1.07E-03	1.07E-03	1.07E-03	1.07E-03	1.07E-03	1.06E-03	1.06E-03	1.06E-03	1.06E-03	
NB 95	9.22E-13	6.68E-07	1.56E-06	2.45E-06	3.34E-06	5.12E-06	7.76E-06	1.04E-05	1.31E-05	1.57E-05	1.83E-05	
ZR 97	4.37E-03	1.90E-02	1.82E-02	1.75E-02	1.68E-02	1.55E-02	1.37E-02	1.21E-02	1.08E-02	9.49E-03	8.43E-03	
NB 97M	9.67E-05	7.86E-02	7.54E-02	7.24E-02	6.95E-02	6.40E-02	5.66E-02	5.01E-02	4.43E-02	3.91E-02	3.46E-02	
NB 97	8.54E-03	3.73E-02	5.25E-02	5.99E-02	6.28E-02	6.25E-02	5.69E-02	5.08E-02	4.49E-02	3.96E-02	3.52E-02	
NB 98	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
MO 99	1.18E-05	4.89E-03	4.83E-03	4.79E-03	4.74E-03	4.64E-03	4.50E-03	4.36E-03	4.23E-03	4.10E-03	3.97E-03	
TC 99M	8.16E-11	3.45E-04	6.48E-04	9.17E-04	1.15E-03	1.54E-03	1.95E-03	2.21E-03	2.38E-03	2.47E-03	2.50E-03	
MO101	2.95E+00	1.33E+00	7.72E-02	4.48E-03	2.60E-04	8.70E-07	1.69E-10	3.29E-14	6.40E-18	1.24E-21	2.42E-25	
TC101	2.88E-02	8.64E-01	9.44E-02	7.75E-03	5.64E-04	2.55E-06	6.36E-10	1.43E-13	3.02E-17	6.22E-21	1.26E-24	
MO102	6.48E+00	1.48E-01	3.36E-03	7.68E-05	1.75E-06	9.10E-10	1.08E-14	1.28E-19	1.52E-24	1.80E-29	2.14E-34	

1

SMOKY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD111M	7.44E-03	6.55E-03	5.77E-03	5.11E-03	4.50E-03	3.50E-03	2.39E-03	1.64E-03	1.12E-03	7.69E-04	5.27E-04	
PD111	1.87E-04	3.38E-04	3.24E-04	2.89E-04	2.55E-04	1.98E-04	1.36E-04	9.33E-05	6.39E-05	4.38E-05	3.01E-05	
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AG111	5.12E-13	1.52E-06	3.19E-06	4.68E-06	6.01E-06	8.19E-06	1.05E-05	1.21E-05	1.31E-05	1.37E-05	1.41E-05	
PD112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AG112	1.18E-07	7.49E-04	1.32E-03	1.77E-03	2.11E-03	2.53E-03	2.78E-03	2.76E-03	2.63E-03	2.45E-03	2.26E-03	
AG113	5.72E-06	1.22E-03	1.07E-03	9.43E-04	8.27E-04	6.36E-04	4.31E-04	2.91E-04	1.96E-04	1.32E-04	8.96E-05	
AG115	2.10E-02	2.25E-02	2.80E-03	3.51E-04	4.39E-05	6.86E-07	1.34E-09	2.62E-12	5.07E-15	5.04E-164	4.67E-18	
CD115M	5.84E-12	1.55E-07	1.75E-07	1.77E-07	1.77E-07	1.77E-07	1.76E-07	1.76E-07	1.76E-07	1.75E-07	1.75E-07	
CD115	2.55E-08	4.80E-04	5.16E-04	5.15E-04	5.08E-04	4.96E-04	4.77E-04	4.59E-04	4.41E-04	4.25E-04	4.08E-04	
IN115M	2.14E-13	3.57E-05	7.94E-05	1.18E-04	1.50E-04	2.00E-04	2.47E-04	2.72E-04	2.84E-04	2.86E-04	2.84E-04	
CD117	2.37E-03	3.95E-02	2.98E-02	2.22E-02	1.67E-02	9.35E-03	3.92E-03	1.65E-03	6.96E-04	2.92E-04	1.23E-04	
IN117M	8.59E-09	1.04E-03	1.50E-03	1.63E-03	1.57E-03	1.24E-03	7.08E-04	3.63E-04	1.74E-04	8.07E-05	3.65E-05	
IN117	3.20E-12	1.75E-03	4.23E-03	5.88E-03	6.56E-03	6.04E-03	3.84E-03	2.06E-03	1.02E-03	4.81E-04	2.21E-04	
CD118	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
IN118	2.58E-03	1.67E-02	7.17E-03	3.06E-03	1.31E-03	2.40E-04	1.88E-05	1.48E-06	1.16E-07	9.05E-09	7.10E-10	
CD119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
IN119M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
IN119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN121	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN123M	3.19E-03	5.97E-03	2.12E-03	7.48E-04	2.64E-04	3.30E-05	1.46E-06	6.46E-08	2.86E-09	1.26E-10	5.58E-12	
SN123	1.52E-09	1.59E-07	1.59E-07	1.59E-07	1.59E-07	1.59E-07	1.59E-07	1.59E-07	1.59E-07	1.59E-07	1.59E-07	
SN125	1.51E-04	1.51E-04	1.51E-04	1.50E-04	1.50E-04	1.49E-04	1.48E-04	1.46E-04	1.45E-04	1.43E-04	1.42E-04	
SB125	1.33E-06	1.33E-06	1.34E-06	1.35E-06	1.35E-06	1.36E-06	1.39E-06	1.40E-06	1.42E-06	1.44E-06	1.46E-06	
SB126	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN127	1.35E-01	9.71E-02	6.98E-02	5.03E-02	3.62E-02	1.87E-02	6.94E-03	2.58E-03	9.56E-04	3.56E-04	1.32E-04	
SB127	6.19E-04	2.14E-03	2.37E-03	2.52E-03	2.63E-03	2.74E-03	2.78E-03	2.76E-03	2.71E-03	2.65E-03	2.60E-03	
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN128	3.19E-01	1.57E-01	7.78E-02	3.85E-02	1.90E-02	4.64E-03	5.60E-04	6.76E-05	8.16E-06	9.89E-07	1.19E-07	
SB128M	4.78E-04	5.27E-01	2.74E-01	1.35E-01	6.67E-02	1.63E-02	1.97E-03	2.37E-04	2.86E-05	3.46E-06	4.18E-07	
SB128	6.44E-02	6.20E-02	5.83E-02	5.47E-02	5.10E-02	4.37E-02	3.49E-02	2.77E-02	2.20E-02	1.75E-02	1.39E-02	
SN129M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SN129	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SB129	1.40E-01	2.35E-01	2.21E-01	1.97E-01	1.74E-01	1.29E-01	8.03E-02	4.97E-02	3.06E-02	1.89E-02	1.16E-02	
TE129M	5.98E-11	6.62E-07	1.36E-06	2.00E-06	2.57E-06	3.49E-06	4.41E-06	4.98E-06	5.34E-06	5.55E-06	5.69E-06	
TE129	4.27E-03	5.86E-03	6.86E-03	7.13E-03	6.86E-03	5.68E-03	3.79E-03	2.39E-03	1.49E-03	9.20E-04	5.70E-04	
SB130M	2.38E-02	4.49E-02	1.18E-04	3.10E-07	8.16E-10	5.63E-15	1.03E-22	1.86E-30	3.38E-38	6.15E-46	1.12E-53	
SB130	5.05E+00	1.53E+00	4.35E-01	1.23E-01	3.48E-02	2.80E-03	6.39E-05	1.46E-06	3.32E-08	7.58E-10	1.73E-11	

SMOKY MR/HR
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.500
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	9.49E-04	8.98E-04	8.50E-04	8.03E-04	7.60E-04	6.80E-04	5.74E-04	4.86E-04	4.10E-04	3.47E-04	2.93E-04	
SB131	5.94E+00	1.55E+00	2.54E-01	4.16E-02	6.83E-03	1.84E-04	8.10E-07	3.58E-09	1.57E-11	6.94E-14	3.46E-16	
TE131M	2.19E-06	1.15E-02	1.31E-02	1.31E-02	1.29E-02	1.23E-02	1.15E-02	1.07E-02	9.98E-03	9.31E-03	8.69E-03	
TE131	5.91E-01	6.43E-01	2.09E-01	5.45E-02	1.32E-02	1.24E-03	6.17E-04	5.70E-04	5.32E-04	4.98E-04	4.64E-04	
I131	8.24E-05	2.86E-03	4.20E-03	4.61E-03	4.69E-03	4.73E-03	4.73E-03	4.69E-03	4.69E-03	4.65E-03	4.65E-03	
TE132	3.44E-03	8.35E-03	8.27E-03	8.21E-03	8.12E-03	7.98E-03	7.77E-03	7.56E-03	7.37E-03	7.16E-03	6.98E-03	
I132	9.13E-02	9.11E-02	9.09E-02	9.04E-02	8.98E-02	8.86E-02	8.66E-02	8.43E-02	8.21E-02	8.01E-02	7.80E-02	
TE133M	4.49E-03	1.56E+00	6.77E-01	2.95E-01	1.28E-01	2.44E-02	2.00E-03	1.65E-04	1.36E-05	1.12E-06	9.27E-08	
TE133	1.02E+01	5.80E-01	6.45E-02	2.13E-02	9.01E-03	1.71E-03	1.41E-04	1.16E-05	9.62E-07	7.91E-08	6.52E-09	
I133	1.09E-02	1.17E-01	1.26E-01	1.26E-01	1.24E-01	1.17E-01	1.07E-01	9.67E-02	8.72E-02	7.95E-02	7.18E-02	
XE133M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE133	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
TE134	2.97E+00	1.38E+00	5.13E-01	1.91E-01	7.07E-02	9.80E-03	5.01E-04	2.57E-05	1.31E-06	6.75E-08	3.46E-09	
I134	4.04E+00	5.41E+00	3.79E+00	2.22E+00	1.19E+00	3.03E-01	3.33E-02	3.40E-03	3.33E-04	3.19E-05	3.03E-06	
I135	4.21E-01	7.42E-01	6.69E-01	6.03E-01	5.45E-01	4.42E-01	3.24E-01	2.37E-01	1.74E-01	1.28E-01	9.37E-02	
XE135M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE135	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS136	2.20E-04	2.19E-04	2.19E-04	2.19E-04	2.18E-04	2.17E-04	2.16E-04	2.14E-04	2.13E-04	2.11E-04	2.10E-04	
CS137	8.35E-07	9.00E-06	9.00E-06	9.00E-06	9.00E-06	9.00E-06	9.00E-06	9.00E-06	9.00E-06	9.00E-06	9.00E-06	
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE138	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS138	3.67E+00	6.17E+00	2.14E+00	6.28E-01	1.76E-01	1.34E-02	2.79E-04	5.79E-06	1.20E-07	2.50E-09	5.18E-11	
CS139	2.73E+00	8.71E-02	1.09E-03	1.37E-05	1.72E-07	2.70E-11	5.38E-17	1.06E-22	2.10E-28	4.17E-34	8.24E-40	
BA139	6.72E-03	7.49E-02	4.62E-02	2.81E-02	1.70E-02	6.23E-03	1.38E-03	3.07E-04	6.82E-05	1.51E-05	3.36E-06	
BA140	2.66E-04	1.66E-03	1.66E-03	1.64E-03	1.64E-03	1.63E-03	1.63E-03	1.62E-03	1.61E-03	1.59E-03	1.58E-03	
LA140	8.72E-09	3.92E-04	7.76E-04	1.15E-03	1.52E-03	2.24E-03	3.27E-03	4.23E-03	5.14E-03	6.00E-03	6.80E-03	
BA141	2.18E+00	6.60E-01	6.55E-02	6.50E-03	6.44E-04	6.39E-06	6.24E-09	6.08E-12	5.92E-15	5.82E-18	5.66E-21	
LA141	9.46E-04	2.00E-02	1.87E-02	1.58E-02	1.33E-02	9.31E-03	5.46E-03	3.19E-03	1.88E-03	1.10E-03	6.46E-04	
CE141	2.06E-10	2.29E-05	5.36E-05	8.07E-05	1.03E-04	1.39E-04	1.72E-04	1.91E-04	2.03E-04	2.09E-04	2.12E-04	
BA142	5.30E+00	2.11E-01	4.81E-03	1.10E-04	2.50E-06	1.30E-09	1.54E-14	1.83E-19	2.17E-24	2.57E-29	3.05E-34	
LA142	2.64E-01	1.83E+00	1.21E+00	7.70E-01	4.90E-01	1.98E-01	5.11E-02	1.32E-02	3.39E-03	8.74E-04	2.25E-04	
LA143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE143	2.12E-04	1.35E-02	1.40E-02	1.37E-02	1.34E-02	1.29E-02	1.21E-02	1.14E-02	1.07E-02	1.00E-02	9.40E-03	
PR143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE144	5.15E-07	3.69E-06	3.69E-06	3.69E-06	3.69E-06	3.69E-06	3.68E-06	3.68E-06	3.68E-06	3.68E-06	3.68E-06	
PR144	2.52E-10	5.98E-06	6.52E-06	6.56E-06	6.58E-06	6.58E-06	6.58E-06	6.58E-06	6.56E-06	6.56E-06	6.56E-06	
PR145	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE146	1.15E+00	5.87E-02	3.01E-03	1.54E-04	7.92E-06	2.09E-08	2.81E-12	3.79E-16	5.10E-20	6.88E-24	9.27E-28	
PR146	8.07E-02	7.02E-01	1.59E-01	2.99E-02	5.38E-03	1.69E-04	9.34E-07	5.15E-09	2.85E-11	1.58E-13	8.61E-16	
PR147	3.04E-01	8.79E-02	2.74E-03	8.57E-05	2.68E-06	2.62E-09	7.99E-14	2.44E-18	7.45E-23	2.28E-27	6.93E-32	

1

SMOKY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1 299E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	2.11E-08	3.98E-04	4.09E-04	4.08E-04	4.07E-04	4.05E-04	4.02E-04	3.99E-04	3.96E-04	3.93E-04	3.89E-04
ND149	7.46E-02	5.07E-02	3.45E-02	2.35E-02	1.59E-02	7.40E-03	2.33E-03	7.34E-04	2.31E-04	7.27E-05	2.30E-05
PM149	3.23E-07	2.53E-05	4.19E-05	5.31E-05	6.01E-05	6.76E-05	7.02E-05	6.89E-05	6.71E-05	6.45E-05	6.23E-05
PM150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ND151	3.98E-01	1.24E-02	3.89E-04	1.21E-05	3.80E-07	3.71E-10	1.13E-14	3.46E-19	1.05E-23	3.21E-28	9.83E-33
PM151	1.42E-04	1.66E-03	1.67E-03	1.63E-03	1.59E-03	1.51E-03	1.40E-03	1.30E-03	1.21E-03	1.12E-03	1.04E-03
PM152	3.24E-01	3.17E-04	3.09E-07	3.02E-10	2.95E-13	2.81E-19	2.62E-28	2.44E-37	2.28E-46	2.13E-55	1.98E-64
SM153	7.72E-05	7.61E-05	7.50E-05	7.39E-05	7.29E-05	7.07E-05	6.77E-05	6.47E-05	6.19E-05	5.93E-05	5.67E-05
SM155	1.48E-02	2.43E-03	3.99E-04	6.53E-05	1.07E-05	2.88E-07	1.27E-09	5.59E-12	2.47E-14	1.10E-16	2.70E-19
EU155	6.01E-09	1.71E-07	1.98E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07
SM156	1.02E-04	9.49E-05	8.81E-05	8.19E-05	7.60E-05	6.56E-05	5.26E-05	4.22E-05	3.38E-05	2.71E-05	2.17E-05
EU156	3.34E-06	5.46E-06	7.41E-06	9.23E-06	1.09E-05	1.39E-05	1.77E-05	2.05E-05	2.29E-05	2.47E-05	2.61E-05
EU157	3.53E-05	1.17E-04	1.12E-04	1.07E-04	1.02E-04	9.30E-05	8.12E-05	7.09E-05	6.17E-05	5.37E-05	4.69E-05
EU158	4.58E-03	1.85E-03	7.50E-04	3.04E-04	1.23E-04	2.01E-05	1.34E-06	8.89E-08	5.91E-09	3.92E-10	2.60E-11
EU159	1.28E-03	1.27E-04	1.26E-05	1.25E-06	1.24E-07	1.22E-09	1.19E-12	1.17E-15	1.14E-18	1.11E-21	1.09E-24
GD159	8.01E-07	3.51E-06	3.65E-06	3.54E-06	3.41E-06	3.16E-06	2.81E-06	2.51E-06	2.23E-06	1.99E-06	1.77E-06
TB161	2.55E-09	1.83E-08	1.82E-08	1.81E-08	1.81E-08	1.79E-08	1.77E-08	1.75E-08	1.72E-08	1.70E-08	1.68E-08
TOTAL	1.02E+02	3.37E+01	1.35E+01	7.21E+00	4.49E+00	2.35E+00	1.38E+00	1.00E+00	7.79E-01	6.32E-01	5.27E-01

1
SMOKY MR/HR
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.500
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	1.89E-07	1.87E-07	1.84E-07	1.77E-07	1.66E-07	1.46E-07	1.28E-07	9.84E-08	5.15E-08	1.40E-08	3.81E-09	
NA 24	8.38E-03	2.77E-03	9.12E-04	3.27E-05	1.28E-07	1.96E-12	2.98E-17	6.95E-27	0.	0.	0.	0.
MN 54	9.83E-07	9.74E-07	9.74E-07	9.57E-07	9.48E-07	9.30E-07	9.13E-07	8.70E-07	7.77E-07	6.17E-07	4.92E-07	
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	5.88E-06	5.80E-06	5.71E-06	5.45E-06	5.04E-06	4.33E-06	3.71E-06	2.73E-06	1.27E-06	2.70E-07	5.80E-08	
CO 57	1.70E-09	1.70E-09	1.68E-09	1.68E-09	1.66E-09	1.61E-09	1.57E-09	1.49E-09	1.32E-09	1.02E-09	7.89E-10	
CO 58	1.06E-07	1.05E-07	1.04E-07	1.01E-07	9.64E-08	8.74E-08	7.93E-08	6.53E-08	4.02E-08	1.52E-08	5.74E-09	
CO 60	1.36E-06	1.36E-06	1.36E-06	1.36E-06	1.35E-06	1.35E-06	1.35E-06	1.34E-06	1.31E-06	1.27E-06	1.22E-06	
CU 64	3.35E-03	9.12E-04	2.49E-04	5.06E-06	7.59E-09	1.73E-14	3.91E-20	2.01E-31	0.	0.	0.	0.
CU 67	5.85E-08	4.46E-08	3.41E-08	1.52E-08	3.95E-09	2.66E-10	1.80E-11	8.15E-14	1.14E-19	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU 198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU 199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB 203	1.26E-06	9.16E-07	3.51E-07	7.12E-08	2.93E-09	1.20E-10	2.02E-13	2.36E-20	0.	0.	0.	0.
U 237	3.62E-04	3.27E-04	2.94E-04	2.17E-04	1.30E-04	4.64E-05	1.66E-05	2.13E-06	1.26E-08	1.35E-12	9.11E-13	
U 240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP 237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP 239	7.75E-06	1.18E-02	8.82E-03	3.64E-03	8.33E-04	4.35E-05	2.28E-06	6.25E-09	2.46E-15	5.87E-25	5.87E-25	
NP 240M	1.22E-05	2.39E-03	7.36E-04	2.13E-05	5.85E-08	4.41E-13	3.31E-18	1.87E-28	0.	0.	0.	0.
AM 241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM 242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 77	1.15E-04	7.22E-05	1.65E-05	2.00E-07	1.27E-10	5.14E-17	2.07E-23	3.38E-36	0.	0.	0.	0.
AS 77	1.03E-08	1.53E-06	1.10E-06	3.19E-07	3.74E-08	5.08E-10	6.89E-12	1.27E-15	5.89E-25	1.26E-43	2.71E-62	
SE 77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AS 78	2.72E-04	2.42E-06	7.08E-11	5.98E-25	0.	0.	0.	0.	0.	0.	0.	0.
BR 82	2.11E-05	1.32E-05	8.24E-06	2.00E-06	1.90E-07	1.71E-09	1.53E-11	1.24E-15	7.21E-26	2.48E-46	8.43E-67	
BR 83	5.02E-05	1.32E-06	1.33E-09	1.35E-18	1.38E-33	0.	0.	0.	0.	0.	0.	0.
KR 83M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 87	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RB 88	1.13E-01	1.30E-03	3.43E-06	6.23E-14	7.82E-27	0.	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 91	1.12E-02	4.02E-02	7.21E-03	4.13E-05	7.56E-09	2.57E-16	8.69E-24	9.90E-39	0.	0.	0.	0.

DEBRIS DECAY FROM 1 TO 300 DAYS

Y 91M	6.08E-07	2.09E-02	3.74E-03	2.15E-05	3.94E-09	1.33E-16	4.50E-24	5.13E-39	0.	0.	0.
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 92	1.47E-01	1.83E-03	3.94E-06	3.96E-14	1.85E-27	0.	0.	0.	0.	0.	0.
Y 92	1.33E-03	3.78E-03	4.20E-05	3.23E-11	1.88E-21	6.45E-42	2.21E-62	0.	0.	0.	0.
Y 93	4.64E-04	3.13E-03	6.11E-04	4.59E-06	1.32E-09	1.09E-16	9.01E-24	6.15E-38	0.	0.	0.
ZR 95	8.01E-06	1.00E-03	9.90E-04	9.59E-04	9.09E-04	8.15E-04	7.34E-04	5.93E-04	3.48E-04	1.20E-04	4.11E-05
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	9.22E-13	2.00E-05	3.95E-05	9.47E-05	1.76E-04	3.04E-04	3.92E-04	4.86E-04	4.68E-04	2.25E-04	8.63E-05
ZR 97	4.37E-03	7.45E-03	2.80E-03	1.48E-04	1.11E-06	6.27E-11	3.52E-15	1.11E-23	6.29E-45	0.	0.
NB 97M	9.67E-05	3.07E-02	1.15E-02	6.14E-04	4.59E-06	2.59E-10	1.46E-14	4.59E-23	2.60E-44	0.	0.
NB 97	8.54E-03	2.91E-02	1.09E-02	5.81E-04	4.37E-06	2.63E-10	1.48E-14	4.70E-23	2.64E-44	0.	0.
MC 99	1.18E-05	3.85E-03	3.01E-03	1.43E-03	4.12E-04	3.45E-05	2.87E-06	2.01E-08	8.14E-14	1.34E-24	2.21E-35
TC 99M	8.16E-11	2.51E-03	2.11E-03	1.01E-03	2.92E-04	2.44E-05	2.03E-06	1.42E-08	5.76E-14	9.50E-25	1.57E-35
RU103	5.07E-07	1.16E-03	1.14E-03	1.08E-03	9.89E-04	8.29E-04	6.96E-04	4.91E-04	2.04E-04	3.55E-05	6.18E-06
RH103M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU105	4.58E-03	4.38E-03	1.03E-04	1.35E-09	9.89E-18	5.28E-34	2.83E-50	0.	0.	0.	0.
RH105M	9.68E-07	1.41E-04	3.32E-06	4.36E-11	3.19E-19	1.71E-35	9.12E-52	0.	0.	0.	0.
RH105	5.02E-12	1.61E-03	1.05E-03	2.61E-04	2.58E-05	2.50E-07	2.43E-09	2.30E-13	1.99E-23	1.50E-43	1.12E-63
RU106	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RH106	1.06E-08	1.86E-05	1.85E-05	1.84E-05	1.83E-05	1.79E-05	1.75E-05	1.69E-05	1.54E-05	1.27E-05	1.05E-05
PD109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD111M	7.44E-03	3.61E-04	1.75E-05	2.01E-09	5.44E-16	3.97E-29	2.92E-42	0.	0.	0.	0.
PD111	1.87E-04	2.06E-05	9.98E-07	1.15E-10	3.10E-17	2.26E-30	1.66E-43	0.	0.	0.	0.
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG111	5.12E-13	1.41E-05	1.36E-05	1.03E-05	6.50E-06	2.58E-06	1.02E-06	1.61E-07	1.59E-09	1.54E-13	1.49E-17
PD112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG112	1.18E-07	2.06E-03	9.47E-04	8.79E-05	1.68E-06	6.07E-10	2.20E-13	2.91E-20	1.82E-37	0.	0.
AG113	5.72E-06	6.05E-05	2.62E-06	2.13E-10	3.25E-17	7.61E-31	1.78E-44	0.	0.	0.	0.
CD115M	5.84E-12	1.69E-07	1.66E-07	1.58E-07	1.46E-07	1.24E-07	1.06E-07	7.65E-08	3.42E-08	6.80E-09	1.36E-09
CD115	2.55E-08	3.83E-04	2.81E-04	1.11E-04	2.33E-05	1.04E-06	4.65E-08	9.27E-11	1.64E-17	5.13E-31	1.61E-44
IN115M	2.14E-13	2.73E-04	2.07E-04	8.15E-05	1.72E-05	7.68E-07	3.42E-08	6.81E-11	1.21E-17	3.78E-31	1.18E-44
CD117	2.										

DEBRIS DECAY FROM 1 TO 300 DAYS

ZERO TIME 1.00E+00 2.00E+00 5.00E+00 1.00E+01 2.00E+01 3.00E+01 5.00E+01 1.00E+02 2.00E+02 3.00E+02

SN127	1.35E-01	4.90E-05	1.78E-08	8.50E-19	5.33E-36	0.	0.	0.	0.	0.	0.	0.
SB127	6.19E-04	2.54E-03	2.13E-03	1.24E-03	5.09E-04	8.50E-05	1.42E-05	3.97E-07	5.18E-11	8.85E-19	1.51E-26	0.
TE127M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SB128	6.44E-02	1.10E-02	1.73E-03	6.76E-06	6.56E-10	6.16E-18	5.79E-26	5.10E-42	0.	0.	0.	0.
SB129	1.40E-01	7.18E-03	1.50E-04	1.37E-09	5.43E-18	8.57E-35	1.35E-51	0.	0.	0.	0.	0.
TE129M	5.98E-11	6.30E-06	6.30E-06	5.94E-06	5.37E-06	4.38E-06	3.56E-06	2.37E-06	8.54E-07	1.11E-07	1.45E-08	0.
TE129	4.27E-03	3.55E-04	1.48E-05	7.13E-06	6.43E-06	5.24E-06	4.28E-06	2.85E-06	1.03E-06	1.34E-07	1.74E-08	0.
I130	9.49E-04	2.48E-04	6.50E-05	1.16E-06	1.42E-09	2.11E-15	3.15E-21	7.01E-33	0.	0.	0.	0.
TE131M	2.19E-06	7.67E-03	4.40E-03	8.34E-04	5.22E-05	2.03E-07	7.96E-10	1.21E-14	1.10E-26	0.	0.	0.
TE131	5.91E-01	4.10E-04	2.35E-04	4.47E-05	2.79E-06	1.09E-08	4.25E-11	6.51E-16	5.91E-28	0.	0.	0.
I131	8.24E-05	4.45E-03	4.20E-03	3.38E-03	2.22E-03	9.39E-04	3.97E-04	7.10E-05	9.59E-07	1.75E-10	3.18E-14	0.
XE131M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE132	3.44E-03	6.81E-03	5.50E-03	2.89E-03	9.98E-04	1.18E-04	1.40E-05	1.97E-07	4.60E-12	2.52E-21	1.37E-30	0.
I132	9.13E-02	7.60E-02	6.13E-02	3.22E-02	1.11E-02	1.32E-03	1.56E-04	2.20E-06	5.14E-11	2.80E-20	1.53E-29	0.
I133	1.09E-02	6.05E-02	2.73E-02	2.53E-03	4.83E-05	1.75E-08	6.35E-12	8.37E-19	5.26E-36	0.	0.	0.
XE133M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE133	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
I135	4.21E-01	6.88E-02	5.74E-03	3.34E-06	1.36E-11	2.24E-22	3.68E-33	1.00E-54	0.	0.	0.	0.
XE135M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE135	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS136	2.20E-04	2.09E-04	1.98E-04	1.69E-04	1.29E-04	7.58E-05	4.46E-05	1.53E-05	1.06E-06	5.13E-09	2.49E-11	0.
CS137	8.35E-07	9.00E-06	9.00E-06	9.00E-06	9.00E-06	9.00E-06	9.00E-06	9.00E-06	8.95E-06	8.90E-06	8.85E-06	0.
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
BA139	6.72E-03	7.17E-07	4.23E-12	8.71E-28	0.	0.	0.	0.	0.	0.	0.	0.
BA140	2.66E-04	1.57E-03	1.49E-03	1.27E-03	9.65E-04	5.62E-04	3.26E-04	1.11E-04	7.39E-06	3.29E-08	1.45E-10	0.
LA140	8.72E-09	7.55E-03	1.21E-02	1.68E-02	1.49E-02	8.93E-03	5.19E-03	1.77E-03	1.17E-04	5.23E-07	2.32E-09	0.
LA141	9.46E-04	3.75E-04	5.26E-06	1.46E-11	7.97E-21	2.38E-39	7.09E-58	0.	0.	0.	0.	0.
CE141	2.06E-10	2.28E-04	2.27E-04	2.13E-04	1.91E-04	1.54E-04	1.24E-04	8.11E-05	2.78E-05	3.28E-06	3.86E-07	0.
LA142	2.64E-01	5.79E-05	1.12E-09	8.25E-24	0.	0.	0.	0.	0.	0.	0.	0.
CE143	2.12E-04	8.73E-03	5.28E-03	1.16E-03	9.35E-05	6.05E-07	3.91E-09	1.64E-13	1.85E-24	0.	0.	0.

1

SMOKY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	1.42E-04	9.65E-04	5.33E-04	8.97E-05	4.60E-06	1.21E-08	3.18E-11	2.19E-16	2.75E-29	0.	0.	0.
SM153	7.72E-05	5.43E-05	3.81E-05	1.32E-05	2.24E-06	6.51E-08	1.89E-09	1.59E-12	3.28E-20	1.40E-35	5.93E-51	0.
SM156	1.02E-04	1.74E-05	2.97E-06	1.46E-08	2.11E-12	4.33E-20	8.95E-28	3.81E-43	0.	0.	0.	0.
EU155	6.01E-09	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.02E-07	2.01E-07	1.99E-07	1.96E-07	1.88E-07	1.80E-07	1.80E-07
EU156	3.34E-06	2.72E-05	3.02E-05	2.70E-05	2.15E-05	1.35E-05	8.51E-06	3.38E-06	3.34E-07	3.29E-09	3.25E-11	0.
EU157	3.53E-05	4.08E-05	1.37E-05	5.14E-07	2.16E-09	3.81E-14	6.74E-19	2.10E-28	0.	0.	0.	0.
GD159	8.01E-07	1.58E-06	6.28E-07	3.92E-08	3.85E-10	3.73E-14	3.62E-18	3.40E-26	2.90E-46	0.	0.	0.
TB161	2.55E-09	1.66E-08	1.50E-08	1.11E-08	6.72E-09	2.46E-09	9.00E-10	1.21E-10	7.98E-13	3.45E-17	1.50E-21	0.
TOTAL	2.12E+00	4.41E-01	1.91E-01	7.38E-02	3.55E-02	1.45E-02	8.25E-03	3.69E-03	1.22E-03	4.18E-04	1.63E-04	0.

1
SMOKY MR/HR
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.500
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	1.89E-07	1.63E-09	1.52E-10	1.41E-11	1.13E-14	9.07E-18	6.78E-22	4.35E-28	0.	0.	0.	0.
MN 54	9.83E-07	4.23E-07	2.79E-07	1.83E-07	5.24E-08	1.50E-08	2.82E-09	2.30E-10	5.41E-14	1.96E-19	7.08E-25	0.
FE 59	5.88E-06	2.12E-08	1.27E-09	7.66E-11	1.66E-14	3.59E-18	4.68E-23	2.19E-30	0.	0.	0.	0.
CO 57	1.70E-09	6.68E-10	4.18E-10	2.62E-10	6.47E-11	1.59E-11	2.46E-13	1.49E-13	1.31E-17	1.07E-23	0.	0.
CO 58	1.06E-07	3.05E-09	5.17E-10	8.76E-11	4.27E-13	2.08E-15	1.71E-18	4.07E-23	1.55E-38	0.	0.	0.
CO 60	1.36E-06	1.19E-06	1.11E-06	1.04E-06	8.55E-07	7.02E-07	5.39E-07	3.64E-07	9.75E-08	1.35E-08	1.87E-09	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	3.62E-04	9.03E-13	8.79E-13	8.56E-13	8.01E-13	7.43E-13	6.76E-13	5.86E-13	3.65E-13	1.79E-13	8.79E-14	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZR 95	8.01E-06	2.06E-05	2.94E-06	4.18E-07	1.22E-09	3.55E-12	1.47E-15	1.24E-20	1.52E-37	0.	0.	0.
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	9.22E-13	4.57E-05	6.57E-06	9.36E-07	2.71E-09	7.87E-12	3.29E-15	2.78E-20	3.40E-37	0.	0.	0.
RU103	5.07E-07	1.97E-06	8.07E-08	3.32E-09	2.26E-13	1.55E-17	4.36E-23	2.05E-31	0.	0.	0.	0.
RH103M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU106	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RH106	1.06E-08	9.33E-06	6.60E-06	4.68E-06	1.66E-06	5.91E-07	1.49E-07	1.88E-08	1.90E-11	6.10E-16	1.96E-20	0.
SN123	1.52E-09	2.11E-08	7.64E-09	2.78E-09	1.33E-10	6.39E-12	1.11E-13	2.57E-16	4.11E-25	2.65E-38	1.70E-51	0.
SB125	1.33E-06	2.68E-06	2.35E-06	2.07E-06	1.41E-06	9.59E-07	5.73E-07	2.65E-07	2.04E-08	4.34E-10	9.25E-12	0.
TE125M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS137	8.35E-07	8.80E-06	8.70E-06	8.60E-06	8.30E-06	8.00E-06	7.65E-06	7.15E-06	5.65E-06	4.01E-06	2.83E-06	0.
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE141	2.06E-10	8.88E-08	1.79E-09	3.59E-11	2.92E-16	2.38E-21	3.90E-28	2.59E-38	0.	0.	0.	0.
CE144	5.15E-07	1.51E-06	9.72E-07	6.21E-07	1.63E-07	4.28E-08	7.20E-09	4.97E-10	6.69E-14	1.05E-19	1.64E-25	0.
PR144	2.52E-10	2.70E-06	1.73E-06	1.11E-06	2.90E-07	7.64E-08	1.28E-08	8.86E-10	1.19E-13	1.87E-19	2.92E-25	0.
PM147	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EU155	6.01E-09	1.76E-07	1.63E-07	1.52E-07	1.22E-07	9.82E-08	7.33E-08	4.73E-08	1.11E-08	1.24E-09	1.40E-10	0.
TOTAL	3.82E-04	9.52E-05	3.15E-05	1.98E-05	1.29E-05	1.05E-05	9.01E-06	7.85E-06	5.78E-06	4.03E-06	2.84E-06	0.

DEBRIS DECAY FROM 1 TO 21 HOURS

BE	7	4.81E-08	4.81E-08	4.81E-08	4.81E-08	4.81E-08	4.80E-08	4.79E-08	4.78E-08	4.77E-08	4.76E-08	4.76E-08
NA	24	2.14E-03	2.04E-03	1.95E-03	1.86E-03	1.78E-03	1.62E-03	1.41E-03	1.23E-03	1.07E-03	9.33E-04	8.08E-04
MN	54	2.51E-07	2.51E-07	2.51E-07	2.51E-07	2.51E-07	2.51E-07	2.51E-07	2.48E-07	2.48E-07	2.48E-07	2.48E-07
FE	55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE	59	1.50E-06	1.50E-06	1.50E-06	1.50E-06	1.50E-06	1.50E-06	1.49E-06	1.49E-06	1.49E-06	1.48E-06	1.48E-06
CO	57	4.32E-10	4.32E-10	4.32E-10	4.32E-10	4.32E-10	4.32E-10	4.32E-10	4.32E-10	4.32E-10	4.32E-10	4.32E-10
CO	58	2.71E-08	2.71E-08	2.71E-08	2.71E-08	2.70E-08	2.70E-08	2.69E-08	2.69E-08	2.69E-08	2.69E-08	2.68E-08
CO	60	3.47E-07	3.47E-07	3.47E-07	3.47E-07	3.47E-07	3.47E-07	3.47E-07	3.47E-07	3.47E-07	3.47E-07	3.47E-07
CU	64	8.55E-04	8.08E-04	7.66E-04	7.27E-04	6.88E-04	6.17E-04	5.24E-04	4.46E-04	3.79E-04	3.22E-04	2.74E-04
CU	67	1.49E-08	1.48E-08	1.45E-08	1.44E-08	1.43E-08	1.39E-08	1.34E-08	1.30E-08	1.26E-08	1.21E-08	1.18E-08
W	181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB	203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	2	2.22E-06	2.18E-06	2.15E-06	2.12E-06	2.09E-06	2.04E-06	1.97E-06	1.89E-06	1.81E-06	1.73E-06	1.67E-06
U239	9	2.23E-05	9.19E-05	9.15E-05	9.11E-05	9.07E-05	8.99E-05	8.87E-05	8.77E-05	8.65E-05	8.53E-05	8.43E-05
U239	1	6.7E-01	2.84E-02	4.85E-03	8.26E-04	1.40E-04	4.09E-06	2.03E-08	1.00E-10	4.95E-13	2.45E-15	1.21E-17
U240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	1	98E-06	3.32E-03	3.83E-03	3.89E-03	3.86E-03	3.77E-03	3.62E-03	3.50E-03	3.38E-03	3.25E-03	3.13E-03
NP240M	3	12E-06	1.88E-03	1.80E-03	1.72E-03	1.63E-03	1.48E-03	1.28E-03	1.10E-03	9.49E-04	8.19E-04	7.07E-04
NP240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE	75	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE	77	1.46E-04	3.76E-04	3.54E-04	3.33E-04	3.13E-04	2.77E-04	2.31E-04	1.92E-04	1.60E-04	1.33E-04	1.10E-04
AS	77	1.32E-08	2.08E-06	2.11E-06	2.12E-06	2.14E-06	2.15E-06	2.15E-06	2.14E-06	2.10E-06	2.06E-06	2.01E-06
SE	77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE	78	4.57E-03	2.86E-03	1.78E-03	1.11E-03	6.94E-04	2.70E-04	6.56E-05	1.59E-05	3.87E-06	9.41E-07	2.29E-07
AS	78	3.46E-04	5.75E-03	7.09E-03	6.64E-03	5.55E-03	3.28E-03	1.22E-03	4.04E-04	1.25E-04	3.74E-05	1.08E-05
AS	79	0.	0.	0.</								

DEBRIS DECAY FROM 1 TO 21 HOURS

ZERO TIME 1.00E+00 2.00E+00 3.00E+00 4.00E+00 6.00E+00 9.00E+00 1.20E+01 1.50E+01 1.80E+01 2.10E+01

BR	84		3.	21E-03	5.	55E-01	1.	50E-01	4.	06E-02	1.	10E-02	8.	02E-04	1.	58E-05	3.	13E-07	6.	19E-09	1.	22E-10	2.	42E-12
KR	85M		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
KR	87		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
KR	88		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
RB	88		1.	44E-01	4.	47E-01	3.	81E-01	3.	01E-01	2.	35E-01	1.	43E-01	6.	83E-02	3.	25E-02	1.	55E-02	7.	37E-03	3.	50E-03
RB	89		2.	25E+00	2.	11E+00	1.	42E-01	9.	55E-03	6.	40E-04	2.	90E-06	8.	77E-10	2.	65E-13	8.	06E-17	2.	44E-20	7.	41E-24
SR	89		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
SR	90		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
SR	91		1.	27E-02	2.	36E-01	2.	20E-01	2.	05E-01	1.	91E-01	1.	65E-01	1.	33E-01	1.	08E-01	8.	70E-02	6.	98E-02	5.	63E-02
Y	91M		6.	86E-07	6.	54E-02	8.	92E-02	9.	56E-02	9.	43E-02	8.	47E-02	6.	93E-02	5.	57E-02	4.	50E-02	3.	62E-02	2.	92E-02
Y	91		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.	
SR	92		3.	74E-02	1.	67E-01	1.	29E-01	1.	00E-01	7.	75E-02	4.	64E-02	2.	16E-02	1.	00E-02	4.	64E-03	2.	16E-03	1.	00E-03
Y	92		3.	40E-04	6.	93E-03	1.	09E-02	1.	29E-02	1.	37E-02	1.	31E-02	2.	10E-02	6.	83E-03	4.	39E-03	2.	70E-03	1.	63E-03
SR	93		2.	59E+00	4.	46E-02	2.	46E-04	1.	36E-06	7.	50E-09	2.	29E-13	3.	87E-20	6.	52E-27	1.	10E-33	1.	86E-40	3.	13E-47
Y	93		1.	18E-04	3.	82E-03	3.	59E-03	3.	36E-03	3.	14E-03	2.	74E-03	2.	23E-03	1.	82E-03	1.	48E-03	1.	22E-03	9.	88E-04
Y	94		1.	28E-01	1.	75E-01	2.	25E-02	2.	90E-03	3.	74E-04	6.	22E-06	1.	33E-08	2.	86E-11	6.	11E-14	1.	33E-16	7.	39E-18
Y	95		7.	97E-01	7.	51E-02	1.	65E-03	3.	65E-05	8.	04E-07	3.	90E-10	4.	18E-15	4.	46E-20	4.	77E-25	5.	09E-30	5.	45E-35
ZR	95		2.	04E-06	2.	67E-04	2.	72E-04	2.	72E-04	2.	72E-04	2.	72E-04	2.	72E-04	2.	71E-04	2.	71E-04	2.	70E-04	2.	70E-04
NB	95		2.	35E-13	1.	70E-07	3.	97E-07	6.	23E-07	8.	51E-07	1.	30E-06	1.	98E-06	2.	66E-06	3.	33E-06	4.	01E-06	4.	67E-06
ZR	97		1.	12E-03	4.	86E-03	4.	65E-03	4.	47E-03	4.	28E-03	3.	95E-03	3.	49E-03	3.	09E-03	2.	74E-03	2.	42E-03	2.	15E-03
NB	97M		2.	47E-05	2.	00E-02	1.	92E-02	1.	85E-02	1.	77E-02	1.	63E-02	1.	44E-02	1.	28E-02	1.	13E-02	9.	98E-03	8.	82E-03
NB	97		2.	18E-03	9.	50E-03	1.	34E-02	1.	53E-02	1.	60E-02	1.	59E-02	1.	45E-02	1.	29E-02	1.	15E-02	1.	01E-02	8.	98E-03

SMOKY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD111M	9.49E-03	8.35E-03	7.36E-03	6.51E-03	5.73E-03	4.46E-03	3.05E-03	2.09E-03	1.43E-03	9.80E-04	6.72E-04
PD111	2.39E-04	4.31E-04	4.13E-04	3.68E-04	3.26E-04	2.53E-04	1.74E-04	1.19E-04	8.14E-05	5.59E-05	3.83E-05
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG111	6.53E-13	1.93E-06	4.06E-06	5.97E-06	7.66E-06	1.04E-05	1.34E-05	1.54E-05	1.67E-05	1.75E-05	1.79E-05
PD112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG112	1.50E-07	9.55E-04	1.69E-03	2.26E-03	2.69E-03	3.22E-03	3.54E-03	3.52E-03	3.36E-03	3.13E-03	2.88E-03
AG113	7.30E-06	1.56E-03	1.37E-03	1.20E-03	1.05E-03	8.11E-04	5.49E-04	3.71E-04	2.50E-04	1.69E-04	1.14E-04
AG115	2.68E-02	2.87E-02	3.57E-03	4.47E-04	5.60E-05	8.75E-07	1.71E-09	3.34E-12	6.47E-15	6.43E-16	5.96E-18
CD115M	7.44E-12	1.98E-07	2.23E-07	2.25E-07	2.25E-07	2.25E-07	2.25E-07	2.25E-07	2.24E-07	2.23E-07	2.23E-07
CD115	3.24E-08	6.11E-04	6.58E-04	6.56E-04	6.48E-04	6.32E-04	6.08E-04	5.85E-04	5.63E-04	5.41E-04	5.20E-04
IN115M	2.73E-13	4.55E-05	1.01E-04	1.50E-04	1.91E-04	2.55E-04	3.15E-04	3.47E-04	3.62E-04	3.65E-04	3.62E-04
CD117	3.03E-03	5.04E-02	3.80E-02	2.83E-02	2.13E-02	1.19E-02	5.00E-03	2.11E-03	8.87E-04	3.73E-04	1.57E-04
IN117M	1.10E-08	1.32E-03	1.91E-03	2.07E-03	2.00E-03	1.58E-03	9.03E-04	4.62E-04	2.22E-04	1.03E-04	4.65E-05
IN117	4.08E-12	2.23E-03	5.40E-03	7.50E-03	8.36E-03	7.70E-03	4.90E-03	2.62E-03	1.30E-03	6.14E-04	2.82E-04
CD118	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN118	3.29E-03	2.13E-02	9.14E-03	3.90E-03	1.67E-03	3.06E-04	2.40E-05	1.88E-06	1.47E-07	1.15E-08	9.05E-10
CD119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN119M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN121	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN123M	4.07E-03	7.61E-03	2.70E-03	9.54E-04	3.37E-04	4.21E-05	1.86E-06	8.24E-08	3.65E-09	1.61E-10	7.12E-12
SN123	1.94E-09	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07	2.03E-07
SN125	1.93E-04	1.93E-04	1.92E-04	1.92E-04	1.91E-04	1.90E-04	1.88E-04	1.86E-04	1.85E-04	1.83E-04	1.81E-04
SB125	1.69E-06	1.70E-06	1.71E-06	1.72E-06	1.72E-06	1.74E-06	1.77E-06	1.79E-06	1.81E-06	1.83E-06	1.86E-06
SB126	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN127	1.72E-01	1.24E-01	8.90E-02	6.41E-02	4.62E-02	2.38E-02	8.85E-03	3.29E-03	1.22E-03	4.53E-04	1.68E-04
SB127	7.90E-04	2.72E-03	3.02E-03	3.21E-03	3.35E-03	3.49E-03	3.55E-03	3.51E-03	3.46E-03	3.38E-03	3.32E-03
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN128	4.06E-01	2.00E-01	9.92E-02	4.90E-02	2.42E-02	5.92E-03	7.14E-04	8.62E-05	1.04E-05	1.26E-06	1.52E-07
SB128M	6.09E-04	6.72E-01	3.49E-01	1.72E-01	8.50E-02	2.08E-02	2.51E-03	3.03E-04	3.65E-05	4.41E-06	5.33E-07
SB128	8.21E-02	7.90E-02	7.44E-02	6.97E-02	6.51E-02	5.58E-02	4.45E-02	3.53E-02	2.80E-02	2.23E-02	1.77E-02
SN129M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN129	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SB129	1.79E-01	3.00E-01	2.82E-01	2.52E-01	2.21E-01	1.64E-01	1.02E-01	6.34E-02	3.90E-02	2.41E-02	1.49E-02
TE129M	7.62E-11	8.44E-07	1.74E-06	2.55E-06	3.28E-06	4.45E-06	5.63E-06	6.35E-06	6.81E-06	7.08E-06	7.26E-06
TE129	5.44E-03	7.48E-03	8.75E-03	9.09E-03	8.75E-03	7.25E-03	4.83E-03	3.04E-03	1.89E-03	1.17E-03	7.27E-04
SB130M	3.04E-02	5.73E-02	1.50E-04	3.95E-07	1.04E-09	7.18E-15	1.31E-22	2.38E-30	4.31E-38	7.83E-46	1.43E-53
SB130	6.44E+00	1.95E+00	5.54E-01	1.57E-01	4.44E-02	3.57E-03	8.15E-05	1.86E-06	4.24E-08	9.66E-10	2.20E-11

SMOKY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	1.21E-03	1.14E-03	1.08E-03	1.02E-03	9.68E-04	8.67E-04	7.32E-04	6.19E-04	5.23E-04	4.43E-04	3.74E-04	
SB131	7.57E+00	1.98E+00	3.23E-01	5.31E-02	8.71E-03	2.34E-04	1.03E-06	4.56E-09	2.01E-11	8.85E-14	4.41E-16	
TE131M	2.80E-06	1.46E-02	1.67E-02	1.67E-02	1.64E-02	1.57E-02	1.46E-02	1.36E-02	1.27E-02	1.19E-02	1.11E-02	
TE131	7.54E-01	8.19E-01	2.67E-01	6.94E-02	1.69E-02	1.58E-03	7.87E-04	7.27E-04	6.78E-04	6.35E-04	5.91E-04	
I131	1.05E-04	3.64E-03	5.36E-03	5.88E-03	5.98E-03	6.03E-03	6.03E-03	5.98E-03	5.98E-03	5.93E-03	5.93E-03	
TE132	4.38E-03	1.06E-02	1.05E-02	1.05E-02	1.04E-02	1.02E-02	9.90E-03	9.64E-03	9.40E-03	9.13E-03	8.89E-03	
I132	1.16E-01	1.16E-01	1.16E-01	1.15E-01	1.14E-01	1.13E-01	1.10E-01	1.08E-01	1.05E-01	1.02E-01	9.95E-02	
TE133M	5.72E-03	1.98E+00	8.63E-01	3.76E-01	1.63E-01	3.10E-02	2.55E-03	2.11E-04	1.74E-05	1.43E-06	1.18E-07	
TE133	1.30E+01	7.39E-01	8.22E-02	2.72E-02	1.15E-02	2.18E-03	1.80E-04	1.48E-05	1.23E-06	1.01E-07	8.32E-09	
I133	1.38E-02	1.49E-01	1.61E-01	1.61E-01	1.58E-01	1.50E-01	1.36E-01	1.23E-01	1.11E-01	1.01E-01	9.15E-02	
XE133M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE133	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
TE134	3.79E+00	1.75E+00	6.53E-01	2.43E-01	9.01E-02	1.25E-02	6.39E-04	3.27E-05	1.68E-06	8.61E-08	4.41E-09	
I134	5.16E+00	6.89E+00	4.83E+00	2.83E+00	1.52E+00	3.86E-01	4.24E-02	4.33E-03	4.24E-04	4.07E-05	3.86E-06	
I135	5.37E-01	9.46E-01	8.53E-01	7.68E-01	6.94E-01	5.63E-01	4.14E-01	3.02E-01	2.22E-01	1.64E-01	1.19E-01	
XE135M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE135	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS136	2.81E-04	2.80E-04	2.79E-04	2.79E-04	2.78E-04	2.77E-04	2.75E-04	2.73E-04	2.71E-04	2.69E-04	2.68E-04	
CS137	1.06E-06	1.15E-05	1.15E-05	1.15E-05	1.15E-05	1.15E-05	1.15E-05	1.15E-05	1.15E-05	1.15E-05	1.15E-05	
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE138	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS138	4.67E+00	7.86E+00	2.73E+00	8.01E-01	2.24E-01	1.71E-02	3.55E-04	7.38E-06	1.53E-07	3.19E-09	6.60E-11	
CS139	3.48E+00	1.11E-01	1.39E-03	1.75E-05	2.19E-07	3.44E-11	6.86E-17	1.35E-22	2.68E-28	5.32E-34	1.05E-38	
BA139	8.57E-03	9.55E-02	5.89E-02	3.58E-02	2.16E-02	7.94E-03	1.76E-03	3.91E-04	8.70E-05	1.93E-05	4.28E-06	
BA140	2.91E-04	1.81E-03	1.81E-03	1.80E-03	1.80E-03	1.79E-03	1.79E-03	1.77E-03	1.76E-03	1.75E-03	1.73E-03	
LA140	9.55E-09	4.29E-04	8.50E-04	1.26E-03	1.67E-03	2.45E-03	3.58E-03	4.63E-03	5.63E-03	6.56E-03	7.45E-03	
BA141	1.66E+00	5.02E-01	4.98E-02	4.94E-03	4.90E-04	4.86E-06	4.75E-09	4.63E-12	4.51E-15	4.43E-18	4.31E-21	
LA141	7.20E-04	1.52E-02	1.42E-02	1.21E-02	1.01E-02	7.08E-03	4.15E-03	2.43E-03	1.43E-03	8.38E-04	4.91E-04	
CE141	1.57E-10	1.74E-05	4.08E-05	6.14E-05	7.87E-05	1.05E-04	1.31E-04	1.46E-04	1.54E-04	1.59E-04	1.62E-04	
BA142	1.35E+00	5.37E-02	1.23E-03	2.79E-05	6.37E-07	3.31E-10	3.93E-15	4.66E-20	5.53E-25	6.56E-30	7.79E-35	
LA142	6.74E-02	4.68E-01	3.08E-01	1.96E-01	1.25E-01	5.05E-02	1.30E-02	3.36E-03	8.66E-04	2.23E-04	5.75E-05	
LA143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE143	5.41E-05	3.45E-03	3.58E-03	3.48E-03	3.42E-03	3.29E-03	3.08E-03	2.90E-03	2.72E-03	2.55E-03	2.40E-03	
PR143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE144	1.31E-07	9.41E-07	9.41E-07	9.41E-07	9.41E-07	9.41E-07	9.39E-07	9.39E-07	9.39E-07	9.39E-07	9.39E-07	
PR144	6.42E-11	1.53E-06	1.66E-06	1.67E-06	1.68E-06	1.68E-06	1.68E-06	1.68E-06	1.67E-06	1.67E-06	1.67E-06	
PR145	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE146	2.92E-01	1.50E-02	7.68E-04	3.92E-05	2.02E-06	5.32E-09	7.16E-13	9.66E-17	1.30E-20	1.75E-24	2.36E-28	
PR146	2.06E-02	1.79E-01	4.06E-02	7.62E-03	1.37E-03	4.31E-05	2.38E-07	1.31E-09	7.27E-12	4.02E-14	2.20E-16	
PR147	7.75E-02	2.24E-02	7.00E-04	2.18E-05	6.84E-07	6.68E-10	2.04E-14	6.23E-19	1.90E-23	5.80E-28	1.77E-32	

1
 SMOKY
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	5.39E-09	1.01E-04	1.04E-04	1.04E-04	1.04E-04	1.03E-04	1.02E-04	1.02E-04	1.01E-04	1.00E-04	9.93E-05	
ND149	1.90E-02	1.29E-02	8.80E-03	6.00E-03	4.06E-03	1.89E-03	5.93E-04	1.87E-04	5.89E-05	1.85E-05	5.86E-06	
PM149	8.24E-08	6.44E-06	1.07E-05	1.35E-05	1.53E-05	1.72E-05	1.79E-05	1.76E-05	1.71E-05	1.64E-05	1.59E-05	
PM150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
ND151	1.01E-01	3.17E-03	9.91E-05	3.10E-06	9.69E-08	9.46E-11	2.89E-15	8.83E-20	2.69E-24	8.19E-29	2.51E-33	
PM151	3.61E-05	4.22E-04	4.25E-04	4.15E-04	4.04E-04	3.84E-04	3.56E-04	3.31E-04	3.08E-04	2.85E-04	2.64E-04	
PM152	8.25E-02	8.07E-05	7.87E-08	7.69E-11	7.51E-14	7.17E-20	6.68E-29	6.23E-38	5.80E-47	5.42E-56	5.04E-65	
SM153	1.97E-05	1.94E-05	1.91E-05	1.88E-05	1.86E-05	1.80E-05	1.73E-05	1.65E-05	1.58E-05	1.51E-05	1.45E-05	
SM155	3.78E-03	6.21E-04	1.02E-04	1.66E-05	2.73E-06	7.34E-08	3.24E-10	1.43E-12	6.29E-15	2.80E-17	6.88E-20	
EU155	1.53E-09	4.37E-08	5.06E-08	5.17E-08	5.19E-08	5.19E-08	5.19E-08	5.19E-08	5.19E-08	5.19E-08	5.19E-08	
SM156	2.61E-05	2.42E-05	2.25E-05	2.09E-05	1.94E-05	1.67E-05	1.34E-05	1.08E-05	8.62E-06	6.91E-06	5.53E-06	
EU156	8.53E-07	1.39E-06	1.89E-06	2.35E-06	2.78E-06	3.55E-06	4.51E-06	5.22E-06	5.85E-06	6.31E-06	6.64E-06	
EU157	9.00E-06	2.98E-05	2.85E-05	2.72E-05	2.59E-05	2.37E-05	2.07E-05	1.81E-05	1.57E-05	1.37E-05	1.19E-05	
EU158	1.17E-03	4.73E-04	1.91E-04	7.75E-05	3.14E-05	5.13E-06	3.42E-07	2.27E-08	1.51E-09	9.99E-11	6.64E-12	
EU159	3.26E-04	3.24E-05	3.21E-06	3.19E-07	3.16E-08	3.12E-10	3.04E-13	2.97E-16	2.90E-19	2.84E-22	2.77E-25	
GD159	2.04E-07	8.95E-07	9.31E-07	9.03E-07	8.69E-07	8.05E-07	7.17E-07	6.39E-07	5.69E-07	5.07E-07	4.52E-07	
TB161	6.49E-10	4.67E-09	4.64E-09	4.62E-09	4.61E-09	4.56E-09	4.51E-09	4.45E-09	4.39E-09	4.35E-09	4.29E-09	
TOTAL	1.06E+02	3.74E+01	1.48E+01	7.61E+00	4.57E+00	2.31E+00	1.36E+00	1.00E+00	7.82E-01	6.34E-01	5.25E-01	

SMOKY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	4.81E-08	4.76E-08	4.69E-08	4.52E-08	4.23E-08	3.71E-08	3.26E-08	2.51E-08	1.31E-08	3.57E-09	9.70E-10	
NA 24	2.14E-03	7.05E-04	2.33E-04	8.34E-06	3.26E-08	4.99E-13	7.61E-18	1.77E-27	0.	0.	0.	0.
MN 54	2.51E-07	2.48E-07	2.48E-07	2.44E-07	2.42E-07	2.37E-07	2.33E-07	2.22E-07	1.98E-07	1.57E-07	1.25E-07	0.
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	1.50E-06	1.48E-06	1.46E-06	1.39E-06	1.29E-06	1.10E-06	9.45E-07	6.95E-07	3.23E-07	6.88E-08	1.48E-08	0.
CO 57	4.32E-10	4.32E-10	4.29E-10	4.29E-10	4.23E-10	4.10E-10	4.00E-10	3.81E-10	3.36E-10	2.60E-10	2.01E-10	0.
CO 58	2.71E-08	2.68E-08	2.65E-08	2.57E-08	2.46E-08	2.23E-08	2.02E-08	1.66E-08	1.03E-08	3.88E-09	1.46E-09	0.
CO 60	3.47E-07	3.47E-07	3.47E-07	3.47E-07	3.45E-07	3.45E-07	3.43E-07	3.41E-07	3.33E-07	3.23E-07	3.10E-07	0.
CU 64	8.55E-04	2.33E-04	6.35E-05	1.29E-06	1.93E-09	4.40E-15	9.96E-21	5.13E-32	0.	0.	0.	0.
CU 67	1.49E-08	1.14E-08	8.69E-09	3.87E-09	1.01E-09	6.79E-11	4.58E-12	2.08E-14	2.91E-20	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	1.61E-06	1.17E-06	4.48E-07	9.08E-08	3.73E-09	1.53E-10	2.57E-13	3.01E-20	0.	0.	0.	0.
U237	9.23E-05	8.33E-05	7.50E-05	5.52E-05	3.30E-05	1.18E-05	4.24E-06	5.42E-07	3.20E-09	3.44E-13	2.32E-13	0.
U240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	1.98E-06	3.02E-03	2.25E-03	9.28E-04	2.12E-04	1.11E-05	5.81E-07	1.59E-09	6.27E-16	1.50E-25	1.50E-25	0.
NP240M	3.12E-06	6.11E-04	1.88E-04	5.44E-06	1.49E-08	1.12E-13	8.45E-19	4.77E-29	0.	0.	0.	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 77	1.46E-04	9.20E-05	2.11E-05	2.54E-07	1.62E-10	6.55E-17	2.64E-23	4.31E-36	0.	0.	0.	0.
AS 77	1.32E-08	1.95E-06	1.41E-06	4.07E-07	4.77E-08	6.47E-10	8.79E-12	1.62E-15	7.51E-25	1.61E-43	3.46E-62	0.
SE 77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AS 78	3.46E-04	3.08E-06	9.03E-11	7.62E-25	0.	0.	0.	0.	0.	0.	0.	0.
BR 82	2.69E-05	1.68E-05	1.05E-05	2.55E-06	2.42E-07	2.17E-09	1.95E-11	1.58E-15	9.20E-26	3.16E-46	1.07E-66	0.
BR 83	6.40E-05	1.69E-06	1.70E-09	1.72E-18	1.76E-33	0.	0.	0.	0.	0.	0.	0.
KR 83M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 87	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RB 88	1.44E-01	1.66E-03	4.38E-06	7.94E-14	9.96E-27	0.	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 91	1.27E-02	4.54E-02	8.14E-03	4.67E-05	8.54E-09	2.90E-16	9.82E-24	1.12E-38	0.	0.	0.	0.

DEBRIS DECAY FROM 1 TO 300 DAYS

Y 91M	6.86E-07	2.36E-02	4.22E-03	2.42E-05	4.45E-09	1.50E-16	5.08E-24	5.80E-39	0.	0.	0.
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 92	3.74E-02	4.66E-04	1.00E-06	1.01E-14	4.73E-28	0.	0.	0.	0.	0.	0.
Y 92	3.40E-04	9.64E-04	1.07E-05	8.24E-12	4.80E-22	1.64E-42	5.63E-63	0.	0.	0.	0.
Y 93	1.18E-04	7.99E-04	1.56E-04	1.17E-06	3.37E-10	2.78E-17	2.30E-24	1.57E-38	0.	0.	0.
ZR 95	2.04E-06	2.55E-04	2.52E-04	2.44E-04	2.32E-04	2.08E-04	1.87E-04	1.51E-04	8.86E-05	3.05E-05	1.05E-05
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	2.35E-13	5.10E-06	1.01E-05	2.41E-05	4.49E-05	7.74E-05	9.99E-05	1.24E-04	1.19E-04	5.74E-05	2.20E-05
ZR 97	1.12E-03	1.90E-03	7.14E-04	3.78E-05	2.84E-07	1.60E-11	8.98E-16	2.84E-24	1.60E-45	0.	0.
NB 97M	2.47E-05	7.83E-03	2.94E-03	1.57E-04	1.17E-06	6.60E-11	3.71E-15	1.17E-23	6.62E-45	0.	0.
NB 97	2.18E-03	7.43E-03	2.79E-03	1.48E-04	1.12E-06	6.71E-11	3.77E-15	1.20E-23	6.74E-45	0.	0.
MO 99	3.02E-06	9.83E-04	7.67E-04	3.63E-04	1.05E-04	8.79E-06	7.33E-07	5.11E-09	2.08E-14	3.42E-25	5.63E-36
TC 99M	2.08E-11	6.40E-04	5.39E-04	2.58E-04	7.44E-05	6.21E-06	5.19E-07	3.62E-09	1.47E-14	2.42E-25	3.99E-36
RU103	6.47E-07	1.48E-03	1.45E-03	1.37E-03	1.26E-03	1.06E-03	8.87E-04	6.26E-04	2.60E-04	4.52E-05	7.88E-06
RH103M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU105	5.83E-03	5.58E-03	1.31E-04	1.72E-09	1.26E-17	6.73E-34	3.61E-50	0.	0.	0.	0.
RH105M	1.23E-06	1.79E-04	4.23E-06	5.56E-11	4.07E-19	2.18E-35	1.16E-51	0.	0.	0.	0.
RH105	6.40E-12	2.05E-03	1.34E-03	3.33E-04	3.28E-05	3.19E-07	3.10E-09	2.93E-13	2.54E-23	1.91E-43	1.43E-63
RU106	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RH106	1.35E-08	2.37E-05	2.36E-05	2.35E-05	2.33E-05	2.29E-05	2.24E-05	2.15E-05	1.96E-05	1.62E-05	1.34E-05
PD108	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD111M	9.49E-03	4.60E-04	2.24E-05	2.57E-09	6.94E-16	5.06E-29	3.72E-42	0.	0.	0.	0.
PD111	2.39E-04	2.63E-05	1.27E-06	1.46E-10	3.96E-17	2.88E-30	2.11E-43	0.	0.	0.	0.
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG111	6.53E-13	1.80E-05	1.73E-05	1.32E-05	8.29E-06	3.29E-06	1.31E-06	2.06E-07	2.02E-09	1.96E-13	1.90E-17
PD112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG112	1.50E-07	2.63E-03	1.21E-03	1.12E-04	2.14E-06	7.74E-10	2.81E-13	3.70E-20	2.32E-37	0.	0.
AG113	7.30E-06	7.71E-05	3.34E-06	2.71E-10	4.15E-17	9.70E-31	2.27E-44	0.	0.	0.	0.
CD115M	7.44E-12	2.15E-07	2.12E-07	2.02E-07	1.86E-07	1.58E-07	1.35E-07	9.76E-08	4.36E-08	8.67E-09	1.73E-09
CD115	3.24E-08	4.88E-04	3.58E-04	1.41E-04	2.98E-05	1.33E-06	5.93E-08	1.18E-10	2.09E-17	6.54E-31	2.05E-44
IN115M	2.73E-13	3.48E-04	2.63E-04	1.04E-04	2.19E-05	9.79E-07	4.36E-08	8.69E-11	1.54E-17	4.82E-31	1.51E-44
CD117	3.										

DEBRIS DECAY FROM 1 TO 300 DAYS

SN127	1.72E-01	6.25E-05	2.27E-08	1.08E-18	6.80E-36	0.	0.	0.	0.	0.	0.	0.	0.
SB127	7.90E-04	3.24E-03	2.71E-03	1.58E-03	6.49E-04	1.08E-04	1.81E-05	5.07E-07	6.61E-11	1.13E-18	1.92E-26	0.	0.
TE127M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SB128	8.21E-02	1.40E-02	2.21E-03	8.62E-06	8.37E-10	7.85E-18	7.38E-26	6.51E-42	0.	0.	0.	0.	0.
SB129	1.79E-01	9.16E-03	1.91E-04	1.74E-09	6.92E-18	1.09E-34	1.72E-51	0.	0.	0.	0.	0.	0.
TE129M	7.62E-11	8.03E-06	8.03E-06	7.58E-06	6.85E-06	5.58E-06	4.54E-06	3.02E-06	1.09E-06	1.42E-07	1.85E-08	0.	0.
TE129	5.44E-03	4.53E-04	1.89E-05	9.09E-06	8.20E-06	6.69E-06	5.45E-06	3.63E-06	1.31E-06	1.71E-07	2.22E-08	0.	0.
I130	1.21E-03	3.16E-04	8.28E-05	1.48E-06	1.81E-09	2.69E-15	4.02E-21	8.94E-33	0.	0.	0.	0.	0.
TE131M	2.80E-06	9.78E-03	5.61E-03	1.06E-03	6.65E-05	2.59E-07	1.01E-09	1.55E-14	1.41E-26	0.	0.	0.	0.
TE131	7.54E-01	5.22E-04	3.00E-04	5.70E-05	3.55E-06	1.39E-08	5.42E-11	8.30E-16	7.54E-28	0.	0.	0.	0.
I131	1.05E-04	5.67E-03	5.36E-03	4.31E-03	2.84E-03	1.20E-03	5.07E-04	9.05E-05	1.22E-06	2.23E-10	4.06E-14	0.	0.
XE131M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE132	4.38E-03	8.68E-03	7.01E-03	3.69E-03	1.27E-03	1.51E-04	1.79E-05	2.51E-07	5.87E-12	3.21E-21	1.75E-30	0.	0.
I132	1.16E-01	9.69E-02	7.82E-02	4.11E-02	1.42E-02	1.68E-03	1.99E-04	2.80E-06	6.55E-11	3.56E-20	1.95E-29	0.	0.
I133	1.38E-02	7.72E-02	3.48E-02	3.23E-03	6.16E-05	2.23E-08	8.09E-12	1.07E-18	6.70E-36	0.	0.	0.	0.
XE133M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE133	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
I135	5.37E-01	8.76E-02	7.31E-03	4.26E-06	1.73E-11	2.85E-22	4.69E-33	1.27E-54	0.	0.	0.	0.	0.
XE135M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE135	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS136	2.81E-04	2.66E-04	2.52E-04	2.15E-04	1.65E-04	9.67E-05	5.69E-05	1.95E-05	1.36E-06	6.54E-09	3.17E-11	0.	0.
CS137	1.06E-06	1.15E-05	1.15E-05	1.15E-05	1.15E-05	1.15E-05	1.15E-05	1.15E-05	1.14E-05	1.13E-05	1.13E-05	0.	0.
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
BA139	8.57E-03	9.15E-07	5.40E-12	1.11E-27	0.	0.	0.	0.	0.	0.	0.	0.	0.
BA140	2.91E-04	1.72E-03	1.63E-03	1.39E-03	1.06E-03	6.15E-04	3.57E-04	1.21E-04	8.09E-06	3.60E-08	1.59E-10	0.	0.
LA140	9.55E-09	8.27E-03	1.33E-02	1.84E-02	1.63E-02	9.78E-03	5.68E-03	1.93E-03	1.28E-04	5.72E-07	2.55E-09	0.	0.
LA141	7.20E-04	2.86E-04	4.01E-06	1.11E-11	6.06E-21	1.81E-39	5.40E-58	0.	0.	0.	0.	0.	0.
CE141	1.57E-10	1.74E-04	1.72E-04	1.62E-04	1.45E-04	1.18E-04	9.47E-05	6.17E-05	2.12E-05	2.50E-06	2.94E-07	0.	0.
LA142	6.74E-02	1.48E-05	2.86E-10	2.10E-24	0.	0.	0.	0.					

SMOKY
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	3.61E-05	2.46E-04	1.36E-04	2.29E-05	1.17E-06	3.08E-09	8.11E-12	5.59E-17	7.02E-30	0.	0.	0.
SM153	1.97E-05	1.38E-05	9.71E-06	3.36E-06	5.70E-07	1.66E-08	4.82E-10	4.05E-13	8.35E-21	3.56E-36	1.51E-51	0.
SM156	2.61E-05	4.44E-06	7.58E-07	3.73E-09	5.38E-13	1.11E-20	2.28E-28	9.71E-44	0.	0.	0.	0.
EU155	1.53E-09	5.19E-08	5.18E-08	5.18E-08	5.17E-08	5.15E-08	5.12E-08	5.08E-08	4.99E-08	4.79E-08	4.60E-08	0.
EU156	8.53E-07	6.94E-06	7.69E-06	6.90E-06	5.47E-06	3.44E-06	2.17E-06	8.61E-07	8.53E-08	8.40E-10	8.27E-12	0.
EU157	9.00E-06	1.04E-05	3.50E-06	1.31E-07	5.51E-10	9.71E-15	1.72E-19	5.35E-29	0.	0.	0.	0.
GD159	2.04E-07	4.02E-07	1.60E-07	9.98E-09	9.83E-11	9.52E-15	9.23E-19	8.66E-27	7.39E-47	0.	0.	0.
TB161	6.49E-10	4.24E-09	3.83E-09	2.83E-09	1.71E-09	6.27E-10	2.30E-10	3.08E-11	2.04E-13	8.80E-18	3.83E-22	0.
TOTAL	2.18E+00	4.37E-01	1.89E-01	8.02E-02	3.91E-02	1.53E-02	8.21E-03	3.19E-03	6.70E-04	1.70E-04	7.08E-05	0.

1

SMOKY MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	4.81E-08	4.16E-10	3.87E-11	3.59E-12	2.89E-15	2.31E-18	1.73E-22	1.11E-28	0.	0.	0.	0.
MN 54	2.51E-07	1.08E-07	7.12E-08	4.68E-08	1.34E-08	3.81E-09	7.18E-10	5.88E-11	1.38E-14	4.99E-20	1.80E-25	0.
FE 59	1.50E-06	5.41E-09	3.25E-10	1.95E-11	4.24E-15	9.16E-19	1.19E-23	5.60E-31	0.	0.	0.	0.
CO 57	4.32E-10	1.70E-10	1.07E-10	6.69E-11	1.65E-11	4.07E-12	6.27E-14	3.81E-14	3.33E-18	2.73E-24	0.	0.
CO 58	2.71E-08	7.77E-10	1.32E-10	2.23E-11	1.09E-13	5.30E-16	4.37E-19	1.04E-23	3.96E-39	0.	0.	0.
CO 60	3.47E-07	3.04E-07	2.84E-07	2.65E-07	2.18E-07	1.79E-07	1.38E-07	9.27E-08	2.49E-08	3.45E-09	4.77E-10	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	9.23E-05	2.30E-13	2.24E-13	2.18E-13	2.04E-13	1.90E-13	1.72E-13	1.49E-13	9.31E-14	4.56E-14	2.24E-14	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZR 95	2.04E-06	5.25E-06	7.48E-07	1.07E-07	3.11E-10	9.04E-13	3.74E-16	3.16E-21	3.87E-38	0.	0.	0.
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	2.35E-13	1.17E-05	1.67E-06	2.39E-07	6.92E-10	2.01E-12	8.38E-16	7.08E-21	8.67E-38	0.	0.	0.
RU103	6.47E-07	2.51E-06	1.03E-07	4.23E-09	2.89E-13	1.98E-17	5.56E-23	2.61E-31	0.	0.	0.	0.
RH103M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU106	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RH106	1.35E-08	1.19E-05	8.42E-06	5.97E-06	2.12E-06	7.54E-07	1.90E-07	2.40E-08	2.42E-11	7.78E-16	2.50E-20	0.
SN123	1.94E-09	2.69E-08	9.74E-09	3.54E-09	1.70E-10	8.14E-12	1.42E-13	3.27E-16	5.25E-25	3.38E-38	2.17E-51	0.
SB125	1.69E-06	3.41E-06	3.00E-06	2.64E-06	1.80E-06	1.22E-06	7.31E-07	3.38E-07	2.60E-08	5.53E-10	1.18E-11	0.
TE125M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS137	1.06E-06	1.12E-05	1.11E-05	1.10E-05	1.06E-05	1.02E-05	9.75E-06	9.11E-06	7.20E-06	5.12E-06	3.61E-06	0.
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE141	1.57E-10	6.76E-08	1.36E-09	2.73E-11	2.22E-16	1.81E-21	2.97E-28	1.97E-38	0.	0.	0.	0.
CE144	1.31E-07	3.86E-07	2.48E-07	1.58E-07	4.15E-08	1.09E-08	1.84E-09	1.27E-10	1.71E-14	2.68E-20	4.17E-26	0.
PR144	6.42E-11	6.88E-07	4.42E-07	2.82E-07	7.40E-08	1.95E-08	3.27E-09	2.26E-10	3.04E-14	4.77E-20	7.44E-26	0.
PM147	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EU155	1.53E-09	4.48E-08	4.17E-08	3.88E-08	3.12E-08	2.50E-08	1.87E-08	1.21E-08	2.82E-09	3.17E-10	3.57E-11	0.
TOTAL	1.00E-04	4.76E-05	2.61E-05	2.07E-05	1.49E-05	1.24E-05	1.08E-05	9.58E-06	7.26E-06	5.12E-06	3.61E-06	0.

APPENDIX 6

SMOKY EVENT

Fit To Sum of Eleven Exponentials

The calculated values are fit to the function

$$\sum_{i=1}^{11} a_i e^{-\lambda_i t}$$

In the first table the a_i 's are the variables and are designated by an odd number in the column under "K"; the i 's are fixed parameters so designated. The quality of fit to each point is shown in the second table.

	<u>Page</u>
Fraction refractories present = 1.0	6-1
Fraction refractories present = 0.5	6-3
Fraction refractories present = 0.1	6-5

1

SMOKY

CI/SQ KM, 1.0 REFRACTORIES PRESENT

K	FINAL VALUE	STND. DEV.	
1	1.2787E+04	1.6077E+03	
2	2.7390E+00	0.	FIXED PARAMETER
3	1.8207E+03	3.1354E+02	
4	8.8130E-01	0.	FIXED PARAMETER
5	3.3494E+02	9.8406E+01	
6	3.8960E-01	0.	FIXED PARAMETER
7	3.0194E+02	1.9321E+01	
8	1.2090E-01	0.	FIXED PARAMETER
9	7.7431E+01	4.4923E+00	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.7983E+01	8.5791E-01	
12	8.8070E-03	0.	FIXED PARAMETER
13	3.4300E+00	1.3641E-01	
14	2.3380E-03	0.	FIXED PARAMETER
15	6.8402E-01	1.8148E-02	
16	4.4040E-04	0.	FIXED PARAMETER
17	4.2089E-02	2.7205E-03	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.3482E-02	7.6210E-04	
20	4.5780E-05	0.	FIXED PARAMETER
21	2.9895E-03	3.9613E-05	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME(HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	2.1700E+03	2.1719E+03	-0.09
2	2.000E+00	8.5600E+02	8.5070E+02	0.62
3	3.000E+00	5.3400E+02	5.3854E+02	-0.84
4	4.000E+00	3.9900E+02	3.9947E+02	-0.12
5	6.000E+00	2.7400E+02	2.7189E+02	0.78
6	9.000E+00	1.9000E+02	1.8994E+02	0.03
7	1.200E+01	1.4500E+02	1.4543E+02	-0.30
8	1.500E+01	1.1600E+02	1.1624E+02	-0.21
9	1.800E+01	9.5400E+01	9.5622E+01	-0.23
10	2.100E+01	8.0900E+01	8.0480E+01	0.52
11	2.400E+01	6.9000E+01	6.9063E+01	-0.09
12	4.800E+01	3.1200E+01	3.1341E+01	-0.45
13	1.200E+02	1.1000E+01	1.0796E+01	1.89
14	2.400E+02	4.7500E+00	4.8221E+00	-1.50
15	4.800E+02	1.9500E+00	1.9888E+00	-1.45
16	7.200E+02	1.2200E+00	1.2218E+00	-0.15
17	1.200E+03	6.8600E-01	6.6367E-01	3.37
18	2.400E+03	3.1000E-01	2.9750E-01	4.20
19	4.800E+03	1.1700E-01	1.2107E-01	-3.36
20	7.200E+03	5.8100E-02	6.0193E-02	-3.48
21	8.770E+03	4.1500E-02	4.2151E-02	-1.54
22	1.320E+04	2.2700E-02	2.1955E-02	3.40
23	1.750E+04	1.5600E-02	1.5189E-02	2.70
24	3.070E+04	7.3100E-03	7.4293E-03	-1.61
25	4.380E+04	4.6700E-03	4.7864E-03	-2.43
26	6.140E+04	3.4200E-03	3.3839E-03	1.07
27	8.770E+04	2.7300E-03	2.5987E-03	5.05
28	1.750E+05	1.8700E-03	1.8585E-03	0.62
29	3.070E+05	1.2700E-03	1.2931E-03	-1.78
30	4.380E+05	8.8500E-04	9.0427E-04	-2.13

1 SMOKY MR/HR, 1.0 REFRACTORIES PRESENT 0.16 GM/SQCM

K	FINAL VALUE	STND. DEV.	
1	1.1554E+02	2.5762E+01	
2	2.7390E+00	0.	FIXED PARAMETER
3	4.0229E+01	4.2812E+00	
4	8.8130E-01	0.	FIXED PARAMETER
5	6.2084E+00	1.1017E+00	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.2179E+00	1.6737E-01	
8	1.2090E-01	0.	FIXED PARAMETER
9	4.5369E-01	3.6722E-02	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.1381E-01	6.8870E-03	
12	8.8070E-03	0.	FIXED PARAMETER
13	2.4705E-02	1.0543E-03	
14	2.3380E-03	0.	FIXED PARAMETER
15	4.6552E-03	9.4189E-05	
16	4.4040E-04	0.	FIXED PARAMETER
17	2.6378E-05	6.7005E-06	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.4814E-05	1.8761E-06	
20	4.5780E-05	0.	FIXED PARAMETER
21	7.5664E-06	1.2140E-07	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	3.0900E+01	3.0883E+01	0.05
2	2.000E+00	1.2500E+01	1.2540E+01	-0.32
3	3.000E+00	6.9000E+00	6.9125E+00	-0.18
4	4.000E+00	4.4300E+00	4.3952E+00	0.79
5	6.000E+00	2.3900E+00	2.3826E+00	0.31
6	9.000E+00	1.4000E+00	1.4147E+00	-1.04
7	1.200E+01	1.0000E+00	1.0101E+00	-1.00
8	1.500E+01	7.7700E-01	7.7882E-01	-0.23
9	1.800E+01	6.3100E-01	6.2700E-01	0.64
10	2.100E+01	5.2800E-01	5.1993E-01	1.55
11	2.400E+01	4.4400E-01	4.4122E-01	0.63
12	4.800E+01	1.9300E-01	1.9498E-01	-1.02
13	1.200E+02	6.8900E-02	6.9991E-02	-1.56
14	2.400E+02	3.2700E-02	3.2197E-02	1.56
15	4.800E+02	1.3900E-02	1.3519E-02	2.82
16	7.200E+02	8.2900E-03	8.2261E-03	0.78
17	1.200E+03	4.0800E-03	4.2858E-03	-4.80
18	2.400E+03	1.6400E-03	1.7491E-03	-6.24
19	4.800E+03	6.0900E-04	5.9732E-04	1.96
20	7.200E+03	2.3400E-04	2.2526E-04	3.88
21	8.770E+03	1.3200E-04	1.2507E-04	5.54
22	1.320E+04	3.5700E-05	3.5356E-05	0.97
23	1.750E+04	1.9100E-05	1.9704E-05	-3.06
24	3.070E+04	1.1300E-05	1.1458E-05	-1.38
25	4.380E+04	8.9900E-06	8.9079E-06	0.92
26	6.140E+04	7.5900E-06	7.3179E-06	3.72
27	8.770E+04	6.5000E-06	6.2242E-06	4.43
28	1.750E+05	4.6400E-06	4.6974E-06	-1.22
29	3.070E+05	3.1900E-06	3.2727E-06	-2.53
30	4.380E+05	2.2400E-06	2.2887E-06	-2.13

1 SMOKY CI/SQ KM, 0.5 REFRACTORIES PRESENT

K	FINAL VALUE	STND. DEV.	
1	1.1893E+04	2.1368E+03	
2	2.7390E+00	0.	FIXED PARAMETER
3	2.1178E+03	4.0687E+02	
4	8.8130E-01	0.	FIXED PARAMETER
5	3.4034E+02	1.2348E+02	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.9491E+02	2.3168E+01	
8	1.2090E-01	0.	FIXED PARAMETER
9	6.5712E+01	5.3623E+00	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.5526E+01	1.0524E+00	
12	8.8070E-03	0.	FIXED PARAMETER
13	3.7251E+00	1.6965E-01	
14	2.3380E-03	0.	FIXED PARAMETER
15	6.0184E-01	2.1101E-02	
16	4.4040E-04	0.	FIXED PARAMETER
17	2.6841E-02	3.3425E-03	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.1484E-02	1.0431E-03	
20	4.5780E-05	0.	FIXED PARAMETER
21	3.7457E-03	6.4566E-05	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	2.2200E+03	2.2211E+03	-0.05
2	2.000E+00	8.8500E+02	8.8175E+02	0.37
3	3.000E+00	5.4000E+02	5.4344E+02	-0.63
4	4.000E+00	3.9300E+02	3.9262E+02	0.10
5	6.000E+00	2.6100E+02	2.5884E+02	0.83
6	9.000E+00	1.7600E+02	1.7716E+02	-0.66
7	1.200E+01	1.3300E+02	1.3407E+02	-0.80
8	1.500E+01	1.0600E+02	1.0615E+02	-0.14
9	1.800E+01	8.6700E+01	8.6610E+01	0.10
10	2.100E+01	7.3200E+01	7.2378E+01	1.14
11	2.400E+01	6.2100E+01	6.1738E+01	0.59
12	4.800E+01	2.7300E+01	2.7629E+01	-1.19
13	1.200E+02	9.9900E+00	9.8816E+00	1.10
14	2.400E+02	4.5900E+00	4.6007E+00	-0.23
15	4.800E+02	1.9300E+00	1.9668E+00	-1.87
16	7.200E+02	1.1800E+00	1.1972E+00	-1.44
17	1.200E+03	6.4800E-01	6.1853E-01	4.77
18	2.400E+03	2.7800E-01	2.5732E-01	8.04
19	4.800E+03	9.7100E-02	1.0136E-01	-4.21
20	7.200E+03	4.6400E-02	4.9216E-02	-5.72
21	8.770E+03	3.3200E-02	3.4089E-02	-2.61
22	1.320E+04	1.8700E-02	1.7847E-02	4.78
23	1.750E+04	1.3400E-02	1.2810E-02	4.61
24	3.070E+04	7.0300E-03	7.1372E-03	-1.50
25	4.380E+04	4.9200E-03	5.0729E-03	-3.01
26	6.140E+04	3.8800E-03	3.8670E-03	-0.16
27	8.770E+04	3.2500E-03	3.1569E-03	2.95
28	1.750E+05	2.3500E-03	2.3268E-03	1.00
29	3.070E+05	1.6100E-03	1.6201E-03	-0.63
30	4.380E+05	1.1200E-03	1.1330E-03	-1.15

6-4

PAGE

1

SMOKY

MR/HR, 0.5 REFRACTORIES PRESENT 0.16 GM/SQCM

K	FINAL VALUE	STND. DEV.	
1	1.1160E+02	1.2755E+01	
2	2.7390E+00	0.	FIXED PARAMETER
3	4.9595E+01	2.0582E+00	
4	8.8130E-01	0.	FIXED PARAMETER
5	4.8207E+00	5.1646E-01	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.3707E+00	7.7918E-02	
8	1.2090E-01	0.	FIXED PARAMETER
9	4.0518E-01	1.7259E-02	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.1999E-01	3.3426E-03	
12	8.8070E-03	0.	FIXED PARAMETER
13	3.0687E-02	4.7280E-04	
14	2.3380E-03	0.	FIXED PARAMETER
15	3.1500E-03	3.3476E-05	
16	4.4040E-04	0.	FIXED PARAMETER
17	2.2094E-05	3.2080E-06	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.4470E-05	9.9109E-07	
20	4.5780E-05	0.	FIXED PARAMETER
21	9.4303E-06	6.9991E-08	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	3.3700E+01	3.3668E+01	0.10
2	2.000E+00	1.3500E+01	1.3580E+01	-0.59
3	3.000E+00	7.2100E+00	7.2190E+00	-0.12
4	4.000E+00	4.4900E+00	4.4411E+00	1.10
5	6.000E+00	2.3500E+00	2.3407E+00	0.40
6	9.000E+00	1.3800E+00	1.4024E+00	-1.60
7	1.200E+01	1.0000E+00	1.0110E+00	-1.09
8	1.500E+01	7.7900E-01	7.8047E-01	-0.19
9	1.800E+01	6.3200E-01	6.2649E-01	0.88
10	2.100E+01	5.2700E-01	5.1739E-01	1.86
11	2.400E+01	4.4100E-01	4.3742E-01	0.82
12	4.800E+01	1.9100E-01	1.9406E-01	-1.58
13	1.200E+02	7.3800E-02	7.4448E-02	-0.87
14	2.400E+02	3.5500E-02	3.4988E-02	1.46
15	4.800E+02	1.4500E-02	1.4335E-02	1.15
16	7.200E+02	8.2500E-03	8.2494E-03	0.01
17	1.200E+03	3.6900E-03	3.7581E-03	-1.81
18	2.400E+03	1.2200E-03	1.2461E-03	-2.10
19	4.800E+03	4.1800E-04	4.1467E-04	0.80
20	7.200E+03	1.6300E-04	1.6175E-04	0.77
21	8.770E+03	9.5200E-05	9.3413E-05	1.91
22	1.320E+04	3.1500E-05	3.1485E-05	0.05
23	1.750E+04	1.9800E-05	2.0041E-05	-1.20
24	3.070E+04	1.2900E-05	1.2946E-05	-0.35
25	4.380E+04	1.0500E-05	1.0483E-05	0.16
26	6.140E+04	9.0100E-06	8.8688E-06	1.59
27	8.770E+04	7.8500E-06	7.6848E-06	2.15
28	1.750E+05	5.7800E-06	5.8533E-06	-1.25
29	3.070E+05	4.0300E-06	4.0789E-06	-1.20
30	4.380E+05	2.8400E-06	2.8525E-06	-0.44

1 SMOKY CI/SQ KM, 0.1 REFRACTORIES PRESENT

K	FINAL VALUE	STND. DEV.	
1	1.0461E+04	3.5391E+03	
2	2.7390E+00	0.	FIXED PARAMETER
3	2.5454E+03	6.5219E+02	
4	8.8130E-01	0.	FIXED PARAMETER
5	3.3839E+02	1.8876E+02	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.8664E+02	3.3117E+01	
8	1.2090E-01	0.	FIXED PARAMETER
9	5.0883E+01	7.6065E+00	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.2079E+01	1.5556E+00	
12	8.8070E-03	0.	FIXED PARAMETER
13	4.1691E+00	2.5699E-01	
14	2.3380E-03	0.	FIXED PARAMETER
15	4.9061E-01	2.8208E-02	
16	4.4040E-04	0.	FIXED PARAMETER
17	5.2336E-03	4.8815E-03	
18	1.1150E-04	0.	FIXED PARAMETER
19	9.6347E-03	1.7415E-03	
20	4.5780E-05	0.	FIXED PARAMETER
21	4.7038E-03	1.3156E-04	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	2.2800E+03	2.2796E+03	0.02
2	2.000E+00	9.2400E+02	9.2483E+02	-0.09
3	3.000E+00	5.4900E+02	5.5066E+02	-0.30
4	4.000E+00	3.8600E+02	3.8373E+02	0.59
5	6.000E+00	2.4300E+02	2.4178E+02	0.50
6	9.000E+00	1.5900E+02	1.6071E+02	-1.06
7	1.200E+01	1.1800E+02	1.1951E+02	-1.26
8	1.500E+01	9.2500E+01	9.3220E+01	-0.77
9	1.800E+01	7.5500E+01	7.5037E+01	0.62
10	2.100E+01	6.3200E+01	6.1948E+01	2.02
11	2.400E+01	5.3100E+01	5.2286E+01	1.56
12	4.800E+01	2.2300E+01	2.2767E+01	-2.05
13	1.200E+02	8.6700E+00	8.6521E+00	0.21
14	2.400E+02	4.3800E+00	4.3117E+00	1.58
15	4.800E+02	1.9000E+00	1.9497E+00	-2.55
16	7.200E+02	1.1300E+00	1.1718E+00	-3.57
17	1.200E+03	5.9900E-01	5.6002E-01	6.96
18	2.400E+03	2.3700E-01	2.0305E-01	16.72
19	4.800E+03	7.0900E-02	7.4745E-02	-5.14
20	7.200E+03	3.1400E-02	3.4476E-02	-8.92
21	8.770E+03	2.2400E-02	2.3322E-02	-3.95
22	1.320E+04	1.3500E-02	1.2469E-02	8.27
23	1.750E+04	1.0500E-02	9.7728E-03	7.44
24	3.070E+04	6.6700E-03	6.8599E-03	-2.77
25	4.380E+04	5.2500E-03	5.5105E-03	-4.73
26	6.140E+04	4.4600E-03	4.5630E-03	-2.26
27	8.770E+04	3.9300E-03	3.8764E-03	1.38
28	1.750E+05	2.9700E-03	2.9204E-03	1.70
29	3.070E+05	2.0600E-03	2.0345E-03	1.25
30	4.380E+05	1.4300E-03	1.4228E-03	0.51

1

SMOKY

MR/HR, 0.1 REFRACTORIES PRESENT 0.16 GM/SQCM

K	FINAL VALUE	STND. DEV.	
1	1.1007E+02	3.6319E+01	
2	2.7390E+00	0.	FIXED PARAMETER
3	6.1070E+01	5.6574E+00	
4	8.8130E-01	0.	FIXED PARAMETER
5	3.2282E+00	1.3774E+00	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.5415E+00	2.0619E-01	
8	1.2090E-01	0.	FIXED PARAMETER
9	3.5338E-01	4.6227E-02	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.2381E-01	9.2635E-03	
12	8.8070E-03	0.	FIXED PARAMETER
13	3.9438E-02	1.1691E-03	
14	2.3380E-03	0.	FIXED PARAMETER
15	1.2073E-03	5.0204E-05	
16	4.4040E-04	0.	FIXED PARAMETER
17	1.1680E-06	7.9412E-06	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.7836E-05	2.8689E-06	
20	4.5780E-05	0.	FIXED PARAMETER
21	1.1709E-05	2.2898E-07	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME(HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	3.7400E+01	3.7355E+01	0.12
2	2.000E+00	1.4800E+01	1.4908E+01	-0.72
3	3.000E+00	7.6100E+00	7.6220E+00	-0.16
4	4.000E+00	4.5700E+00	4.5144E+00	1.23
5	6.000E+00	2.3100E+00	2.2958E+00	0.62
6	9.000E+00	1.3600E+00	1.3884E+00	-2.05
7	1.200E+01	1.0000E+00	1.0122E+00	-1.20
8	1.500E+01	7.8200E-01	7.8268E-01	-0.09
9	1.800E+01	6.3400E-01	6.2626E-01	1.24
10	2.100E+01	5.2500E-01	5.1484E-01	1.97
11	2.400E+01	4.3700E-01	4.3340E-01	0.83
12	4.800E+01	1.8900E-01	1.9305E-01	-2.10
13	1.200E+02	8.0200E-02	7.9691E-02	0.64
14	2.400E+02	3.9100E-02	3.8666E-02	1.12
15	4.800E+02	1.5300E-02	1.5653E-02	-2.26
16	7.200E+02	8.2100E-03	8.4531E-03	-2.88
17	1.200E+03	3.1900E-03	3.1293E-03	1.94
18	2.400E+03	6.7000E-04	5.9228E-04	13.12
19	4.800E+03	1.7000E-04	1.7289E-04	-1.67
20	7.200E+03	7.0800E-05	7.5502E-05	-6.23
21	8.770E+03	4.7600E-05	4.9187E-05	-3.23
22	1.320E+04	2.6100E-05	2.4917E-05	4.75
23	1.750E+04	2.0700E-05	1.9877E-05	4.14
24	3.070E+04	1.4900E-05	1.5182E-05	-1.86
25	4.380E+04	1.2400E-05	1.2800E-05	-3.12
26	6.140E+04	1.0800E-05	1.0976E-05	-1.60
27	8.770E+04	9.5800E-06	9.5379E-06	0.44
28	1.750E+05	7.2600E-06	7.2676E-06	-0.10
29	3.070E+05	5.1200E-06	5.0645E-06	1.10
30	4.380E+05	3.6100E-06	3.5417E-06	1.93

APPENDIX 7

ANNIE EVENT

Microcuries per Square Meter

	<u>Page</u>
Fraction of refractories present = 1.0	
Total mR/hr and Total $\mu\text{Ci}/\text{m}^2$	7-1
Individual nuclide $\mu\text{Ci}/\text{m}^2$	7-2
 Fraction of refractories present = 0.5	
Total mR/hr and Total $\mu\text{Ci}/\text{m}^2$	7-12
Individual nuclide $\mu\text{Ci}/\text{m}^2$	7-13
 Fraction of refractories present = 0.1	
Total mR/hr and Total $\mu\text{Ci}/\text{m}^2$	7-23
Individual nuclide $\mu\text{Ci}/\text{m}^2$	7-24

1

ANNIE
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.873E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.06E+02	1.23E+04
1.00E+00	3.16E+01	2.54E+03
2.00E+00	1.27E+01	9.17E+02
3.00E+00	6.94E+00	5.45E+02
4.00E+00	4.43E+00	4.03E+02
6.00E+00	2.37E+00	2.78E+02
9.00E+00	1.39E+00	1.96E+02
1.20E+01	1.00E+00	1.52E+02
1.50E+01	7.84E-01	1.24E+02
1.80E+01	6.43E-01	1.04E+02
2.10E+01	5.42E-01	8.98E+01
1.00E+00 DAYS	4.60E-01	7.80E+01
2.00E+00	2.11E-01	3.88E+01
5.00E+00	7.84E-02	1.43E+01
1.00E+01	3.52E-02	5.52E+00
2.00E+01	1.43E-02	2.02E+00
3.00E+01	8.47E-03	1.25E+00
5.00E+01	4.18E-03	7.01E-01
1.00E+02	1.66E-03	3.15E-01
2.00E+02	6.07E-04	1.19E-01
3.00E+02	2.35E-04	6.02E-02
1.00E+00 YEARS	1.34E-04	4.38E-02
1.50E+00	3.84E-05	2.45E-02
2.00E+00	2.12E-05	1.69E-02
3.50E+00	1.19E-05	7.64E-03
5.00E+00	9.10E-06	4.65E-03
7.00E+00	7.61E-06	3.29E-03
1.00E+01	6.58E-06	2.59E-03
2.00E+01	4.79E-06	1.79E-03
3.50E+01	3.31E-06	1.22E-03
5.00E+01	2.32E-06	8.52E-04

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BE 7	1.52E-05	1.51E-05	1.51E-05	1.51E-05	1.51E-05	1.51E-05	1.51E-05	1.51E-05	1.51E-05	1.50E-05	1.50E-05	1.50E-05
NA 24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MN 54	5.19E-05	5.19E-05	5.19E-05	5.19E-05	5.19E-05	5.19E-05	5.19E-05	5.19E-05	5.15E-05	5.15E-05	5.15E-05	5.15E-05
FE 55	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.12E-04
FE 59	3.67E-04	3.66E-04	3.66E-04	3.66E-04	3.66E-04	3.66E-04	3.66E-04	3.65E-04	3.65E-04	3.63E-04	3.63E-04	3.62E-04
CO 57	8.07E-05	8.07E-05	8.07E-05	8.07E-05	8.07E-05	8.07E-05	8.07E-05	8.07E-05	8.07E-05	8.07E-05	8.07E-05	8.07E-05
CO 58	7.13E-04	7.13E-04	7.13E-04	7.13E-04	7.11E-04	7.11E-04	7.11E-04	7.10E-04	7.10E-04	7.08E-04	7.08E-04	7.07E-04
CO 60	5.66E-05	5.66E-05	5.66E-05	5.66E-05	5.66E-05	5.66E-05	5.66E-05	5.66E-05	5.66E-05	5.66E-05	5.66E-05	5.66E-05
CU 64	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CU 67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU 198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU 199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB 203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.66E-01	1.66E-01	1.65E-01	1.64E-01	1.63E-01	1.62E-01	1.60E-01	1.58E-01	1.56E-01	1.54E-01	1.52E-01	1.52E-01
U239	3.34E+03	5.70E+02	9.74E+01	1.66E+01	2.82E+00	8.20E-02	4.07E-04	2.01E-06	9.93E-09	4.91E-11	2.43E-13	2.43E-13
U240	5.71E-01	5.44E-01	5.18E-01	4.94E-01	4.70E-01	4.26E-01	3.67E-01	3.16E-01	2.73E-01	2.35E-01	2.03E-01	2.03E-01
NP239	1.14E-02	1.92E+01	2.22E+01	2.25E+01	2.24E+01	2.18E+01	2.09E+01	2.02E+01	1.95E+01	1.88E+01	1.81E+01	1.81E+01
NP240M	9.04E-04	5.47E-01	5.23E-01	4.98E-01	4.74E-01	4.29E-01	3.70E-01	3.20E-01	2.75E-01	2.38E-01	2.05E-01	2.05E-01
NP240	2.29E-11	1.18E-11	6.11E-12	3.15E-12	1.63E-12	4.36E-13	6.02E-14	8.31E-15	1.14E-15	1.58E-16	2.18E-17	2.18E-17
AM241	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09
CM242	4.88E-07	4.88E-07	4.88E-07	4.88E-07	4.88E-07	4.88E-07	4.85E-07	4.85E-07	4.85E-07	4.85E-07	4.85E-07	4.85E-07
GE 75	6.10E-06	2.96E-02	1.78E-02	1.07E-02	6.45E-03	2.34E-03	5.11E-04	1.12E-04	2.44E-05	5.33E-06	1.17E-06	1.17E-06
GE 77	4.11E-03	1.06E-02	9.96E-03	9.37E-03	8.82E-03	7.80E-03	6.49E-03	5.39E-03	4.49E-03	3.73E-03	3.11E-03	3.11E-03
AS 77	4.25E-05	6.72E-03	6.79E-03	6.84E-03	6.88E-03	6.93E-03	6.93E-03	6.88E-03	6.78E-03	6.64E-03	6.47E-03	6.47E-03
SE 77M	1.68E-09	2.01E-05	2.04E-05	2.06E-05	2.06E-05	2.07E-05	2.09E-05	2.07E-05	2.04E-05	2.00E-05	1.93E-05	1.93E-05
GE 78	6.40E-01	4.00E-01	2.49E-01	1.55E-01	9.71E-02	3.78E-02	9.17E-03	2.22E-03	5.42E-04	1.32E-04	3.20E-05	3.20E-05
AS 78	1.15E-02	1.91E-01	2.35E-01	2.21E-01	1.84E-01	1.09E-01	4.04E-02	1.34E-02	4.15E-03	1.24E-03	3.60E-04	3.60E-04
AS 79	1.25E+01	1.23E-01	1.21E-03	1.19E-05	1.18E-07	1.14E-11	1.09E-17	1.04E-23	9.89E-30	9.44E-36	9.02E-42	9.02E-42
SE 79M	1.85E-02	2.17E-01	2.14E-03	2.11E-05	2.08E-07	2.01E-11	1.92E-17	1.83E-23	1.75E-29	1.67E-35	1.59E-41	1.59E-41
BR 80	7.72E-02	7.28E-03	6.85E-04	6.44E-05	6.06E-06	5.38E-08	4.50E-11	3.75E-14	3.13E-17	2.61E-20	2.18E-23	2.18E-23
SE 81M	6.32E-02	2.95E+00	1.42E+00	6.84E-01	3.29E-01	7.69E-02	8.60E-03	9.65E-04	1.08E-04	1.21E-05	1.36E-06	1.36E-06
SE 81	7.72E-01	3.49E+00	2.02E+00	1.01E+00	4.89E-01	1.14E-01	1.28E-02	1.43E-03	1.60E-04	1.80E-05	2.01E-06	2.01E-06
BR 82	3.79E-04	3.72E-04	3.65E-04	3.58E-04	3.51E-04	3.37E-04	3.18E-04	3.00E-04	2.83E-04	2.66E-04	2.51E-04	2.51E-04
SE 83	3.47E+01	6.58E+00	1.25E+00	2.36E-01	4.47E-02	1.61E-03	1.09E-05	7.43E-08	5.07E-10	3.44E-12	2.18E-14	2.18E-14
BR 83	2.88E-01	4.30E+00	3.98E+00	3.13E+00	2.38E+00	1.34E+00	5.68E-01	2.39E-01	1.01E-01	4.26E-02	1.80E-02	1.80E-02
KR 83M	1.49E-05	9.74E-01	1.99E+00	2.47E+00	2.55E+00	2.13E+00	1.25E+00	6.45E-01	3.11E-01	1.44E-01	6.45E-02	6.45E-02

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BR 84	7.25E-02	1.25E+01	3.38E+00	9.16E-01	2.47E-01	1.81E-02	3.58E-04	7.06E-06	1.40E-07	2.76E-09	5.46E-11	
KR 85M	3.41E-03	7.31E+00	6.22E+00	5.32E+00	4.54E+00	3.32E+00	2.07E+00	1.29E+00	8.04E-01	5.00E-01	3.12E-01	
KR 87	5.69E+01	3.28E+01	1.90E+01	1.10E+01	6.33E+00	2.12E+00	4.12E-01	7.98E-02	1.55E-02	2.99E-03	5.79E-04	
KR 88	3.23E+01	2.52E+01	1.97E+01	1.54E+01	1.20E+01	7.29E+00	3.48E+00	1.66E+00	7.87E-01	3.75E-01	1.78E-01	
RB 88	8.21E+00	2.55E+01	2.18E+01	1.71E+01	1.34E+01	8.16E+00	3.90E+00	1.86E+00	8.84E-01	4.20E-01	2.00E-01	
RB 89	3.95E+01	3.71E+01	2.49E+00	1.67E-01	1.12E-02	5.08E-05	1.54E-08	4.64E-12	1.41E-15	4.28E-19	1.30E-22	
SR 89	3.02E-06	1.06E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.13E-01	1.12E-01	1.12E-01	
SR 90	6.07E-06	6.24E-04	6.24E-04	6.24E-04	6.24E-04	6.24E-04	6.24E-04	6.24E-04	6.24E-04	6.24E-04	6.24E-04	
SR 91	8.20E-01	1.53E+01	1.42E+01	1.33E+01	1.23E+01	1.07E+01	8.62E+00	6.97E+00	5.62E+00	4.52E+00	3.64E+00	
Y 91M	5.52E-05	5.26E+00	7.17E+00	7.69E+00	7.59E+00	6.81E+00	5.57E+00	4.48E+00	3.62E+00	2.92E+00	2.35E+00	
Y 91	2.26E-08	4.68E-03	1.08E-02	1.72E-02	2.35E-02	3.52E-02	5.01E-02	6.19E-02	7.17E-02	7.95E-02	8.57E-02	
SR 92	1.05E+01	4.70E+01	3.64E+01	2.82E+01	2.18E+01	1.31E+01	6.07E+00	2.82E+00	1.31E+00	6.07E-01	2.82E-01	
Y 92	4.85E-01	9.88E+00	1.55E+01	1.84E+01	1.96E+01	1.86E+01	1.43E+01	9.74E+00	6.26E+00	3.86E+00	2.32E+00	
SR 93	4.27E+02	7.36E+00	4.06E-02	2.25E-04	1.24E-06	3.79E-11	6.38E-18	1.08E-24	1.82E-31	3.06E-38	5.16E-45	
Y 93	5.21E-01	1.69E+01	1.58E+01	1.48E+01	1.38E+01	1.21E+01	9.84E+00	8.04E+00	6.53E+00	5.36E+00	4.36E+00	
Y 94	6.23E+01	8.51E+01	1.10E+01	1.41E+00	1.82E-01	3.03E-03	6.49E-06	1.39E-08	2.97E-11	6.49E-14	3.60E-15	
Y 95	2.70E+02	2.55E+01	5.61E-01	1.24E-02	2.72E-04	1.32E-07	1.42E-12	1.51E-17	1.62E-22	1.73E-27	1.85E-32	
ZR 95	1.01E-03	1.33E-01	1.35E-01	1.35E-01	1.35E-01	1.35E-01	1.35E-01	1.35E-01	1.35E-01	1.34E-01	1.34E-01	
NB 95	1.13E-10	8.19E-05	1.91E-04	3.00E-04	4.09E-04	6.28E-04	9.52E-04	1.28E-03	1.60E-03	1.93E-03	2.25E-03	
ZR 97	2.47E+00	1.07E+01	1.03E+01	9.89E+00	9.47E+00	8.74E+00	7.73E+00	6.83E+00	6.07E+00	5.35E+00	4.75E+00	
NB 97M	1.27E-02	1.03E+01	9.89E+00	9.51E+00	9.13E+00	8.40E+00	7.43E+00	6.58E+00	5.81E+00	5.14E+00	4.54E+00	
NB 97	1.24E+00	5.39E+00	7.60E+00	8.66E+00	9.08E+00	9.04E+00	8.23E+00	7.34E+00	6.49E+00	5.73E+00	5.09E+00	
NB 98	1.40E+01	6.21E+00	2.75E+00	1.22E+00	5.39E-01	1.05E-01	9.12E-03	7.87E-04	6.86E-05	5.94E-06	5.11E-07	
MO 99	7.47E-03	3.09E+00	3.05E+00	3.02E+00	2.99E+00	2.93E+00	2.84E+00	2.75E+00	2.67E+00	2.59E+00	2.51E+00	
TC 99M	6.95E-08	2.94E-01	5.52E-01	7.81E-01	9.81E-01	1.31E+00	1.66E+00	1.89E+00	2.02E+00	2.10E+00	2.13E+00	
MO101	1.09E+02	4.92E+01	2.85E+00	1.65E-01	9.60E-03	3.22E-05	6.25E-09	1.22E-12	2.37E-16	4.60E-20	8.96E-24	
TC101	4.60E+00	1.38E+02	1.51E+01	1.24E+00	9.01E-02	4.06E-04	1.02E-07	2.27E-11	4.83E-15	9.93E-19	2.01E-22	
MO102	9.17E+02	2.09E+01	4.76E-01	1.09E-02	2.48E-04	1.29E-07	1.53E-12	1.82E-17	2.15E-22	2.55E-27	3.03E-32	
TC102M	5.89E-01	1.77E+01	4.05E-01	9.25E-03	2.11E-04	1.09E-07	1.30E-12	1.54E-17	1.82E-22	2.16E-27	2.57E-32	
TC102	2.76E+03	1.05E+01	2.40E-01	5.46E-03	1.25E-04	6.50E-08	7.72E-13	9.17E-18	1.09E-22	1.29E-27	1.53E-32	
RU103	6.71E-05	1.56E-01	1.55E-01	1.55E-01	1.55E-01	1.55E-01	1.54E-01	1.54E-01	1.54E-01	1.54E-01	1.53E-01	
RH103M	4.47E-09	8.05E-02	1.19E-01	1.38E-01	1.47E-01	1.53E-01	1.54E-01	1.54E-01	1.54E-01	1.54E-01	1.54E-01	
TC104	5.87E+01	4.22E+01	4.22E+00	4.18E-01	4.13E-02	4.07E-04	3.98E-07	3.88E-10	3.79E-13	3.71E-16	3.62E-19	
RU105	4.85E-01	1.68E+01	1.43E+01	1.23E+01	1.05E+01	7.69E+00	4.82E+00	3.01E+00	1.88E+00	1.18E+00	7.40E-01	
RH105M	3.19E-03	1.68E+01	1.44E+01	1.23E+01	1.05E+01	7.72E+00	4.82E+00	3.02E+00	1.89E+00	1.18E+00	7.40E-01	
RH105	5.24E-09	3.42E-01	6.34E-01	8.75E-01	1.08E+00	1.38E+00	1.65E+00	1.77E+00	1.81E+00	1.79E+00	1.74E+00	
RU106	4.25E-04	8.04E-03	8.04E-03	8.04E-03	8.04E-03	8.04E-03	8.04E-03	8.04E-03	8.04E-03	8.04E-03	8.04E-03	
RH106	4.60E-06	8.04E-03	8.04E-03	8.04E-03	8.04E-03	8.04E-03	8.04E-03	8.04E-03	8.04E-03	8.04E-03	8.04E-03	
RH107	1.09E-01	1.47E+01	2.24E+00	3.36E-01	5.08E-02	1.16E-03	3.99E-06	1.38E-08	4.73E-11	1.62E-14	1.61E-17	
PD107M	2.26E-04	3.00E+00	4.53E-01	6.85E-02	1.03E-02	2.36E-04	8.12E-07	2.80E-09	9.63E-12	3.32E-14	1.13E-16	

ANNIE MICROCURIES/SQ METER
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	6.31E-03	5.24E-01	4.98E-01	4.72E-01	4.48E-01	4.04E-01	3.47E-01	2.98E-01	2.55E-01	2.19E-01	1.88E-01
AG109M	3.64E-05	5.24E-01	4.98E-01	4.73E-01	4.49E-01	4.05E-01	3.47E-01	2.98E-01	2.55E-01	2.19E-01	1.88E-01
PD111M	7.62E-01	6.71E-01	5.92E-01	5.23E-01	4.61E-01	3.58E-01	2.45E-01	1.68E-01	1.15E-01	7.88E-02	5.41E-02
PD111	2.71E-01	4.89E-01	4.69E-01	4.18E-01	3.70E-01	2.87E-01	1.97E-01	1.35E-01	9.25E-02	6.34E-02	4.35E-02
AG111M	2.16E-03	6.60E-01	6.20E-01	5.55E-01	4.89E-01	3.78E-01	2.59E-01	1.77E-01	1.21E-01	8.34E-02	5.69E-02
AG111	7.68E-10	2.28E-03	4.78E-03	7.03E-03	9.02E-03	1.23E-02	1.58E-02	1.81E-02	1.96E-02	2.05E-02	2.11E-02
PD112	1.45E-01	1.41E-01	1.36E-01	1.31E-01	1.27E-01	1.19E-01	1.08E-01	9.78E-02	8.85E-02	8.01E-02	7.26E-02
AG112	4.37E-06	2.78E-02	4.91E-02	6.60E-02	7.84E-02	9.38E-02	1.03E-01	1.03E-01	9.78E-02	9.12E-02	8.41E-02
AG113	1.30E-03	2.79E-01	2.44E-01	2.14E-01	1.88E-01	1.45E-01	9.79E-02	6.61E-02	4.46E-02	3.01E-02	2.04E-02
AG115	4.48E-01	4.80E-01	5.97E-02	7.46E-03	9.34E-04	1.46E-05	2.85E-08	5.58E-11	1.08E-13	1.07E-162	9.95E-17
CD115M	3.66E-09	9.74E-05	1.09E-04	1.11E-04	1.11E-04	1.11E-04	1.11E-04	1.11E-04	1.10E-04	1.10E-04	1.10E-04
CD115	1.41E-06	2.66E-02	2.87E-02	2.86E-02	2.82E-02	2.75E-02	2.65E-02	2.55E-02	2.45E-02	2.36E-02	2.27E-02
IN115M	1.76E-11	2.94E-03	6.54E-03	9.70E-03	1.24E-02	1.65E-02	2.04E-02	2.24E-02	2.34E-02	2.36E-02	2.34E-02
CD117	3.14E-02	5.23E-01	3.94E-01	2.94E-01	2.20E-01	1.24E-01	5.19E-02	2.19E-02	9.20E-03	3.87E-03	1.63E-03
IN117M	1.51E-06	1.82E-01	2.63E-01	2.86E-01	2.76E-01	2.18E-01	1.24E-01	6.37E-02	3.06E-02	1.42E-02	6.40E-03
IN117	6.07E-11	3.32E-02	8.02E-02	1.12E-01	1.24E-01	1.14E-01	7.29E-02	3.90E-02	1.94E-02	9.13E-03	4.20E-03
CD118	2.07E+00	8.88E-01	3.81E-01	1.62E-01	6.96E-02	1.27E-02	9.99E-04	7.81E-05	6.14E-06	4.81E-07	3.78E-08
IN118	1.37E-01	8.88E-01	3.81E-01	1.63E-01	6.96E-02	1.28E-02	9.99E-04	7.85E-05	6.14E-06	4.81E-07	3.78E-08
CD119	5.17E+00	8.06E-02	1.26E-03	1.97E-05	3.07E-07	7.52E-11	2.87E-16	1.10E-21	4.17E-27	1.59E-32	6.09E-38
IN119M	7.79E-03	8.72E-01	9.49E-02	9.57E-03	9.53E-04	9.37E-06	9.14E-09	8.95E-12	8.72E-15	8.52E-18	8.33E-21
IN119	3.84E-01	4.59E-02	5.32E-03	5.40E-04	5.40E-05	5.28E-07	5.17E-10	5.05E-13	4.94E-16	4.82E-19	4.71E-22
SN121	6.40E-04	6.59E-02	6.40E-02	6.25E-02	6.10E-02	5.80E-02	5.34E-02	4.97E-02	4.59E-02	4.25E-02	3.95E-02
SN123M	3.67E-01	6.86E-01	2.43E-01	8.60E-02	3.04E-02	3.79E-03	1.68E-04	7.43E-06	3.29E-07	1.45E-08	6.42E-10
SN123	3.45E-06	3.60E-04	3.60E-04	3.60E-04	3.60E-04	3.60E-04	3.60E-04	3.60E-04	3.60E-04	3.60E-04	3.60E-04
SN125	9.79E-03	9.76E-03	9.74E-03	9.71E-03	9.66E-03	9.61E-03	9.53E-03	9.43E-03	9.35E-03	9.25E-03	9.18E-03
SB125	5.88E-05	5.90E-05	5.93E-05	5.95E-05	5.98E-05	6.03E-05	6.13E-05	6.21E-05	6.29E-05	6.36E-05	6.44E-05
SB126	1.82E-03	1.82E-03	1.82E-03	1.81E-03	1.81E-03	1.80E-03	1.79E-03	1.78E-03	1.76E-03	1.75E-03	1.74E-03
SN127	2.56E+00	1.84E+00	1.32E+00	9.51E-01	6.84E-01	3.53E-01	1.31E-01	4.88E-02	1.81E-02	6.72E-03	2.50E-03
SB127	2.98E-02	1.03E-01	1.14E-01	1.21E-01	1.27E-01	1.32E-01	1.34E-01	1.33E-01	1.31E-01	1.28E-01	1.25E-01
TE127	1.68E-02	2.10E-02	2.55E-02	3.02E-02	3.49E-02	4.38E-02	5.61E-02	6.56E-02	7.29E-02	7.87E-02	8.24E-02
SN128	1.72E+01	8.48E+00	4.20E+00	2.08E+00	1.03E+00	2.50E-01	3.02E-02	3.65E-03	4.40E-04	5.34E-05	6.43E-06
SB128M	8.76E-03	9.67E+00	5.02E+00	2.48E+00	1.22E+00	2.99E-01	3.60E-02	4.35E-03	5.24E-04	6.34E-05	7.66E-06
SB128	7.25E-01	6.98E-01	6.57E-01	6.16E-01	5.75E-01	4.93E-01	3.93E-01	3.12E-01	2.48E-01	1.97E-01	1.56E-01
SN129M	1.10E+01	5.47E+00	2.74E+00	1.37E+00	6.86E-01	1.71E-01	2.15E-02	2.68E-03	3.35E-04	4.19E-05	5.24E-06
SN129	7.32E+01	7.18E-01	7.09E-03	7.00E-05	6.86E-07	6.67E-11	6.35E-17	6.07E-23	5.79E-29	5.51E-35	5.28E-41
SB129	4.12E+00	6.90E+00	6.49E+00	5.79E+00	5.10E+00	3.79E+00	2.36E+00	1.46E+00	8.99E-01	5.56E-01	3.42E-01
TE129M	7.78E-08	8.62E-04	1.77E-03	2.61E-03	3.35E-03	4.54E-03	5.75E-03	6.49E-03	6.95E-03	7.23E-03	7.41E-03
TE129	2.97E+00	4.08E+00	4.77E+00	4.96E+00	4.77E+00	3.95E+00	2.63E+00	1.66E+00	1.03E+00	6.39E-01	3.97E-01
SB130M	4.17E-01	7.87E-01	2.07E-03	5.43E-06	1.43E-08	9.86E-14	1.80E-21	3.26E-29	5.92E-37	1.08E-44	1.96E-52
SB130	7.14E+01	2.16E+01	6.15E+00	1.74E+00	4.93E-01	3.97E-02	9.04E-04	2.06E-05	4.70E-07	1.07E-08	2.45E-10

ANNIE
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

ZERO TIME 1.00E+00 2.00E+00 3.00E+00 4.00E+00 6.00E+00 9.00E+00 1.20E+01 1.50E+01 1.80E+01 2.10E+01

I130	1.99E-02	1.88E-02	1.78E-02	1.68E-02	1.59E-02	1.42E-02	1.20E-02	1.02E-02	8.59E-03	7.28E-03	6.15E-03
SB131	1.65E+02	4.31E+01	7.04E+00	1.16E+00	1.90E-01	5.11E-03	2.25E-05	9.94E-08	4.37E-10	1.93E-12	9.62E-15
TE131M	7.94E-05	4.15E-01	4.74E-01	4.74E-01	4.65E-01	4.45E-01	4.15E-01	3.87E-01	3.61E-01	3.37E-01	3.14E-01
TE131	7.31E+01	7.94E+01	2.59E+01	6.73E+00	1.63E+00	1.54E-01	7.62E-02	7.04E-02	6.57E-02	6.15E-02	5.73E-02
I131	1.06E-02	3.68E-01	5.41E-01	5.94E-01	6.05E-01	6.10E-01	6.10E-01	6.05E-01	6.05E-01	5.99E-01	5.99E-01
TE132	8.38E-01	2.04E+00	2.02E+00	2.00E+00	1.98E+00	1.95E+00	1.89E+00	1.84E+00	1.80E+00	1.75E+00	1.70E+00
I132	2.06E+00	2.05E+00	2.05E+00	2.04E+00	2.02E+00	2.00E+00	1.95E+00	1.90E+00	1.85E+00	1.80E+00	1.76E+00
TE133M	1.01E-01	3.51E+01	1.53E+01	6.66E+00	2.90E+00	5.50E-01	4.53E-02	3.74E-03	3.08E-04	2.54E-05	2.09E-06
TE133	5.70E+02	3.23E+01	3.59E+00	1.19E+00	5.02E-01	9.51E-02	7.87E-03	6.47E-04	5.36E-05	4.41E-06	3.63E-07
I133	8.83E-01	9.51E+00	1.03E+01	1.03E+01	1.01E+01	9.56E+00	8.69E+00	7.87E+00	7.09E+00	6.47E+00	5.84E+00
XE133M	3.76E-08	2.14E-03	5.16E-03	8.25E-03	1.12E-02	1.69E-02	2.45E-02	3.10E-02	3.66E-02	4.14E-02	4.53E-02
XE133	6.56E-07	3.74E-02	9.07E-02	1.45E-01	1.99E-01	3.01E-01	4.42E-01	5.65E-01	6.76E-01	7.72E-01	8.59E-01
TE134	1.80E+02	8.34E+01	3.11E+01	1.15E+01	4.28E+00	5.94E-01	3.03E-02	1.56E-03	7.96E-05	4.09E-06	2.10E-07
I134	8.25E+01	1.10E+02	7.73E+01	4.53E+01	2.43E+01	6.17E+00	6.79E-01	6.93E-02	6.79E-03	6.50E-04	6.17E-05
I135	1.50E+01	2.64E+01	2.38E+01	2.14E+01	1.94E+01	1.57E+01	1.15E+01	8.43E+00	6.19E+00	4.56E+00	3.33E+00
XE135M	1.66E-03	7.61E+00	7.40E+00	6.71E+00	6.02E+00	4.90E+00	3.60E+00	2.64E+00	1.94E+00	1.42E+00	1.04E+00
XE135	1.72E+00	3.41E+00	4.99E+00	6.28E+00	7.31E+00	8.77E+00	9.72E+00	9.76E+00	9.29E+00	8.47E+00	7.57E+00
CS136	5.49E-03	5.47E-03	5.47E-03	5.46E-03	5.44E-03	5.41E-03	5.38E-03	5.34E-03	5.31E-03	5.27E-03	5.24E-03
CS137	7.36E-05	7.93E-04	7.93E-04	7.93E-04	7.93E-04	7.93E-04	7.93E-04	7.93E-04	7.93E-04	7.93E-04	7.93E-04
BA137M	1.55E-07	7.40E-04	7.40E-04	7.40E-04	7.40E-04	7.40E-04	7.40E-04	7.40E-04	7.40E-04	7.40E-04	7.40E-04
XE138	5.63E+02	4.85E+01	4.21E+00	3.65E+01	3.16E-02	2.37E-04	1.54E-07	1.00E-10	6.50E-14	4.23E-17	2.75E-20
CS138	8.38E+01	1.41E+02	4.89E+01	1.44E+01	4.03E+00	3.06E-01	6.37E-03	1.32E-04	2.75E-06	5.72E-08	1.18E-09
CS139	5.41E+02	1.73E+01	2.16E-01	2.72E-03	3.41E-05	5.36E-09	1.07E-14	2.11E-20	4.17E-26	8.27E-32	1.63E-37
BA139	9.99E+00	1.11E+02	6.87E+01	4.17E+01	2.52E+01	9.26E+00	2.06E+00	4.56E-01	1.01E-01	2.25E-02	5.00E-03
BA140	1.03E-01	6.41E-01	6.41E-01	6.36E-01	6.36E-01	6.32E-01	6.32E-01	6.27E-01	6.22E-01	6.17E-01	6.12E-01
LA140	2.44E-07	1.10E-02	2.17E-02	3.23E-02	4.26E-02	6.27E-02	9.16E-02	1.18E-01	1.44E-01	1.68E-01	1.90E-01
BA141	1.97E+02	5.94E+01	5.90E+00	5.85E-01	5.80E-02	5.76E-04	5.62E-07	5.48E-10	5.34E-13	5.24E-16	5.10E-19
LA141	1.82E+00	3.85E+01	3.59E+01	3.04E+01	2.55E+01	1.79E+01	1.05E+01	6.13E+00	3.61E+00	2.12E+00	1.24E+00
CE141	2.25E-07	2.50E-02	5.85E-02	8.80E-02	1.13E-01	1.51E-01	1.88E-01	2.09E-01	2.21E-01	2.28E-01	2.32E-01
BA142	5.24E+02	2.08E+01	4.75E-01	1.08E-02	2.47E-04	1.28E-07	1.52E-12	1.81E-17	2.15E-22	2.54E-27	3.02E-32
LA142	1.20E+01	8.35E+01	5.51E+01	3.50E+01	2.23E+01	9.02E+00	2.33E+00	6.00E-01	1.55E-01	3.98E-02	1.03E-02
LA143	1.97E+02	3.84E+01	1.97E+00	1.01E-01	5.20E-03	1.36E-05	1.83E-09	2.47E-13	3.33E-17	4.50E-21	6.07E-25
CE143	7.86E-02	5.01E+00	5.20E+00	5.06E+00	4.97E+00	4.78E+00	4.48E+00	4.21E+00	3.95E+00	3.71E+00	3.48E+00
PR143	2.30E-08	7.68E-03	1.85E-02	2.93E-02	3.98E-02	6.02E-02	8.88E-02	1.16E-01	1.41E-01	1.64E-01	1.86E-01
CE144	3.14E-03	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02
PR144	8.62E-07	2.05E-02	2.23E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02	2.25E-02
PR145	1.27E-01	1.86E+01	1.65E+01	1.47E+01	1.31E+01	1.04E+01	7.33E+00	5.18E+00	3.67E+00	2.59E+00	1.83E+00
CE146	3.72E+02	1.91E+01	9.79E+01	5.00E-02	2.58E-03	6.79E-06	9.14E-10	1.23E-13	1.66E-17	2.24E-21	3.01E-25
PR146	7.70E+00	6.70E+01	1.52E+01	2.85E+00	5.13E-01	1.61E-02	8.92E-05	4.92E-07	2.72E-09	1.51E-11	8.22E-14
PR147	4.32E+01	1.25E+01	3.90E-01	1.22E-02	3.81E-04	3.72E-07	1.14E-11	3.47E-16	1.06E-20	3.23E-25	9.85E-30

1

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	1.54E-05	2.90E-01	2.98E-01	2.98E-01	2.97E-01	2.96E-01	2.93E-01	2.91E-01	2.89E-01	2.86E-01	2.84E-01
ND149	2.24E+01	1.52E+01	1.04E+01	7.07E+00	4.78E+00	2.22E+00	6.98E-01	2.20E-01	6.94E-02	2.18E-02	6.90E-03
PM149	3.12E-03	2.44E-01	4.05E-01	5.12E-01	5.80E-01	6.52E-01	6.77E-01	6.64E-01	6.47E-01	6.22E-01	6.01E-01
PM150	2.58E-01	2.00E-01	1.55E-01	1.19E-01	9.22E-02	5.53E-02	2.56E-02	1.18E-02	5.49E-03	2.54E-03	1.18E-03
ND151	8.86E+01	2.77E+00	8.66E-02	2.71E-03	8.47E-05	8.27E-08	2.52E-12	7.71E-17	2.35E-21	7.16E-26	2.19E-30
PM151	5.62E-02	6.57E-01	6.61E-01	6.45E-01	6.29E-01	5.97E-01	5.54E-01	5.14E-01	4.79E-01	4.43E-01	4.11E-01
PM152	1.43E+02	1.40E-01	1.36E-04	1.33E-07	1.30E-10	1.24E-16	1.16E-25	1.08E-34	1.00E-43	9.39E-53	8.72E-62
SM153	1.92E-01	1.89E-01	1.86E-01	1.83E-01	1.81E-01	1.76E-01	1.68E-01	1.60E-01	1.54E-01	1.47E-01	1.41E-01
SM155	1.07E+01	1.76E+00	2.89E-01	4.72E-02	7.74E-03	2.08E-04	9.19E-07	4.05E-09	1.79E-11	7.95E-14	1.95E-16
EU155	7.88E-06	2.25E-04	2.60E-04	2.66E-04	2.67E-04	2.67E-04	2.67E-04	2.67E-04	2.67E-04	2.67E-04	2.67E-04
SM156	1.87E-01	1.74E-01	1.61E-01	1.50E-01	1.39E-01	1.20E-01	9.63E-02	7.72E-02	6.19E-02	4.96E-02	3.97E-02
EU156	5.47E-04	8.93E-04	1.21E-03	1.51E-03	1.79E-03	2.28E-03	2.90E-03	3.35E-03	3.75E-03	4.05E-03	4.26E-03
EU157	3.04E-02	1.01E-01	9.63E-02	9.20E-02	8.77E-02	8.02E-02	7.00E-02	6.11E-02	5.32E-02	4.63E-02	4.04E-02
EU158	1.12E+00	4.54E-01	1.84E-01	7.45E-02	3.01E-02	4.93E-03	3.29E-04	2.18E-05	1.45E-06	9.60E-08	6.38E-09
EU159	1.36E+00	1.35E-01	1.34E-02	1.33E-03	1.32E-04	1.30E-06	1.27E-09	1.24E-12	1.21E-15	1.18E-18	1.15E-21
GD159	5.81E-03	2.55E-02	2.65E-02	2.57E-02	2.47E-02	2.29E-02	2.04E-02	1.82E-02	1.62E-02	1.44E-02	1.29E-02
TB161	7.39E-05	5.32E-04	5.28E-04	5.27E-04	5.25E-04	5.20E-04	5.14E-04	5.07E-04	5.00E-04	4.95E-04	4.88E-04
TOTAL	1.23E+04	2.54E+03	9.17E+02	5.45E+02	4.03E+02	2.78E+02	1.96E+02	1.52E+02	1.24E+02	1.04E+02	8.98E+01

ANNIE
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	1.52E-05	1.50E-05	1.48E-05	1.42E-05	1.33E-05	1.17E-05	1.03E-05	7.91E-06	4.14E-06	1.12E-06	3.06E-07	
NA 24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
MN 54	5.19E-05	5.15E-05	5.15E-05	5.06E-05	5.01E-05	4.92E-05	4.83E-05	4.60E-05	4.10E-05	3.26E-05	2.60E-05	
FE 55	1.12E-04	1.12E-04	1.12E-04	1.12E-04	1.11E-04	1.11E-04	1.10E-04	1.08E-04	1.04E-04	9.70E-05	9.00E-05	
FE 59	3.67E-04	3.61E-04	3.56E-04	3.40E-04	3.14E-04	2.70E-04	2.31E-04	1.70E-04	7.89E-05	1.68E-05	3.61E-06	
CO 57	8.07E-05	8.07E-05	8.01E-05	8.01E-05	7.89E-05	7.65E-05	7.47E-05	7.11E-05	6.27E-05	4.85E-05	3.75E-05	
CO 58	7.13E-04	7.07E-04	6.99E-04	6.78E-04	6.48E-04	5.87E-04	5.32E-04	4.38E-04	2.70E-04	1.02E-04	3.85E-05	
CO 60	5.66E-05	5.66E-05	5.66E-05	5.66E-05	5.63E-05	5.63E-05	5.60E-05	5.56E-05	5.43E-05	5.26E-05	5.06E-05	
CU 64	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CU 67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AU 198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AU 199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
PB 203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
U237	1.66E-01	1.50E-01	1.35E-01	9.96E-02	5.95E-02	2.13E-02	7.65E-03	9.78E-04	5.77E-06	6.21E-10	4.19E-10	
U240	5.71E-01	1.76E-01	5.40E-02	1.57E-03	4.30E-06	3.23E-11	2.43E-16	1.37E-26	0.	0.	0.	
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
NP239	1.14E-02	1.75E+01	1.30E+01	5.37E+00	1.23E+00	6.43E-02	3.36E-03	9.22E-06	3.63E-12	8.66E-22	8.66E-22	
NP240M	9.04E-04	1.77E-01	5.44E-02	1.58E-03	4.33E-06	3.26E-11	2.45E-16	1.38E-26	0.	0.	0.	
AM241	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.74E-09	
CM242	4.88E-07	4.85E-07	4.83E-07	4.78E-07	4.68E-07	4.47E-07	4.30E-07	3.94E-07	3.21E-07	2.09E-07	1.37E-07	
GE 77	4.11E-03	2.59E-03	5.92E-04	7.16E-06	4.55E-09	1.84E-15	7.43E-22	1.21E-34	0.	0.	0.	
AS 77	4.25E-05	6.28E-03	4.54E-03	1.31E-03	1.54E-04	2.09E-06	2.83E-08	5.22E-12	2.42E-21	5.19E-40	1.11E-58	
SE 77M	1.68E-09	1.89E-05	1.36E-05	3.94E-06	4.60E-07	6.26E-09	8.50E-11	1.57E-14	7.27E-24	1.55E-42	3.35E-61	
AS 78	1.15E-02	1.02E-04	3.00E-09	2.53E-23	0.	0.	0.	0.	0.	0.	0.	
BR 82	3.79E-04	2.37E-04	1.48E-04	3.60E-05	3.41E-06	3.06E-08	2.75E-10	2.22E-14	1.30E-24	4.45E-45	1.51E-65	
BR 83	2.88E-01	7.59E-03	7.63E-06	7.75E-15	7.92E-30	0.	0.	0.	0.	0.	0.	
KR 83M	1.49E-05	3.32E-02	3.77E-05	3.39E-14	3.48E-29	0.	0.	0.	0.	0.	0.	
KR 85M	3.41E-03	1.95E-01	4.44E-03	5.27E-08	3.25E-16	1.24E-32	4.68E-49	0.	0.	0.	0.	
KR 85	3.53E-06	9.27E-05	9.45E-05	9.45E-05	9.45E-05	9.45E-05	9.45E-05	9.40E-05	9.31E-05	9.13E-05	9.00E-05	
KR 87	5.69E+01	1.12E-04	2.22E-10	1.72E-27	0.	0.	0.	0.	0.	0.	0.	
KR 88	3.23E+01	8.50E-02	2.23E-04	4.05E-12	5.10E-25	0.	0.	0.	0.	0.	0.	
RB 88	8.21E+00	9.47E-02	2.50E-04	4.53E-12	5.68E-25	0.	0.	0.	0.	0.	0.	
SR 89	3.02E-06	9.06E-02	8.93E-02	8.57E-02	8.04E-02	7.03E-02	6.14E-02	4.73E-02	2.42E-02	6.36E-03	1.68E-03	
SR 90	6.07E-06	6.24E-04	6.24E-04	6.24E-04	6.24E-04	6.24E-04	6.24E-04	6.24E-04	6.18E-04	6.18E-04	6.13E-04	
Y 90	9.00E-12	1.43E-04	2.53E-04	4.54E-04	5.80E-04	6.18E-04	6.24E-04	6.24E-04	6.18E-04	6.18E-04	6.13E-04	
SR 91	8.20E-01	2.94E+00	5.26E-01	3.02E-03	5.52E-07	1.87E-14	6.35E-22	7.22E-37	0.	0.	0.	

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
Y 91M	5.52E-05	1.90E+00	3.40E-01	1.95E-03	3.58E-07	1.21E-14	4.09E-22	4.66E-37	0.	0.	0.
Y 91	2.26E-08	9.03E-02	1.07E-01	1.07E-01	1.01E-01	8.93E-02	7.95E-02	6.30E-02	3.48E-02	1.07E-02	3.30E-03
SR 92	1.05E+01	1.31E-01	2.83E-04	2.84E-12	1.33E-25	0.	0.	0.	0.	0.	0.
Y 92	4.85E-01	1.37E+00	1.53E-02	1.17E-08	6.85E-19	2.34E-39	8.02E-60	0.	0.	0.	0.
Y 93	5.21E-01	3.52E+00	6.87E-01	5.16E-03	1.49E-06	1.23E-13	1.01E-20	6.92E-35	0.	0.	0.
ZR 95	1.01E-03	1.27E-01	1.26E-01	1.22E-01	1.15E-01	1.03E-01	9.30E-02	7.52E-02	4.41E-02	1.52E-02	5.21E-03
NB 95M	2.16E-11	4.29E-04	7.83E-04	1.50E-03	2.02E-03	2.13E-03	1.96E-03	1.59E-03	9.35E-04	3.22E-04	1.11E-04
NB 95	1.13E-10	2.45E-03	4.85E-03	1.16E-02	2.16E-02	3.73E-02	4.81E-02	5.96E-02	5.74E-02	2.76E-02	1.06E-02
ZR 97	2.47E+00	4.20E+00	1.58E+00	8.36E-02	6.28E-04	3.54E-08	1.99E-12	6.28E-21	3.54E-42	0.	0.
NB 97M	1.27E-02	4.03E+00	1.52E+00	8.06E-02	6.03E-04	3.40E-08	1.91E-12	6.03E-21	3.41E-42	0.	0.
NB 97	1.24E+00	4.21E+00	1.58E+00	8.40E-02	6.32E-04	3.81E-08	2.14E-12	6.79E-21	3.82E-42	0.	0.
MO 99	7.47E-03	2.43E+00	1.90E+00	9.00E-01	2.60E-01	2.18E-02	1.81E-03	1.27E-05	5.14E-11	8.47E-22	1.39E-32
TC 99M	6.95E-08	2.14E+00	1.80E+00	8.62E-01	2.49E-01	2.08E-02	1.73E-03	1.21E-05	4.90E-11	8.09E-22	1.33E-32
RU103	6.71E-05	1.53E-01	1.50E-01	1.42E-01	1.31E-01	1.10E-01	9.21E-02	6.50E-02	2.70E-02	4.69E-03	8.17E-04
RU103M	4.47E-09	1.53E-01	1.51E-01	1.43E-01	1.31E-01	1.10E-01	9.21E-02	6.50E-02	2.71E-02	4.69E-03	8.17E-04
RU105	4.85E-01	4.64E-01	1.09E-02	1.43E-07	1.05E-15	5.60E-32	3.00E-48	0.	0.	0.	0.
RU105M	3.19E-03	4.64E-01	1.09E-02	1.44E-07	1.05E-15	5.63E-32	3.01E-48	0.	0.	0.	0.
RH105	5.24E-09	1.68E+00	1.09E+00	2.73E-01	2.69E-02	2.61E-04	2.54E-06	2.40E-10	2.08E-20	1.56E-40	1.17E-60
RU106	4.25E-04	8.04E-03	8.01E-03	7.97E-03	7.90E-03	7.76E-03	7.59E-03	7.31E-03	6.65E-03	5.50E-03	4.56E-03
RH106	4.60E-06	8.04E-03	8.01E-03	7.97E-03	7.90E-03	7.76E-03	7.59E-03	7.31E-03	6.65E-03	5.50E-03	4.56E-03
PD109	6.31E-03	1.61E-01	4.68E-02	1.16E-03	2.45E-06	1.09E-11	4.86E-17	9.61E-28	0.	0.	0.
AG109M	3.64E-05	1.61E-01	4.69E-02	1.16E-03	2.46E-06	1.09E-11	4.86E-17	9.62E-28	0.	0.	0.
PD111M	7.62E-01	3.70E-02	1.80E-03	2.06E-07	5.58E-14	4.07E-27	2.99E-40	0.	0.	0.	0.
PD111	2.71E-01	2.99E-02	1.45E-03	1.66E-07	4.49E-14	3.27E-27	2.40E-40	0.	0.	0.	0.
AG111M	2.16E-03	3.90E-02	1.90E-03	2.18E-07	5.89E-14	4.32E-27	3.16E-40	0.	0.	0.	0.
AG111	7.68E-10	2.12E-02	2.04E-02	1.55E-02	9.76E-03	3.87E-03	1.54E-03	2.42E-04	2.38E-06	2.31E-10	2.24E-14
PD112	1.45E-01	6.60E-02	2.98E-02	2.77E-03	5.27E-05	1.91E-08	6.95E-12	9.12E-19	5.75E-36	0.	0.
AG112	4.37E-06	7.66E-02	3.52E-02	3.27E-03	6.24E-05	2.26E-08	8.19E-12	1.08E-18	6.77E-36	0.	0.
AG113	1.30E-03	1.38E-02	5.95E-04	4.83E-08	7.40E-15	1.73E-28	4.05E-42	0.	0.	0.	0.
CD115M	3.66E-09	1.06E-04	1.04E-04	9.91E-05	9.17E-05	7.78E-05	6.64E-05	4.80E-05	2.15E-05	4.26E-06	8.53E-07
CD115	1.41E-06	2.13E-02	1.56E-02	6.15E-03	1.30E-03	5.79E-05	2.58E-06	5.15E-09	9.10E-16	2.85E-29	8.92E-43
IN115M	1.76E-11	2.25E-02	1.70E-02	6.72E-03	1.41E-03	6.32E-05	2.82E-06	5.61E-09	9.95E-16	3.11E-29	9.74E-43
CD117	3.14E-02	6.85E-04	6.66E-07	6.22E-16	5.52E-31	0.	0.	0.	0.	0.	0.
IN117M	1.51E-06	2.84E-03	3.29E-06	3.17E-15	2.82E-30	0.	0.	0.	0.	0.	0.
IN117	6.07E-11	1.87E-03	2.22E-06	2.15E-15	1.91E-30	0.	0.	0.	0.	0.	0.
SN121	6.40E-04	3.65E-02	1.97E-02	3.10E-03	1.42E-04	3.00E-07	6.32E-10	2.82E-15	1.18E-28	0.	0.
SN123	3.45E-06	3.60E-04	3.57E-04	3.51E-04	3.42E-04	3.23E-04	3.06E-04	2.74E-04	2.07E-04	1.19E-04	6.86E-05
SN125	9.79E-03	9.10E-03	8.46E-03	6.77E-03	4.68E-03	2.24E-03	1.07E-03	2.45E-04	6.13E-06	3.86E-09	2.42E-12
SB125	5.88E-05	6.52E-05	7.13E-05	8.71E-05	1.07E-04	1.29E-04	1.39E-04	1.45E-04	1.42E-04	1.33E-04	1.24E-04
SB126	1.82E-03	1.73E-03	1.63E-03	1.38E-03	1.05E-03	6.00E-04	3.46E-04	1.14E-04	7.13E-06	3.46E-08	6.96E-09

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
SN127	2.56E+00	9.26E-04	3.36E-07	1.61E-17	1.01E-34	0.	0.	0.	0.	0.	0.	0.
SB127	2.98E-02	1.23E-01	1.02E-01	5.98E-02	2.45E-02	4.09E-03	6.84E-04	1.91E-05	2.50E-09	4.26E-17	7.25E-25	0.
TE127M	2.41E-10	1.87E-04	3.42E-04	6.64E-04	9.18E-04	1.01E-03	9.75E-04	8.65E-04	6.31E-04	3.33E-04	1.76E-04	0.
TE127	1.68E-02	8.77E-02	8.60E-02	5.24E-02	2.22E-02	4.55E-03	1.56E-03	8.73E-04	6.23E-04	3.29E-04	1.74E-04	0.
SB128	7.25E-01	1.24E-01	1.95E-02	7.62E-05	7.39E-09	6.93E-17	6.52E-25	5.75E-41	0.	0.	0.	0.
SB129	4.12E+00	2.11E-01	4.40E-03	4.01E-08	1.59E-16	2.52E-33	3.97E-50	0.	0.	0.	0.	0.
TE129M	7.78E-08	8.20E-03	8.20E-03	7.74E-03	7.00E-03	5.70E-03	4.63E-03	3.09E-03	1.11E-03	1.45E-04	1.89E-05	0.
TE129	2.97E+00	2.47E-01	1.03E-02	4.96E-03	4.47E-03	3.65E-03	2.97E-03	1.98E-03	7.14E-04	9.31E-05	1.21E-05	0.
I130	1.99E-02	5.20E-03	1.36E-03	2.43E-05	2.97E-08	4.43E-14	6.60E-20	1.47E-31	0.	0.	0.	0.
TE131M	7.94E-05	2.78E-01	1.59E-01	3.02E-02	1.89E-03	7.36E-06	2.88E-08	4.39E-13	4.00E-25	0.	0.	0.
TE131	7.31E+01	5.06E-02	2.91E-02	5.52E-03	3.44E-04	1.35E-06	5.25E-09	8.04E-14	7.31E-26	0.	0.	0.
I131	1.06E-02	5.73E-01	5.41E-01	4.35E-01	2.87E-01	1.21E-01	5.12E-02	9.15E-03	1.24E-04	2.25E-08	4.10E-12	0.
XE131M	2.88E-11	2.65E-04	5.04E-04	1.05E-03	1.50E-03	1.49E-03	1.10E-03	4.56E-04	3.04E-05	9.09E-08	2.57E-10	0.
TE132	8.38E-01	1.66E+00	1.34E+00	7.06E-01	2.43E-01	2.88E-02	3.42E-03	4.80E-05	1.12E-09	6.15E-19	3.35E-28	0.
I132	2.06E+00	1.71E+00	1.38E+00	7.26E-01	2.51E-01	2.97E-02	3.52E-03	4.95E-05	1.16E-09	6.30E-19	3.45E-28	0.
I133	8.83E-01	4.92E+00	2.22E+00	2.06E-01	3.93E-03	1.42E-06	5.16E-10	6.81E-17	4.28E-34	0.	0.	0.
XE133M	3.76E-08	4.65E-02	5.50E-02	3.23E-02	7.58E-03	3.56E-04	1.66E-05	3.59E-08	7.87E-15	3.76E-28	1.80E-41	0.
XE133	6.56E-07	8.93E-01	1.20E+00	1.07E+00	5.84E-01	1.58E-01	4.24E-02	3.06E-03	4.26E-06	8.25E-12	1.60E-17	0.
I135	1.50E+01	2.44E+00	2.04E-01	1.19E-04	4.82E-10	7.96E-21	1.31E-31	3.55E-53	0.	0.	0.	0.
XE135M	1.66E-03	7.61E-01	6.37E-02	3.70E-05	1.51E-10	2.48E-21	4.08E-32	1.11E-53	0.	0.	0.	0.
XE135	1.72E+00	6.58E+00	1.61E+00	9.20E-03	1.13E-06	1.58E-14	2.22E-22	4.39E-38	0.	0.	0.	0.
CS136	5.49E-03	5.20E-03	4.93E-03	4.20E-03	3.22E-03	1.89E-03	1.11E-03	3.82E-04	2.65E-05	1.28E-07	6.20E-10	0.
CS137	7.36E-05	7.93E-04	7.93E-04	7.93E-04	7.93E-04	7.93E-04	7.93E-04	7.93E-04	7.89E-04	7.84E-04	7.80E-04	0.
BA137M	1.55E-07	7.40E-04	7.40E-04	7.40E-04	7.40E-04	7.40E-04	7.40E-04	7.40E-04	7.36E-04	7.31E-04	7.27E-04	0.
BA139	9.99E+00	1.07E-03	6.30E-09	1.30E-24	0.	0.	0.	0.	0.	0.	0.	0.
BA140	1.03E-01	6.07E-01	5.78E-01	4.90E-01	3.74E-01	2.17E-01	1.26E-01	4.28E-02	2.86E-03	1.27E-05	5.63E-08	0.
LA140	2.44E-07	2.12E-01	3.40E-01	4.70E-01	4.18E-01	2.50E-01	1.45E-01	4.94E-02	3.29E-03	1.46E-05	6.51E-08	0.
LA141	1.82E+00	7.21E-01	1.01E-02	2.80E-08	1.53E-17	4.57E-36	1.36E-54	0.	0.	0.	0.	0.
CE141	2.25E-07	2.49E-01	2.47E-01	2.32E-01	2.08E-01	1.69E-01	1.36E-01	8.85E-02	3.04E-02	3.58E-03	4.21E-04	0.
LA142	1.20E+01	2.64E-03	5.11E-08	3.76E-22	0.	0.	0.	0.	0.	0.	0.	0.
CE143	7.86E-02	3.23E+00	1.95E+00	4.30E-01	3.46E-02	2.24E-04	1.45E-06	6.07E-11	6.85E-22	0.	0.	0.
PR143	2.30E-08	2.07E-01	3.22E-01	4.16E-01	3.56E-01	2.17E-01	1.31E-01	4.74E-02	3.79E-03	2.41E-05	1.53E-07	0.
CE144	3.14E-03	2.25E-02	2.24E-02	2.22E-02	2.19E-02	2.14E-02	2.09E-02	1.99E-02	1.76E-02	1.38E-02	1.08E-02	0.
PR144	8.62E-07	2.25E-02	2.24E-02	2.22E-02	2.19E-02	2.14E-02	2.09E-02	1.99E-02	1.76E-02	1.38E-02	1.08E-02	0.
PR145	1.27E-01	1.29E+00	8.01E-02	1.90E-05	1.73E-11	1.43E-23	1.19E-35	0.	0.	0.	0.	0.
ND147	1.54E-05	2.59E-01	2.44E-01	2.02E-01	1.48E-01	7.94E-02	4.24E-02	1.22E-02	5.34E-04	1.04E-06	2.02E-09	0.
PM147	4.28E-14	1.94E-04	3.75E-04	8.58E-04	1.48E-03	2.26E-03	2.67E-03	2.98E-03	3.01E-03	2.80E-03	2.60E-03	0.
ND149	2.24E+01	2.17E-03	2.10E-07	1.91E-19	1.63E-39	0.	0.	0.	0.	0.	0.	0.
PM149	3.12E-03	5.75E-01	4.21E-01	1.65E-01	3.44E-02	1.50E-03	6.52E-05	1.24E-07	1.95E-14	4.82E-28	1.20E-41	0.
PM150	2.58E-01	5.45E-04	1.15E-06	1.08E-14	4.51E-28	0.	0.	0.	0.	0.	0.	0.

1

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	5.62E-02	3.83E-01	2.11E-01	3.56E-02	1.82E-03	4.79E-06	1.26E-08	8.70E-14	1.09E-26	0.	0.	0.
SM153	1.92E-01	1.35E-01	9.46E-02	3.27E-02	5.55E-03	1.62E-04	4.69E-06	3.94E-09	8.13E-17	3.46E-32	1.47E-47	0.
SM156	1.87E-01	3.19E-02	5.44E-03	2.68E-05	3.86E-09	7.94E-17	1.64E-24	6.97E-40	0.	0.	0.	0.
EU155	7.88E-06	2.67E-04	2.67E-04	2.67E-04	2.66E-04	2.65E-04	2.64E-04	2.62E-04	2.57E-04	2.46E-04	2.37E-04	0.
EU156	5.47E-04	4.45E-03	4.93E-03	4.42E-03	3.51E-03	2.21E-03	1.39E-03	5.52E-04	5.47E-05	5.39E-07	5.31E-09	0.
EU157	3.04E-02	3.52E-02	1.18E-02	4.44E-04	1.86E-06	3.29E-11	5.82E-16	1.81E-25	0.	0.	0.	0.
GD159	5.81E-03	1.14E-02	4.55E-03	2.84E-04	2.80E-06	2.71E-10	2.62E-14	2.46E-22	2.10E-42	0.	0.	0.
TB161	7.39E-05	4.83E-04	4.36E-04	3.23E-04	1.95E-04	7.15E-05	2.62E-05	3.51E-06	2.32E-08	1.00E-12	4.36E-17	0.
TOTAL	2.67E+02	7.80E+01	3.88E+01	1.43E+01	5.52E+00	2.02E+00	1.25E+00	7.01E-01	3.15E-01	1.19E-01	6.02E-02	0.

1

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	1.52E-05	1.31E-07	1.22E-08	1.13E-09	9.10E-13	7.29E-16	5.45E-20	3.49E-26	0.	0.	0.
MN 54	5.19E-05	2.24E-05	1.48E-05	9.70E-06	2.77E-06	7.91E-07	1.49E-07	1.22E-08	2.86E-12	1.03E-17	3.74E-23
FE 59	3.67E-04	1.32E-06	7.94E-08	4.78E-09	1.04E-12	2.24E-16	2.92E-21	1.37E-28	0.	0.	0.
CO 57	8.07E-05	3.18E-05	1.99E-05	1.25E-05	3.08E-06	7.59E-07	1.17E-08	7.11E-09	6.21E-13	5.10E-19	0.
CO 58	7.13E-04	2.05E-05	3.47E-06	5.89E-07	2.87E-09	1.40E-11	1.15E-14	2.73E-19	1.04E-34	0.	0.
CO 60	5.66E-05	4.96E-05	4.62E-05	4.32E-05	3.55E-05	2.92E-05	2.24E-05	1.51E-05	4.05E-06	5.63E-07	7.77E-08
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.66E-01	4.15E-10	4.04E-10	3.93E-10	3.68E-10	3.42E-10	3.11E-10	2.70E-10	1.68E-10	8.23E-11	4.04E-11
AM241	9.74E-09	9.74E-09	9.74E-09	9.74E-09	9.79E-09	9.84E-09	9.84E-09	9.88E-09	9.93E-09	9.84E-09	9.70E-09
CM242	4.88E-07	1.03E-07	4.75E-08	2.19E-08	2.13E-09	2.08E-10	9.30E-12	8.80E-14	2.53E-18	2.36E-18	2.20E-18
KR 85	3.53E-06	8.77E-05	8.50E-05	8.22E-05	7.50E-05	6.77E-05	5.95E-05	4.91E-05	2.59E-05	9.90E-06	3.78E-06
SR 89	3.02E-06	7.07E-04	6.19E-05	5.44E-06	3.66E-09	2.47E-12	1.46E-16	6.63E-23	4.82E-44	0.	0.
SR 90	6.07E-06	6.07E-04	6.02E-04	5.96E-04	5.74E-04	5.52E-04	5.26E-04	4.88E-04	3.82E-04	2.63E-04	1.82E-04
Y 90	9.00E-12	6.07E-04	6.02E-04	5.96E-04	5.74E-04	5.52E-04	5.26E-04	4.88E-04	3.82E-04	2.63E-04	1.82E-04
Y 91	2.26E-08	1.53E-03	1.78E-04	2.06E-05	3.24E-08	5.08E-11	9.29E-15	2.28E-20	4.61E-39	0.	0.
ZR 95	1.01E-03	2.61E-03	3.72E-04	5.30E-05	1.54E-07	4.50E-10	1.86E-13	1.57E-18	1.92E-35	0.	0.
NB 95M	2.16E-11	5.52E-05	7.88E-06	1.13E-06	3.27E-09	9.52E-12	3.94E-15	3.33E-20	4.08E-37	0.	0.
NB 95	1.13E-10	5.61E-03	8.06E-04	1.15E-04	3.33E-07	9.66E-10	4.03E-13	3.40E-18	4.17E-35	0.	0.
RU103	6.71E-05	2.61E-04	1.07E-05	4.39E-07	2.99E-11	2.05E-15	5.77E-21	2.71E-29	0.	0.	0.
RH103M	4.47E-09	2.61E-04	1.07E-05	4.39E-07	3.00E-11	2.06E-15	5.77E-21	2.71E-29	0.	0.	0.
RU106	4.25E-04	4.04E-03	2.86E-03	2.03E-03	7.21E-04	2.56E-04	6.44E-05	8.15E-06	8.22E-09	2.64E-13	8.49E-18
RH106	4.60E-06	4.04E-03	2.86E-03	2.03E-03	7.21E-04	2.56E-04	6.44E-05	8.15E-06	8.22E-09	2.64E-13	8.49E-18
SN123	3.45E-06	4.77E-05	1.73E-05	6.29E-06	3.02E-07	1.45E-08	2.52E-10	5.82E-13	9.33E-22	6.01E-35	3.86E-48
SB125	5.88E-05	1.18E-04	1.04E-04	9.15E-05	6.24E-05	4.24E-05	2.34E-05	1.17E-05	9.02E-07	1.92E-08	4.09E-10
TE125M	1.58E-12	4.83E-05	4.29E-05	3.78E-05	2.58E-05	1.76E-05	1.05E-05	4.86E-06	3.73E-07	7.95E-09	1.69E-10
TE127M	2.41E-10	1.16E-04	3.61E-05	1.13E-05	3.48E-07	1.07E-08	1.03E-10	9.67E-14	7.95E-24	5.94E-39	4.42E-54
TE127	1.68E-02	1.14E-04	3.57E-05	1.12E-05	3.44E-07	1.06E-08	1.02E-10	9.59E-14	7.87E-24	5.86E-39	4.38E-54
CS137	7.36E-05	7.75E-04	7.67E-04	7.58E-04	7.31E-04	7.05E-04	6.74E-04	6.30E-04	4.98E-04	3.54E-04	2.50E-04
BA137M	1.55E-07	7.27E-04	7.18E-04	7.09E-04	6.83E-04	6.61E-04	6.30E-04	5.90E-04	4.67E-04	3.30E-04	2.34E-04
CE141	2.25E-07	9.69E-05	1.95E-06	3.91E-08	3.19E-13	2.59E-18	4.26E-25	2.82E-35	0.	0.	0.
CE144	3.14E-03	9.23E-03	5.93E-03	3.79E-03	9.94E-04	2.61E-04	4.39E-05	3.03E-06	4.08E-10	6.40E-16	9.98E-22
PR144	8.62E-07	9.23E-03	5.93E-03	3.79E-03	9.94E-04	2.61E-04	4.39E-05	3.03E-06	4.08E-10	6.40E-16	9.98E-22
PM147	4.28E-14	2.49E-03	2.18E-03	1.91E-03	1.28E-03	8.62E-04	5.06E-04	2.30E-04	1.63E-05	3.09E-07	5.84E-09
EU155	7.88E-06	2.31E-04	2.14E-04	1.99E-04	1.60E-04	1.29E-04	9.62E-05	6.21E-05	1.45E-05	1.63E-06	1.84E-07
TOTAL	1.89E-01	4.38E-02	2.45E-02	1.69E-02	7.64E-03	4.65E-03	3.29E-03	2.59E-03	1.79E-03	1.22E-03	8.52E-04

ANNIE
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.500
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 3.648E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.10E+02	1.20E+04
1.00E+00	3.46E+01	2.47E+03
2.00E+00	1.37E+01	9.25E+02
3.00E+00	7.28E+00	5.47E+02
4.00E+00	4.51E+00	3.95E+02
6.00E+00	2.34E+00	2.62E+02
9.00E+00	1.38E+00	1.80E+02
1.20E+01	1.00E+00	1.38E+02
1.50E+01	7.84E-01	1.11E+02
1.80E+01	6.40E-01	9.28E+01
2.10E+01	5.36E-01	7.93E+01
1.00E+00 DAYS	4.52E-01	6.82E+01
2.00E+00	2.04E-01	3.25E+01
5.00E+00	8.08E-02	1.22E+01
1.00E+01	3.75E-02	5.12E+00
2.00E+01	1.49E-02	2.00E+00
3.00E+01	8.51E-03	1.22E+00
5.00E+01	3.84E-03	6.72E-01
1.00E+02	1.27E-03	2.88E-01
2.00E+02	4.27E-04	1.01E-01
3.00E+02	1.68E-04	4.99E-02
1.00E+00 YEARS	1.00E-04	3.65E-02
1.50E+00	3.55E-05	2.12E-02
2.00E+00	2.27E-05	1.52E-02
3.50E+00	1.37E-05	7.50E-03
5.00E+00	1.07E-05	4.93E-03
7.00E+00	9.05E-06	3.73E-03
1.00E+01	7.96E-06	3.09E-03
2.00E+01	5.98E-06	2.25E-03
3.50E+01	4.18E-06	1.55E-03
5.00E+01	2.95E-06	1.08E-03

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BE 7	9.63E-06	9.62E-06	9.62E-06	9.62E-06	9.62E-06	9.60E-06	9.59E-06	9.56E-06	9.54E-06	9.53E-06	9.51E-06
NA 24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MN 54	3.30E-05	3.30E-05	3.30E-05	3.30E-05	3.30E-05	3.30E-05	3.30E-05	3.27E-05	3.27E-05	3.27E-05	3.27E-05
FE 55	7.12E-05	7.12E-05	7.12E-05	7.12E-05	7.12E-05	7.12E-05	7.12E-05	7.12E-05	7.12E-05	7.12E-05	7.12E-05
FE 59	2.33E-04	2.33E-04	2.33E-04	2.33E-04	2.33E-04	2.32E-04	2.32E-04	2.31E-04	2.31E-04	2.30E-04	2.30E-04
CO 57	5.12E-05	5.12E-05	5.12E-05	5.12E-05	5.12E-05	5.12E-05	5.12E-05	5.12E-05	5.12E-05	5.12E-05	5.12E-05
CO 58	4.53E-04	4.53E-04	4.53E-04	4.53E-04	4.52E-04	4.52E-04	4.51E-04	4.51E-04	4.50E-04	4.50E-04	4.49E-04
CO 60	3.60E-05	3.60E-05	3.60E-05	3.60E-05	3.60E-05	3.60E-05	3.60E-05	3.60E-05	3.60E-05	3.60E-05	3.60E-05
CU 64	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CU 67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.06E-01	1.05E-01	1.05E-01	1.04E-01	1.04E-01	1.03E-01	1.01E-01	1.00E-01	9.90E-02	9.76E-02	9.64E-02
U239	2.12E+03	3.62E+02	6.18E+01	1.05E+01	1.79E+00	5.21E-02	2.58E-04	1.27E-06	6.30E-09	3.12E-11	1.54E-13
U240	3.63E-01	3.46E-01	3.29E-01	3.13E-01	2.98E-01	2.70E-01	2.33E-01	2.01E-01	1.74E-01	1.50E-01	1.29E-01
NP239	7.27E-03	1.22E+01	1.41E+01	1.43E+01	1.42E+01	1.39E+01	1.33E+01	1.29E+01	1.24E+01	1.20E+01	1.15E+01
NP240M	5.74E-04	3.47E-01	3.32E-01	3.16E-01	3.01E-01	2.72E-01	2.35E-01	2.03E-01	1.75E-01	1.51E-01	1.30E-01
NP240	1.45E-11	7.48E-12	3.88E-12	2.00E-12	1.04E-12	2.77E-13	3.82E-14	5.27E-15	7.27E-16	1.00E-16	1.39E-17
AM241	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09
CM242	3.10E-07	3.10E-07	3.10E-07	3.10E-07	3.10E-07	3.10E-07	3.08E-07	3.08E-07	3.08E-07	3.08E-07	3.08E-07
GE 75	7.75E-06	3.75E-02	2.26E-02	1.36E-02	8.20E-03	2.97E-03	6.49E-04	1.42E-04	3.10E-05	6.76E-06	1.48E-06
GE 77	5.22E-03	1.34E-02	1.26E-02	1.19E-02	1.12E-02	9.90E-03	8.24E-03	6.85E-03	5.71E-03	4.74E-03	3.95E-03
AS 77	5.40E-05	8.53E-03	8.63E-03	8.68E-03	8.74E-03	8.80E-03	8.80E-03	8.74E-03	8.61E-03	8.43E-03	8.22E-03
SE 77M	2.13E-09	2.55E-05	2.59E-05	2.61E-05	2.61E-05	2.63E-05	2.65E-05	2.63E-05	2.59E-05	2.53E-05	2.46E-05
GE 78	8.12E-01	5.08E-01	3.16E-01	1.97E-01	1.23E-01	4.79E-02	1.16E-02	2.82E-03	6.88E-04	1.67E-04	4.06E-05
AS 78	1.46E-02	2.43E-01	2.99E-01	2.80E-01	2.34E-01	1.38E-01	5.13E-02	1.70E-02	5.27E-03	1.58E-03	4.57E-04
AS 79	1.59E+01	1.56E-01	1.54E-03	1.52E-05	1.49E-07	1.45E-11	1.38E-17	1.32E-23	1.26E-29	1.20E-35	1.14E-41
SE 79M	2.35E-02	2.76E-01	2.72E-03	2.68E-05	2.64E-07	2.55E-11	2.43E-17	2.32E-23	2.22E-29	2.12E-35	2.02E-41
BR 80	9.81E-02	9.25E-03	8.69E-04	8.18E-05	7.70E-06	6.83E-08	5.72E-11	4.76E-14	3.97E-17	3.31E-20	2.77E-23
SE 81M	8.03E-02	3.75E+00	1.81E+00	8.69E-01	4.18E-01	9.77E-02	1.09E-02	1.23E-03	1.37E-04	1.54E-05	1.73E-06
SE 81	9.81E-01	4.43E+00	2.56E+00	1.28E+00	6.21E-01	1.45E-01	1.62E-02	1.82E-03	2.04E-04	2.28E-05	2.56E-06
BR 82	4.82E-04	4.73E-04	4.63E-04	4.55E-04	4.45E-04	4.28E-04	4.04E-04	3.81E-04	3.59E-04	3.38E-04	3.19E-04
SE 83	4.41E+01	8.35E+00	1.58E+00	3.00E-01	5.67E-02	2.04E-03	1.39E-05	9.43E-08	6.44E-10	4.37E-12	2.77E-14
BR 83	3.66E-01	5.46E+00	5.06E+00	3.98E+00	3.02E+00	1.71E+00	7.22E-01	3.04E-01	1.28E-01	5.41E-02	2.28E-02
KR 83M	1.89E-05	1.24E+00	2.53E+00	3.14E+00	3.24E+00	2.70E+00	1.59E+00	8.20E-01	3.95E-01	1.82E-01	8.20E-02

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BR 84	9.21E-02	1.59E+01	4.29E+00	1.16E+00	3.14E-01	2.30E-02	4.54E-04	8.97E-06	1.77E-07	3.51E-09	6.93E-11	
KR 85M	4.33E-03	9.29E+00	7.90E+00	6.75E+00	5.77E+00	4.21E+00	2.63E+00	1.64E+00	1.02E+00	6.35E-01	3.96E-01	
KR 87	7.22E+01	4.17E+01	2.41E+01	1.39E+01	8.04E+00	2.70E+00	5.23E-01	1.01E-01	1.96E-02	3.80E-03	7.35E-04	
KR 88	4.10E+01	3.20E+01	2.50E+01	1.95E+01	1.52E+01	9.25E+00	4.42E+00	2.10E+00	9.99E-01	4.76E-01	2.26E-01	
RB 88	1.04E+01	3.24E+01	2.76E+01	2.18E+01	1.70E+01	1.04E+01	4.95E+00	2.36E+00	1.12E+00	5.34E-01	2.54E-01	
RB 89	5.01E+01	4.71E+01	3.17E+00	2.13E-01	1.43E-02	6.45E-05	1.95E-08	5.89E-12	1.80E-15	5.44E-19	1.65E-22	
SR 89	3.84E-06	1.35E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.44E-01	1.43E-01	1.43E-01	1.43E-01	1.43E-01	
SR 90	7.71E-06	7.92E-04	7.92E-04	7.92E-04	7.92E-04	7.92E-04	7.92E-04	7.92E-04	7.92E-04	7.92E-04	7.92E-04	
SR 91	9.12E-01	1.70E+01	1.58E+01	1.47E+01	1.37E+01	1.19E+01	9.57E+00	7.74E+00	6.25E+00	5.02E+00	4.05E+00	
Y 91M	6.13E-05	5.85E+00	7.97E+00	8.54E+00	8.43E+00	7.57E+00	6.19E+00	4.98E+00	4.02E+00	3.24E+00	2.61E+00	
Y 91	2.51E-08	5.20E-03	1.20E-02	1.91E-02	2.61E-02	3.92E-02	5.56E-02	6.88E-02	7.97E-02	8.83E-02	9.52E-02	
SR 92	6.68E+00	2.98E+01	2.31E+01	1.79E+01	1.39E+01	8.29E+00	3.85E+00	1.79E+00	8.29E-01	3.85E-01	1.79E-01	
Y 92	3.08E-01	6.28E+00	9.85E+00	1.17E+01	1.24E+01	1.18E+01	9.07E+00	6.18E+00	3.98E+00	2.45E+00	1.48E+00	
SR 93	2.71E+02	4.67E+00	2.58E-02	1.43E-04	7.86E-07	2.40E-11	4.05E-18	6.84E-25	1.15E-31	1.95E-38	3.28E-45	
Y 93	3.31E-01	1.07E+01	1.01E+01	9.40E+00	8.79E+00	7.67E+00	6.25E+00	5.10E+00	4.15E+00	3.40E+00	2.77E+00	
Y 94	3.96E+01	5.41E+01	6.95E+00	8.97E-01	1.16E-01	1.92E-03	4.12E-06	8.83E-09	1.89E-11	4.12E-14	2.28E-15	
Y 95	1.72E+02	1.62E+01	3.56E-01	7.86E-03	1.73E-04	8.39E-08	8.99E-13	9.61E-18	1.03E-22	1.10E-27	1.17E-32	
ZR 95	6.44E-04	8.42E-02	8.59E-02	8.59E-02	8.59E-02	8.59E-02	8.59E-02	8.56E-02	8.56E-02	8.53E-02	8.53E-02	
NB 95	7.18E-11	5.20E-05	1.21E-04	1.90E-04	2.60E-04	3.98E-04	6.05E-04	8.14E-04	1.02E-03	1.22E-03	1.43E-03	
ZR 97	1.57E+00	6.82E+00	6.52E+00	6.28E+00	6.01E+00	5.55E+00	4.90E+00	4.34E+00	3.85E+00	3.40E+00	3.02E+00	
NB 97M	8.06E-03	6.55E+00	6.28E+00	6.04E+00	5.79E+00	5.34E+00	4.72E+00	4.18E+00	3.69E+00	3.26E+00	2.88E+00	
NB 97	7.84E-01	3.42E+00	4.82E+00	5.50E+00	5.77E+00	5.74E+00	5.23E+00	4.66E+00	4.12E+00	3.64E+00	3.23E+00	
NB 98	8.91E+00	3.95E+00	1.74E+00	7.72E-01	3.42E-01	6.69E-02	5.79E-03	5.00E-04	4.36E-05	3.77E-06	3.24E-07	
MO 99	4.75E-03	1.96E+00	1.94E+00	1.92E+00	1.90E+00	1.86E+00	1.80E+00	1.75E+00	1.70E+00	1.64E+00	1.59E+00	
TC 99M	4.41E-08	1.87E-01	3.51E-01	4.96E-01	6.23E-01	8.31E-01	1.05E+00	1.20E+00	1.28E+00	1.33E+00	1.35E+00	
MO101	1.38E+02	6.24E+01	3.62E+00	2.10E-01	1.22E-02	4.08E-05	7.94E-09	1.55E-12	3.01E-16	5.84E-20	1.14E-23	
TC101	5.84E+00	1.75E+02	1.91E+01	1.57E+00	1.14E-01	5.16E-04	1.29E-07	2.89E-11	6.13E-15	1.26E-18	2.55E-22	
MO102	1.16E+03	2.65E+01	6.04E-01	1.38E-02	3.15E-04	1.63E-07	1.95E-12	2.31E-17	2.73E-22	3.24E-27	3.85E-32	
TC102M	7.48E-01	2.24E+01	5.14E-01	1.17E-02	2.68E-04	1.39E-07	1.65E-12	1.95E-17	2.31E-22	2.74E-27	3.26E-32	
TC102	3.50E+03	1.34E+01	3.05E-01	6.93E-03	1.58E-04	8.26E-08	9.81E-13	1.16E-17	1.38E-22	1.63E-27	1.94E-32	
RU103	8.52E-05	1.98E-01	1.97E-01	1.97E-01	1.97E-01	1.97E-01	1.96E-01	1.96E-01	1.96E-01	1.95E-01	1.94E-01	
RH103M	5.68E-09	1.02E-01	1.51E-01	1.75E-01	1.87E-01	1.94E-01	1.96E-01	1.96E-01	1.96E-01	1.95E-01	1.94E-01	
TC104	7.46E+01	5.36E+01	5.36E+00	5.31E-01	5.25E-02	5.17E-04	5.05E-07	4.93E-10	4.82E-13	4.71E-16	4.60E-19	
RU105	6.16E-01	2.13E+01	1.82E+01	1.56E+01	1.34E+01	9.76E+00	6.12E+00	3.82E+00	2.39E+00	1.50E+00	9.40E-01	
RH105M	4.05E-03	2.14E+01	1.83E+01	1.57E+01	1.34E+01	9.81E+00	6.12E+00	3.84E+00	2.40E+00	1.50E+00	9.40E-01	
RH105	6.66E-09	4.34E-01	8.05E-01	1.11E+00	1.37E+00	1.75E+00	2.09E+00	2.25E+00	2.29E+00	2.27E+00	2.21E+00	
RU106	5.39E-04	1.02E-02	1.02E-02	1.02E-02	1.02E-02	1.02E-02	1.02E-02	1.02E-02	1.02E-02	1.02E-02	1.02E-02	
RH106	5.84E-06	1.02E-02	1.02E-02	1.02E-02	1.02E-02	1.02E-02	1.02E-02	1.02E-02	1.02E-02	1.02E-02	1.02E-02	
RH107	1.38E-01	1.87E+01	2.84E+00	4.27E-01	6.45E-02	1.47E-03	5.07E-06	1.75E-08	6.01E-11	2.06E-14	2.05E-17	
PD107M	2.87E-04	3.81E+00	5.76E-01	8.70E-02	1.31E-02	2.99E-04	1.03E-06	3.56E-09	1.22E-11	4.22E-14	1.44E-16	

1

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	8.01E-03	6.65E-01	6.32E-01	5.99E-01	5.69E-01	5.13E-01	4.41E-01	3.78E-01	3.24E-01	2.78E-01	2.39E-01	2.09E-01
AG109M	4.62E-05	6.65E-01	6.32E-01	6.00E-01	5.70E-01	5.15E-01	4.41E-01	3.78E-01	3.24E-01	2.78E-01	2.39E-01	2.09E-01
PD111M	9.68E-01	8.53E-01	7.51E-01	6.65E-01	5.85E-01	4.55E-01	3.11E-01	2.13E-01	1.46E-01	1.00E-01	6.86E-02	4.86E-02
PD111	3.45E-01	6.21E-01	5.96E-01	5.31E-01	4.70E-01	3.65E-01	2.50E-01	1.72E-01	1.17E-01	8.06E-02	5.53E-02	3.96E-02
AG111M	2.74E-03	8.38E-01	7.87E-01	7.04E-01	6.21E-01	4.80E-01	3.28E-01	2.25E-01	1.54E-01	1.06E-01	7.22E-02	5.12E-02
AG111	9.75E-10	2.89E-03	6.07E-03	8.92E-03	1.15E-02	1.56E-02	2.00E-02	2.30E-02	2.49E-02	2.61E-02	2.68E-02	2.72E-02
PD112	1.84E-01	1.79E-01	1.73E-01	1.67E-01	1.62E-01	1.51E-01	1.37E-01	1.24E-01	1.12E-01	1.02E-01	9.22E-02	8.42E-02
AG112	5.55E-06	3.54E-02	6.24E-02	8.38E-02	9.95E-02	1.19E-01	1.31E-01	1.30E-01	1.24E-01	1.16E-01	1.07E-01	9.92E-02
AG113	1.65E-03	3.54E-01	3.10E-01	2.72E-01	2.39E-01	1.84E-01	1.24E-01	8.40E-02	5.67E-02	3.83E-02	2.59E-02	1.76E-02
AG115	5.68E-01	6.09E-01	7.58E-02	9.47E-03	1.19E-03	1.85E-05	3.62E-08	7.08E-11	1.37E-13	1.36E-162	1.26E-16	1.26E-16
CD115M	4.65E-09	1.24E-04	1.39E-04	1.41E-04	1.41E-04	1.41E-04	1.40E-04	1.40E-04	1.40E-04	1.39E-04	1.39E-04	1.39E-04
CD115	1.80E-06	3.38E-02	3.64E-02	3.63E-02	3.59E-02	3.50E-02	3.37E-02	3.23E-02	3.11E-02	3.00E-02	2.88E-02	2.77E-02
IN115M	2.24E-11	3.74E-03	8.30E-03	1.23E-02	1.57E-02	2.09E-02	2.59E-02	2.85E-02	2.97E-02	3.00E-02	2.97E-02	2.97E-02
CD117	3.99E-02	6.64E-01	5.00E-01	3.73E-01	2.80E-01	1.57E-01	6.59E-02	2.78E-02	1.17E-02	4.91E-03	2.07E-03	9.13E-04
IN117M	1.92E-06	2.31E-01	3.34E-01	3.63E-01	3.51E-01	2.76E-01	1.58E-01	8.09E-02	3.88E-02	1.80E-02	8.13E-03	3.83E-03
IN117	7.71E-11	4.21E-02	1.02E-01	1.42E-01	1.58E-01	1.45E-01	9.25E-02	4.95E-02	2.46E-02	1.16E-02	5.33E-03	2.46E-03
CD118	2.63E+00	1.13E+00	4.84E-01	2.06E-01	8.84E-02	1.62E-02	1.27E-03	9.92E-05	7.80E-06	6.11E-07	4.79E-08	3.46E-09
IN118	1.74E-01	1.13E+00	4.84E-01	2.07E-01	8.84E-02	1.62E-02	1.27E-03	9.96E-05	7.80E-06	6.11E-07	4.79E-08	3.46E-09
CD119	6.56E+00	1.02E-01	1.60E-03	2.50E-05	3.90E-07	9.55E-11	3.64E-16	1.39E-21	5.29E-27	2.02E-32	7.74E-38	2.87E-43
IN119M	9.89E-03	1.11E+00	1.20E-01	1.21E-02	1.21E-03	1.19E-05	1.16E-08	1.14E-11	1.11E-14	1.08E-17	1.06E-20	1.04E-23
IN119	4.88E-01	5.83E-02	6.76E-03	6.86E-04	6.86E-05	6.71E-07	6.56E-10	6.42E-13	6.27E-16	6.12E-19	5.98E-22	5.84E-25
SN121	8.12E-04	8.36E-02	8.12E-02	7.93E-02	7.74E-02	7.36E-02	6.79E-02	6.31E-02	5.83E-02	5.40E-02	5.02E-02	4.64E-02
SN123M	4.66E-01	8.71E-01	3.09E-01	1.09E-01	3.86E-02	4.82E-03	2.13E-04	9.44E-06	4.18E-07	1.84E-08	8.15E-10	3.66E-11
SN123	4.38E-06	4.58E-04	4.58E-04	4.58E-04	4.58E-04	4.58E-04	4.58E-04	4.58E-04	4.58E-04	4.58E-04	4.58E-04	4.58E-04
SN125	1.24E-02	1.24E-02	1.24E-02	1.23E-02	1.23E-02	1.22E-02	1.21E-02	1.20E-02	1.19E-02	1.17E-02	1.17E-02	1.17E-02
SB125	7.46E-05	7.50E-05	7.53E-05	7.56E-05	7.59E-05	7.66E-05	7.79E-05	7.89E-05	7.98E-05	8.08E-05	8.18E-05	8.28E-05
SB126	2.32E-03	2.31E-03	2.31E-03	2.30E-03	2.29E-03	2.28E-03	2.27E-03	2.25E-03	2.24E-03	2.22E-03	2.21E-03	2.20E-03
SN127	3.25E+00	2.33E+00	1.68E+00	1.21E+00	8.69E-01	4.48E-01	1.66E-01	6.19E-02	2.29E-02	8.53E-03	3.17E-03	1.17E-03
SB127	3.79E-02	1.31E-01	1.45E-01	1.54E-01	1.61E-01	1.68E-01	1.70E-01	1.69E-01	1.66E-01	1.62E-01	1.59E-01	1.56E-01
TE127	2.14E-02	2.66E-02	3.24E-02	3.84E-02	4.44E-02	5.57E-02	7.13E-02	8.32E-02	9.26E-02	9.99E-02	1.05E-01	1.10E-01
SN128	2.18E+01	1.08E+01	5.33E+00	2.63E+00	1.30E+00	3.18E-01	3.84E-02	4.63E-03	5.59E-04	6.78E-05	8.17E-06	9.73E-07
SB128M	1.11E-02	1.23E+01	6.37E+00	3.14E+00	1.55E+00	3.80E-01	4.57E-02	5.52E-03	6.66E-04	8.05E-05	9.73E-06	1.17E-06
SB128	9.21E-01	8.86E-01	8.34E-01	7.82E-01	7.30E-01	6.25E-01	4.99E-01	3.96E-01	3.14E-01	2.50E-01	1.98E-01	1.50E-01
SN129M	1.39E+01	6.94E+00	3.48E+00	1.74E+00	8.71E-01	2.18E-01	2.72E-02	3.41E-03	4.25E-04	5.32E-05	6.65E-06	8.28E-07
SN129	9.30E+01	9.12E-01	9.00E-03	8.88E-05	8.71E-07	8.47E-11	8.06E-17	7.71E-23	7.35E-29	7.00E-35	6.71E-41	6.42E-47
SB129	5.23E+00	8.77E+00	8.24E+00	7.35E+00	6.47E+00	4.81E+00	2.99E+00	1.85E+00	1.14E+00	7.06E-01	4.34E-01	2.64E-01
TE129M	9.88E-08	1.09E-03	2.25E-03	3.31E-03	4.25E-03	5.77E-03	7.30E-03	8.24E-03	8.83E-03	9.18E-03	9.41E-03	9.64E-03
TE129	3.77E+00	5.18E+00	6.06E+00	6.30E+00	6.06E+00	5.02E+00	3.34E+00	2.11E+00	1.31E+00	8.12E-01	5.04E-01	3.04E-01
SB130M	5.29E-01	9.99E-01	2.62E-03	6.89E-06	1.81E-08	1.25E-13	2.28E-21	4.15E-29	7.52E-37	1.37E-44	2.49E-52	4.36E-60
SB130	9.07E+01	2.74E+01	7.81E+00	2.21E+00	6.26E-01	5.04E-02	1.15E-03	2.62E-05	5.97E-07	1.36E-08	3.11E-10	7.04E-12

1

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	2.53E-02	2.39E-02	2.26E-02	2.14E-02	2.02E-02	1.81E-02	1.53E-02	1.29E-02	1.09E-02	9.24E-03	7.81E-03
SB131	2.10E+02	5.47E+01	8.94E+00	1.47E+00	2.41E-01	6.49E-03	2.86E-05	1.26E-07	5.55E-10	2.45E-12	1.22E-14
TE131M	1.01E-04	5.27E-01	6.01E-01	6.02E-01	5.91E-01	5.65E-01	5.27E-01	4.91E-01	4.59E-01	4.28E-01	3.99E-01
TE131	9.28E+01	1.01E+02	3.28E+01	8.54E+00	2.08E+00	1.95E-01	9.68E-02	8.94E-02	8.34E-02	7.81E-02	7.28E-02
I131	1.35E-02	4.67E-01	6.88E-01	7.54E-01	7.68E-01	7.74E-01	7.74E-01	7.68E-01	7.68E-01	7.61E-01	7.61E-01
TE132	1.06E+00	2.59E+00	2.56E+00	2.54E+00	2.52E+00	2.47E+00	2.41E+00	2.34E+00	2.28E+00	2.22E+00	2.16E+00
I132	2.61E+00	2.61E+00	2.60E+00	2.59E+00	2.57E+00	2.53E+00	2.48E+00	2.41E+00	2.35E+00	2.29E+00	2.23E+00
TE133M	1.29E-01	4.46E+01	1.94E+01	8.46E+00	3.68E+00	6.99E-01	5.75E-02	4.74E-03	3.91E-04	3.22E-05	2.66E-06
TE133	7.23E+02	4.10E+01	4.56E+00	1.51E+00	6.37E-01	1.21E-01	9.99E-03	8.21E-04	6.80E-05	5.60E-06	4.61E-07
I133	1.12E+00	1.21E+01	1.31E+01	1.31E+01	1.28E+01	1.21E+01	1.10E+01	9.99E+00	9.01E+00	8.21E+00	7.42E+00
XE133M	4.77E-08	2.72E-03	6.56E-03	1.05E-02	1.43E-02	2.15E-02	3.11E-02	3.94E-02	4.65E-02	5.25E-02	5.75E-02
XE133	8.34E-07	4.74E-02	1.15E-01	1.84E-01	2.53E-01	3.82E-01	5.61E-01	7.17E-01	8.58E-01	9.81E-01	1.09E+00
TE134	2.29E+02	1.06E+02	3.94E+01	1.47E+01	5.44E+00	7.54E-01	3.85E-02	1.97E-03	1.01E-04	5.19E-06	2.66E-07
I134	1.05E+02	1.40E+02	9.81E+01	5.75E+01	3.09E+01	7.84E+00	8.62E-01	8.80E-02	8.62E-03	8.26E-04	7.84E-05
I135	1.90E+01	3.35E+01	3.02E+01	2.72E+01	2.46E+01	1.99E+01	1.46E+01	1.07E+01	7.86E+00	5.79E+00	4.23E+00
XE135M	2.10E-03	9.67E+00	9.39E+00	8.52E+00	7.65E+00	6.23E+00	4.57E+00	3.35E+00	2.46E+00	1.80E+00	1.32E+00
XE135	2.19E+00	4.33E+00	6.34E+00	7.97E+00	9.28E+00	1.11E+01	1.23E+01	1.24E+01	1.18E+01	1.08E+01	9.61E+00
CS136	6.97E-03	6.95E-03	6.94E-03	6.93E-03	6.91E-03	6.87E-03	6.83E-03	6.78E-03	6.74E-03	6.70E-03	6.65E-03
CS137	9.34E-05	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03
BA137M	1.97E-07	9.40E-04	9.40E-04	9.40E-04	9.40E-04	9.40E-04	9.40E-04	9.40E-04	9.40E-04	9.40E-04	9.40E-04
XE138	7.15E+02	6.15E+01	5.35E+00	4.63E-01	4.01E-02	3.01E-04	1.96E-07	1.27E-10	8.26E-14	5.37E-17	3.49E-20
CS138	1.06E+02	1.79E+02	6.21E+01	1.82E+01	5.11E+00	3.89E-01	8.09E-03	1.68E-04	3.49E-06	7.26E-08	1.50E-09
CS139	6.87E+02	2.19E+01	2.75E-01	3.46E-03	4.33E-05	6.81E-09	1.35E-14	2.68E-20	5.30E-26	1.05E-31	2.07E-37
BA139	1.27E+01	1.41E+02	8.72E+01	5.30E+01	3.20E+01	1.18E+01	2.61E+00	5.80E-01	1.29E-01	2.85E-02	6.34E-03
BA140	1.11E-01	6.92E-01	6.92E-01	6.87E-01	6.87E-01	6.82E-01	6.82E-01	6.76E-01	6.71E-01	6.66E-01	6.61E-01
LA140	2.64E-07	1.18E-02	2.35E-02	3.48E-02	4.60E-02	6.76E-02	9.88E-02	1.28E-01	1.55E-01	1.81E-01	2.06E-01
BA141	1.66E+02	5.02E+01	4.98E+00	4.94E-01	4.90E-02	4.86E-04	4.74E-07	4.62E-10	4.51E-13	4.43E-16	4.31E-19
LA141	1.53E+00	3.25E+01	3.03E+01	2.57E+01	2.15E+01	1.51E+01	8.85E+00	5.18E+00	3.05E+00	1.79E+00	1.05E+00
CE141	1.90E-07	2.11E-02	4.94E-02	7.43E-02	9.53E-02	1.28E-01	1.59E-01	1.76E-01	1.87E-01	1.92E-01	1.96E-01
BA142	3.33E+02	1.32E+01	3.02E-01	6.88E-03	1.57E-04	8.15E-08	9.67E-13	1.15E-17	1.36E-22	1.62E-27	1.92E-32
LA142	7.64E+00	5.30E+01	3.50E+01	2.22E+01	1.42E+01	5.72E+00	1.48E+00	3.81E-01	9.81E-02	2.53E-02	6.51E-03
LA143	1.25E+02	2.44E+01	1.25E+00	6.42E-02	3.30E-03	8.64E-06	1.17E-09	1.57E-13	2.12E-17	2.86E-21	3.85E-25
CE143	4.99E-02	3.18E+00	3.30E+00	3.21E+00	3.15E+00	3.04E+00	2.84E+00	2.67E+00	2.51E+00	2.35E+00	2.21E+00
PR143	1.46E-08	4.88E-03	1.18E-02	1.86E-02	2.53E-02	3.83E-02	5.64E-02	7.36E-02	8.93E-02	1.04E-01	1.18E-01
CE144	1.99E-03	1.43E-02	1.43E-02	1.43E-02	1.43E-02	1.43E-02	1.43E-02	1.43E-02	1.43E-02	1.43E-02	1.43E-02
PR144	5.47E-07	1.30E-02	1.42E-02	1.43E-02	1.43E-02	1.43E-02	1.43E-02	1.43E-02	1.43E-02	1.43E-02	1.43E-02
PR145	8.04E-02	1.18E+01	1.05E+01	9.34E+00	8.34E+00	6.60E+00	4.66E+00	3.29E+00	2.33E+00	1.64E+00	1.16E+00
CE146	2.36E+02	1.21E+01	6.21E-01	3.18E-02	1.64E-03	4.31E-06	5.80E-10	7.82E-14	1.05E-17	1.42E-21	1.91E-25
PR146	4.89E+00	4.25E+01	9.64E+00	1.81E+00	3.26E-01	1.02E-02	5.66E-05	3.12E-07	1.73E-09	9.56E-12	5.22E-14
PR147	2.74E+01	7.94E+00	2.48E-01	7.73E-03	2.42E-04	2.36E-07	7.21E-12	2.20E-16	6.72E-21	2.05E-25	6.26E-30

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	9.79E-06	1.84E-01	1.89E-01	1.89E-01	1.89E-01	1.88E-01	1.86E-01	1.85E-01	1.83E-01	1.82E-01	1.80E-01	1.80E-01
ND149	1.42E+01	9.67E+00	6.58E+00	4.49E+00	3.04E+00	1.41E+00	4.43E-01	1.40E-01	4.41E-02	1.39E-02	4.38E-03	4.38E-03
PM149	1.98E-03	1.55E-01	2.57E-01	3.25E-01	3.68E-01	4.14E-01	4.30E-01	4.22E-01	4.11E-01	3.95E-01	3.81E-01	3.81E-01
PM150	1.64E-01	1.27E-01	9.81E-02	7.57E-02	5.86E-02	3.51E-02	1.63E-02	7.52E-03	3.49E-03	1.61E-03	7.47E-04	7.47E-04
ND151	5.63E+01	1.76E+00	5.50E-02	1.72E-03	5.37E-05	5.25E-08	1.60E-12	4.90E-17	1.49E-21	4.55E-26	1.39E-30	1.39E-30
PM151	3.57E-02	4.17E-01	4.19E-01	4.09E-01	3.99E-01	3.79E-01	3.52E-01	3.27E-01	3.04E-01	2.81E-01	2.61E-01	2.61E-01
PM152	9.07E+01	8.88E-02	8.65E-05	8.46E-08	8.26E-11	7.89E-17	7.34E-26	6.85E-35	6.38E-44	5.96E-53	5.54E-62	5.54E-62
SM153	1.22E-01	1.20E-01	1.18E-01	1.16E-01	1.15E-01	1.11E-01	1.07E-01	1.02E-01	9.76E-02	9.35E-02	8.94E-02	8.94E-02
SM155	6.81E+00	1.12E+00	1.83E-01	3.00E-02	4.91E-03	1.32E-04	5.84E-07	2.57E-09	1.13E-11	5.05E-14	1.24E-16	1.24E-16
EU155	5.00E-06	1.43E-04	1.65E-04	1.69E-04	1.69E-04	1.69E-04	1.69E-04	1.69E-04	1.69E-04	1.69E-04	1.69E-04	1.69E-04
SM156	1.19E-01	1.10E-01	1.02E-01	9.52E-02	8.84E-02	7.63E-02	6.11E-02	4.90E-02	3.93E-02	3.15E-02	2.52E-02	2.52E-02
EU156	3.47E-04	5.67E-04	7.70E-04	9.58E-04	1.13E-03	1.45E-03	1.84E-03	2.13E-03	2.38E-03	2.57E-03	2.71E-03	2.71E-03
EU157	1.93E-02	6.40E-02	6.11E-02	5.84E-02	5.57E-02	5.09E-02	4.44E-02	3.88E-02	3.38E-02	2.94E-02	2.57E-02	2.57E-02
EU158	7.12E-01	2.89E-01	1.17E-01	4.73E-02	1.91E-02	3.13E-03	2.09E-04	1.38E-05	9.19E-07	6.10E-08	4.05E-09	4.05E-09
EU159	8.62E-01	8.56E-02	8.49E-03	8.43E-04	8.35E-05	8.24E-07	8.05E-10	7.86E-13	7.67E-16	7.50E-19	7.32E-22	7.32E-22
GD159	3.69E-03	1.62E-02	1.68E-02	1.63E-02	1.57E-02	1.45E-02	1.30E-02	1.15E-02	1.03E-02	9.15E-03	8.16E-03	8.16E-03
TB161	4.69E-05	3.38E-04	3.35E-04	3.34E-04	3.33E-04	3.30E-04	3.27E-04	3.22E-04	3.18E-04	3.14E-04	3.10E-04	3.10E-04
TOTAL	1.20E+04	2.47E+03	9.25E+02	5.47E+02	3.95E+02	2.62E+02	1.80E+02	1.38E+02	1.11E+02	9.28E+01	7.93E+01	7.93E+01

1

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	9.63E-06	9.51E-06	9.38E-06	9.03E-06	8.46E-06	7.43E-06	6.52E-06	5.02E-06	2.63E-06	7.14E-07	1.94E-07	
NA 24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MN 54	3.30E-05	3.27E-05	3.27E-05	3.21E-05	3.18E-05	3.12E-05	3.06E-05	2.92E-05	2.61E-05	2.07E-05	1.65E-05	
FE 55	7.12E-05	7.12E-05	7.12E-05	7.09E-05	7.07E-05	7.03E-05	6.96E-05	6.87E-05	6.60E-05	6.16E-05	5.71E-05	
FE 59	2.33E-04	2.29E-04	2.26E-04	2.16E-04	2.00E-04	1.71E-04	1.47E-04	1.08E-04	5.01E-05	1.07E-05	2.29E-06	
CO 57	5.12E-05	5.12E-05	5.08E-05	5.08E-05	5.01E-05	4.86E-05	4.74E-05	4.51E-05	3.98E-05	3.08E-05	2.38E-05	
CO 58	4.53E-04	4.49E-04	4.44E-04	4.30E-04	4.11E-04	3.73E-04	3.38E-04	2.78E-04	1.71E-04	6.48E-05	2.45E-05	
CO 60	3.60E-05	3.60E-05	3.60E-05	3.60E-05	3.57E-05	3.57E-05	3.55E-05	3.53E-05	3.45E-05	3.34E-05	3.21E-05	
CU 64	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CU 67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.06E-01	9.53E-02	8.59E-02	6.32E-02	3.78E-02	1.35E-02	4.86E-03	6.21E-04	3.67E-06	3.94E-10	2.66E-10	
U240	3.63E-01	1.12E-01	3.43E-02	9.94E-04	2.73E-06	2.05E-11	1.54E-16	8.71E-27	0.	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	7.27E-03	1.11E+01	8.26E+00	3.41E+00	7.80E-01	4.08E-02	2.13E-03	5.86E-06	2.30E-12	5.50E-22	5.50E-22	
NP240M	5.74E-04	1.12E-01	3.46E-02	1.00E-03	2.75E-06	2.07E-11	1.56E-16	8.78E-27	0.	0.	0.	0.
AM241	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.19E-09	
CM242	3.10E-07	3.08E-07	3.07E-07	3.03E-07	2.97E-07	2.84E-07	2.73E-07	2.50E-07	2.04E-07	1.33E-07	8.67E-08	
GE 77	5.22E-03	3.29E-03	7.52E-04	9.09E-06	5.78E-09	2.34E-15	9.44E-22	1.54E-34	0.	0.	0.	0.
AS 77	5.40E-05	7.97E-03	5.76E-03	1.67E-03	1.95E-04	2.65E-06	3.60E-08	6.63E-12	3.08E-21	6.60E-40	1.42E-58	
SE 77M	2.13E-09	2.40E-05	1.73E-05	5.01E-06	5.84E-07	7.95E-09	1.08E-10	1.99E-14	9.23E-24	1.97E-42	4.25E-61	
AS 78	1.46E-02	1.30E-04	3.81E-09	3.22E-23	0.	0.	0.	0.	0.	0.	0.	0.
BR 82	4.82E-04	3.01E-04	1.88E-04	4.57E-05	4.33E-06	3.89E-08	3.49E-10	2.82E-14	1.65E-24	5.65E-45	1.92E-65	
BR 83	3.66E-01	9.64E-03	9.69E-06	9.85E-15	1.01E-29	0.	0.	0.	0.	0.	0.	0.
KR 83M	1.89E-05	4.22E-02	4.79E-05	4.30E-14	4.42E-29	0.	0.	0.	0.	0.	0.	0.
KR 85M	4.33E-03	2.48E-01	5.64E-03	6.69E-08	4.13E-16	1.57E-32	5.94E-49	0.	0.	0.	0.	0.
KR 85	4.48E-06	1.18E-04	1.20E-04	1.20E-04	1.20E-04	1.20E-04	1.20E-04	1.19E-04	1.18E-04	1.16E-04	1.14E-04	
KR 87	7.22E+01	1.42E-04	2.82E-10	2.18E-27	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	4.10E+01	1.08E-01	2.83E-04	5.14E-12	6.48E-25	0.	0.	0.	0.	0.	0.	0.
RB 88	1.04E+01	1.20E-01	3.17E-04	5.76E-12	7.22E-25	0.	0.	0.	0.	0.	0.	0.
SR 89	3.84E-06	1.15E-01	1.13E-01	1.09E-01	1.02E-01	8.92E-02	7.80E-02	6.00E-02	3.07E-02	8.08E-03	2.13E-03	
SR 90	7.71E-06	7.92E-04	7.92E-04	7.92E-04	7.92E-04	7.92E-04	7.92E-04	7.92E-04	7.85E-04	7.85E-04	7.78E-04	
Y 90	1.14E-11	1.82E-04	3.21E-04	5.77E-04	7.36E-04	7.85E-04	7.92E-04	7.92E-04	7.85E-04	7.85E-04	7.78E-04	
SR 91	9.12E-01	3.26E+00	5.85E-01	3.35E-03	6.13E-07	2.08E-14	7.05E-22	8.03E-37	0.	0.	0.	0.

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
Y 91M	6.13E-05	2.11E+00	3.77E-01	2.17E-03	3.98E-07	1.34E-14	4.54E-22	5.18E-37	0.	0.	0.
Y 91	2.51E-08	1.00E-01	1.19E-01	1.19E-01	1.12E-01	9.92E-02	8.83E-02	6.99E-02	3.87E-02	1.19E-02	3.66E-03
SR 92	6.68E+00	8.33E-02	1.80E-04	1.80E-12	8.45E-26	0.	0.	0.	0.	0.	0.
Y 92	3.08E-01	8.73E-01	9.69E-03	7.46E-09	4.35E-19	1.49E-39	5.09E-60	0.	0.	0.	0.
Y 93	3.31E-01	2.24E+00	4.36E-01	3.28E-03	9.44E-07	7.80E-14	6.43E-21	4.39E-35	0.	0.	0.
ZR 95	6.44E-04	8.05E-02	7.97E-02	7.71E-02	7.32E-02	6.56E-02	5.91E-02	4.78E-02	2.80E-02	9.64E-03	3.31E-03
NB 95M	1.37E-11	2.73E-04	4.97E-04	9.49E-04	1.28E-03	1.35E-03	1.25E-03	1.01E-03	5.93E-04	2.04E-04	7.04E-05
NB 95	7.18E-11	1.56E-03	3.08E-03	7.38E-03	1.37E-02	2.37E-02	3.05E-02	3.79E-02	3.65E-02	1.75E-02	6.73E-03
ZR 97	1.57E+00	2.67E+00	1.00E+00	5.31E-02	3.99E-04	2.24E-08	1.26E-12	3.99E-21	2.25E-42	0.	0.
NB 97M	8.06E-03	2.56E+00	9.62E-01	5.12E-02	3.83E-04	2.16E-08	1.21E-12	3.83E-21	2.16E-42	0.	0.
NB 97	7.84E-01	2.68E+00	1.01E+00	5.34E-02	4.02E-04	2.42E-08	1.36E-12	4.31E-21	2.43E-42	0.	0.
MO 99	4.75E-03	1.54E+00	1.21E+00	5.71E-01	1.65E-01	1.38E-02	1.15E-03	8.04E-06	3.26E-11	5.38E-22	8.86E-33
TC 99M	4.41E-08	1.36E+00	1.14E+00	5.47E-01	1.58E-01	1.32E-02	1.10E-03	7.68E-06	3.11E-11	5.14E-22	8.46E-33
RU103	8.52E-05	1.94E-01	1.91E-01	1.81E-01	1.66E-01	1.39E-01	1.17E-01	8.25E-02	3.44E-02	5.96E-03	1.04E-03
RH103M	5.68E-09	1.94E-01	1.91E-01	1.81E-01	1.66E-01	1.39E-01	1.17E-01	8.25E-02	3.44E-02	5.96E-03	1.04E-03
RU105	6.16E-01	5.89E-01	1.39E-02	1.82E-07	1.33E-15	7.11E-32	3.81E-48	0.	0.	0.	0.
RH105M	4.05E-03	5.89E-01	1.39E-02	1.83E-07	1.34E-15	7.15E-32	3.82E-48	0.	0.	0.	0.
RH105	6.66E-09	2.13E+00	1.39E+00	3.46E-01	3.41E-02	3.32E-04	3.23E-06	3.05E-10	2.64E-20	1.98E-40	1.49E-60
RU106	5.39E-04	1.02E-02	1.02E-02	1.01E-02	1.00E-02	9.86E-03	9.64E-03	9.28E-03	8.44E-03	6.98E-03	5.79E-03
RH106	5.84E-06	1.02E-02	1.02E-02	1.01E-02	1.00E-02	9.86E-03	9.64E-03	9.28E-03	8.44E-03	6.98E-03	5.79E-03
PD109	8.01E-03	2.04E-01	5.94E-02	1.48E-03	3.11E-06	1.39E-11	6.17E-17	1.22E-27	0.	0.	0.
AG109M	4.62E-05	2.04E-01	5.96E-02	1.48E-03	3.12E-06	1.39E-11	6.17E-17	1.22E-27	0.	0.	0.
PD111M	9.68E-01	4.70E-02	2.28E-03	2.62E-07	7.08E-14	5.17E-27	3.79E-40	0.	0.	0.	0.
PD111	3.45E-01	3.79E-02	1.84E-03	2.11E-07	5.71E-14	4.15E-27	3.05E-40	0.	0.	0.	0.
AG111M	2.74E-03	4.95E-02	2.41E-03	2.77E-07	7.48E-14	5.49E-27	4.01E-40	0.	0.	0.	0.
AG111	9.75E-10	2.69E-02	2.59E-02	1.97E-02	1.24E-02	4.91E-03	1.95E-03	3.07E-04	3.02E-06	2.93E-10	2.84E-14
PD112	1.84E-01	8.38E-02	3.79E-02	3.52E-03	6.69E-05	2.43E-08	8.83E-12	1.16E-18	7.31E-36	0.	0.
AG112	5.55E-06	9.72E-02	4.47E-02	4.15E-03	7.93E-05	2.87E-08	1.04E-11	1.37E-18	8.60E-36	0.	0.
AG113	1.65E-03	1.75E-02	7.56E-04	6.14E-08	9.39E-15	2.20E-28	5.14E-42	0.	0.	0.	0.
CD115M	4.65E-09	1.34E-04	1.32E-04	1.26E-04	1.16E-04	9.88E-05	8.44E-05	6.09E-05	2.73E-05	5.41E-06	1.08E-06
CD115	1.80E-06	2.70E-02	1.98E-02	7.81E-03	1.65E-03	7.35E-05	3.28E-06	6.54E-09	1.16E-15	3.62E-29	1.13E-42
IN115M	2.24E-11	2.85E-02	2.16E-02	8.53E-03	1.80E-03	8.03E-05	3.58E-06	7.13E-09	1.26E-15	3.95E-29	1.24E-42
CD117	3.99E-02	8.69E-04	8.46E-07	7.90E-16	7.01E-31	0.	0.	0.	0.	0.	0.
IN117M	1.92E-06	3.61E-03	4.18E-06	4.03E-15	3.58E-30	0.	0.	0.	0.	0.	0.
IN117	7.71E-11	2.38E-03	2.82E-06	2.73E-15	2.42E-30	0.	0.	0.	0.	0.	0.
SN121	8.12E-04	4.63E-02	2.50E-02	3.94E-03	1.81E-04	3.81E-07	8.03E-10	3.58E-15	1.50E-28	0.	0.
SN123	4.38E-06	4.58E-04	4.54E-04	4.46E-04	4.34E-04	4.10E-04	3.89E-04	3.48E-04	2.63E-04	1.51E-04	8.71E-05
SN125	1.24E-02	1.16E-02	1.07E-02	8.60E-03	5.94E-03	2.85E-03	1.36E-03	3.11E-04	7.79E-06	4.90E-09	3.07E-12
SB125	7.46E-05	8.28E-05	9.05E-05	1.11E-04	1.36E-04	1.64E-04	1.77E-04	1.84E-04	1.81E-04	1.69E-04	1.57E-04
SB126	2.32E-03	2.19E-03	2.07E-03	1.76E-03	1.33E-03	7.62E-04	4.40E-04	1.45E-04	9.05E-06	4.40E-08	8.83E-09

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
SN127	3.25E+00	1.18E-03	4.27E-07	2.04E-17	1.28E-34	0.	0.	0.	0.	0.	0.	0.
SB127	3.79E-02	1.56E-01	1.30E-01	7.60E-02	3.11E-02	5.20E-03	8.69E-04	2.43E-05	3.17E-09	5.41E-17	9.21E-25	9.21E-25
TE127M	3.06E-10	2.37E-04	4.34E-04	8.43E-04	1.17E-03	1.29E-03	1.24E-03	1.10E-03	8.01E-04	4.23E-04	2.24E-04	2.24E-04
TE127	2.14E-02	1.11E-01	1.09E-01	6.66E-02	2.81E-02	5.77E-03	1.98E-03	1.11E-03	7.91E-04	4.18E-04	2.21E-04	2.21E-04
SB128	9.21E-01	1.57E-01	2.48E-02	9.67E-05	9.38E-09	8.80E-17	8.28E-25	7.30E-41	0.	0.	0.	0.
SB129	5.23E+00	2.68E-01	5.59E-03	5.09E-08	2.02E-16	3.19E-33	5.04E-50	0.	0.	0.	0.	0.
TE129M	9.88E-08	1.04E-02	1.04E-02	9.83E-03	8.88E-03	7.24E-03	5.88E-03	3.92E-03	1.41E-03	1.84E-04	2.39E-05	2.39E-05
TE129	3.77E+00	3.14E-01	1.31E-02	6.30E-03	5.68E-03	4.63E-03	3.78E-03	2.51E-03	9.06E-04	1.18E-04	1.54E-05	1.54E-05
I130	2.53E-02	6.60E-03	1.73E-03	3.09E-05	3.77E-08	5.62E-14	8.38E-20	1.87E-31	0.	0.	0.	0.
TE131M	1.01E-04	3.52E-01	2.02E-01	3.83E-02	2.40E-03	9.35E-06	3.66E-08	5.58E-13	5.07E-25	0.	0.	0.
TE131	9.28E+01	6.43E-02	3.69E-02	7.01E-03	4.37E-04	1.71E-06	6.67E-09	1.02E-13	9.28E-26	0.	0.	0.
I131	1.35E-02	7.28E-01	6.88E-01	5.53E-01	3.64E-01	1.54E-01	6.50E-02	1.16E-02	1.57E-04	2.86E-08	5.21E-12	5.21E-12
XE131M	3.66E-11	3.37E-04	6.40E-04	1.34E-03	1.91E-03	1.89E-03	1.40E-03	5.79E-04	3.86E-05	1.15E-07	3.26E-10	3.26E-10
TE132	1.06E+00	2.11E+00	1.70E+00	8.96E-01	3.09E-01	3.66E-02	4.34E-03	6.09E-05	1.43E-09	7.80E-19	4.26E-28	4.26E-28
I132	2.61E+00	2.17E+00	1.75E+00	9.22E-01	3.19E-01	3.77E-02	4.47E-03	6.28E-05	1.47E-09	8.00E-19	4.39E-28	4.39E-28
I133	1.12E+00	6.25E+00	2.82E+00	2.62E-01	4.99E-03	1.81E-06	6.56E-10	8.64E-17	5.43E-34	0.	0.	0.
XE133M	4.77E-08	5.90E-02	6.99E-02	4.10E-02	9.62E-03	4.52E-04	2.10E-05	4.56E-08	9.99E-15	4.77E-28	2.29E-41	2.29E-41
XE133	8.34E-07	1.13E+00	1.52E+00	1.36E+00	7.42E-01	2.00E-01	5.39E-02	3.88E-03	5.41E-06	1.05E-11	2.03E-17	2.03E-17
I135	1.90E+01	3.10E+00	2.59E-01	1.51E-04	6.12E-10	1.01E-20	1.66E-31	4.51E-53	0.	0.	0.	0.
XE135M	2.10E-03	9.67E-01	8.08E-02	4.70E-05	1.91E-10	3.15E-21	5.18E-32	1.41E-53	0.	0.	0.	0.
XE135	2.19E+00	8.36E+00	2.04E+00	1.17E-02	1.43E-06	2.01E-14	2.82E-22	5.57E-38	0.	0.	0.	0.
CS136	6.97E-03	6.61E-03	6.26E-03	5.34E-03	4.09E-03	2.40E-03	1.41E-03	4.85E-04	3.37E-05	1.62E-07	7.87E-10	7.87E-10
CS137	9.34E-05	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.00E-03	9.96E-04	9.90E-04	9.90E-04
BA137M	1.97E-07	9.40E-04	9.40E-04	9.40E-04	9.40E-04	9.40E-04	9.40E-04	9.40E-04	9.34E-04	9.29E-04	9.23E-04	9.23E-04
BA139	1.27E+01	1.35E-03	8.00E-09	1.65E-24	0.	0.	0.	0.	0.	0.	0.	0.
BA140	1.11E-01	6.55E-01	6.24E-01	5.28E-01	4.03E-01	2.35E-01	1.36E-01	4.62E-02	3.09E-03	1.37E-05	6.08E-08	6.08E-08
LA140	2.64E-07	2.28E-01	3.67E-01	5.08E-01	4.51E-01	2.70E-01	1.57E-01	5.34E-02	3.55E-03	1.58E-05	7.03E-08	7.03E-08
LA141	1.53E+00	6.09E-01	8.54E-03	2.36E-08	1.29E-17	3.86E-36	1.15E-54	0.	0.	0.	0.	0.
CE141	1.90E-07	2.10E-01	2.09E-01	1.96E-01	1.76E-01	1.42E-01	1.15E-01	7.47E-02	2.57E-02	3.02E-03	3.56E-04	3.56E-04
LA142	7.64E+00	1.67E-03	3.24E-08	2.39E-22	0.	0.	0.	0.	0.	0.	0.	0.
CE143	4.99E-02	2.05E+00	1.24E+00	2.73E-01	2.20E-02	1.42E-04	9.20E-07	3.85E-11	4.35E-22	0.	0.	0.
PR143	1.46E-08	1.31E-01	2.04E-01	2.64E-01	2.26E-01	1.38E-01	8.32E-02	3.01E-02	2.41E-03	1.53E-05	9.69E-08	9.69E-08
CE144	1.99E-03	1.43E-02	1.42E-02	1.41E-02	1.39E-02	1.36E-02	1.33E-02	1.26E-02	1.12E-02	8.76E-03	6.88E-03	6.88E-03
PR144	5.47E-07	1.43E-02	1.42E-02	1.41E-02	1.39E-02	1.36E-02	1.33E-02	1.26E-02	1.12E-02	8.76E-03	6.88E-03	6.88E-03
PR145	8.04E-02	8.22E-01	5.08E-02	1.21E-05	1.10E-11	9.10E-24	7.55E-36	0.	0.	0.	0.	0.
ND147	9.79E-06	1.65E-01	1.55E-01	1.28E-01	9.38E-02	5.04E-02	2.69E-02	7.73E-03	3.39E-04	6.60E-07	1.28E-09	1.28E-09
PM147	2.72E-14	1.23E-04	2.38E-04	5.45E-04	9.41E-04	1.44E-03	1.70E-03	1.89E-03	1.91E-03	1.78E-03	1.65E-03	1.65E-03
ND149	1.42E+01	1.38E-03	1.33E-07	1.21E-19	1.04E-39	0.	0.	0.	0.	0.	0.	0.
PM149	1.98E-03	3.65E-01	2.68E-01	1.05E-01	2.18E-02	9.51E-04	4.14E-05	7.87E-08	1.24E-14	3.06E-28	7.63E-42	7.63E-42
PM150	1.64E-01	3.46E-04	7.29E-07	6.85E-15	2.86E-28	0.	0.	0.	0.	0.	0.	0.

1

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	3.57E-02	2.43E-01	1.34E-01	2.26E-02	1.16E-03	3.04E-06	8.01E-09	5.53E-14	6.93E-27	0.	0.	0.
SM153	1.22E-01	8.55E-02	6.00E-02	2.07E-02	3.53E-03	1.03E-04	2.98E-06	2.50E-09	5.16E-17	2.20E-32	9.35E-48	0.
SM156	1.19E-01	2.03E-02	3.46E-03	1.70E-05	2.45E-09	5.04E-17	1.04E-24	4.43E-40	0.	0.	0.	0.
EU155	5.00E-06	1.69E-04	1.69E-04	1.69E-04	1.69E-04	1.68E-04	1.67E-04	1.66E-04	1.63E-04	1.56E-04	1.50E-04	0.
EU156	3.47E-04	2.83E-03	3.13E-03	2.81E-03	2.23E-03	1.40E-03	8.84E-04	3.51E-04	3.47E-05	3.42E-07	3.37E-09	0.
EU157	1.93E-02	2.23E-02	7.51E-03	2.82E-04	1.18E-06	2.09E-11	3.69E-16	1.15E-25	0.	0.	0.	0.
GD159	3.69E-03	7.27E-03	2.89E-03	1.80E-04	1.78E-06	1.72E-10	1.67E-14	1.56E-22	1.34E-42	0.	0.	0.
TB161	4.69E-05	3.07E-04	2.77E-04	2.05E-04	1.24E-04	4.54E-05	1.66E-05	2.23E-06	1.47E-08	6.37E-13	2.77E-17	0.
TOTAL	3.06E+02	6.82E+01	3.25E+01	1.22E+01	5.12E+00	2.00E+00	1.22E+00	6.72E-01	2.88E-01	1.01E-01	4.99E-02	0.

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	9.63E-06	8.32E-08	7.73E-09	7.18E-10	5.78E-13	4.63E-16	3.46E-20	2.22E-26	0.	0.	0.	0.
MN 54	3.30E-05	1.42E-05	9.37E-06	6.16E-06	1.76E-06	5.02E-07	9.46E-08	7.73E-09	1.82E-12	6.57E-18	2.38E-23	0.
FE 59	2.33E-04	8.40E-07	5.04E-08	3.03E-09	6.58E-13	1.42E-16	1.85E-21	8.68E-29	0.	0.	0.	0.
CO 57	5.12E-05	2.02E-05	1.26E-05	7.93E-06	1.95E-06	4.82E-07	7.44E-09	4.51E-09	3.95E-13	3.24E-19	0.	0.
CO 58	4.53E-04	1.30E-05	2.21E-06	3.74E-07	1.82E-09	8.86E-12	7.31E-15	1.73E-19	6.63E-35	0.	0.	0.
CO 60	3.60E-05	3.15E-05	2.94E-05	2.74E-05	2.26E-05	1.85E-05	1.42E-05	9.59E-06	2.57E-06	3.57E-07	4.94E-08	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.06E-01	2.63E-10	2.57E-10	2.50E-10	2.34E-10	2.17E-10	1.97E-10	1.71E-10	1.07E-10	5.22E-11	2.57E-11	0.
AM241	6.19E-09	6.19E-09	6.19E-09	6.19E-09	6.22E-09	6.25E-09	6.25E-09	6.27E-09	6.30E-09	6.25E-09	6.16E-09	0.
CM242	3.10E-07	6.56E-08	3.02E-08	1.39E-08	1.35E-09	1.32E-10	5.91E-12	5.59E-14	1.61E-18	1.50E-18	1.40E-18	0.
KR 85	4.48E-06	1.11E-04	1.08E-04	1.04E-04	9.52E-05	8.60E-05	7.56E-05	6.23E-05	3.29E-05	1.26E-05	4.81E-06	0.
SR 89	3.84E-06	8.98E-04	7.86E-05	6.90E-06	4.65E-09	3.14E-12	1.85E-16	8.42E-23	6.12E-44	0.	0.	0.
SR 90	7.71E-06	7.71E-04	7.64E-04	7.57E-04	7.29E-04	7.01E-04	6.67E-04	6.20E-04	4.84E-04	3.34E-04	2.31E-04	0.
Y 90	1.14E-11	7.71E-04	7.64E-04	7.57E-04	7.29E-04	7.01E-04	6.67E-04	6.20E-04	4.84E-04	3.34E-04	2.31E-04	0.
Y 91	2.51E-08	1.70E-03	1.97E-04	2.29E-05	3.59E-08	5.64E-11	1.03E-14	2.53E-20	5.12E-39	0.	0.	0.
ZR 95	6.44E-04	1.66E-03	2.36E-04	3.36E-05	9.81E-08	2.85E-10	1.18E-13	9.97E-19	1.22E-35	0.	0.	0.
NB 95M	1.37E-11	3.50E-05	5.00E-06	7.15E-07	2.08E-09	6.05E-12	2.50E-15	2.11E-20	2.59E-37	0.	0.	0.
NB 95	7.18E-11	3.56E-03	5.11E-04	7.29E-05	2.11E-07	6.13E-10	2.56E-13	2.16E-18	2.65E-35	0.	0.	0.
RU103	8.52E-05	3.31E-04	1.35E-05	5.57E-07	3.80E-11	2.61E-15	7.32E-21	3.44E-29	0.	0.	0.	0.
RH103M	5.68E-09	3.32E-04	1.35E-05	5.57E-07	3.81E-11	2.61E-15	7.32E-21	3.45E-29	0.	0.	0.	0.
RU106	5.39E-04	5.13E-03	3.63E-03	2.57E-03	9.15E-04	3.25E-04	8.18E-05	1.03E-05	1.04E-08	3.36E-13	1.08E-17	0.
RH106	5.84E-06	5.13E-03	3.63E-03	2.57E-03	9.15E-04	3.25E-04	8.18E-05	1.03E-05	1.04E-08	3.36E-13	1.08E-17	0.
SN123	4.38E-06	6.06E-05	2.20E-05	7.99E-06	3.83E-07	1.84E-08	3.20E-10	7.39E-13	1.18E-21	7.63E-35	4.90E-48	0.
SB125	7.46E-05	1.50E-04	1.32E-04	1.16E-04	7.92E-05	5.39E-05	3.22E-05	1.49E-05	1.15E-06	2.44E-08	5.19E-10	0.
TE125M	2.01E-12	6.13E-05	5.45E-05	4.80E-05	3.28E-05	2.23E-05	1.33E-05	6.17E-06	4.74E-07	1.01E-08	2.15E-10	0.
TE127M	3.06E-10	1.47E-04	4.59E-05	1.44E-05	4.42E-07	1.36E-08	1.31E-10	1.23E-13	1.01E-23	7.54E-39	5.62E-54	0.
TE127	2.14E-02	1.45E-04	4.54E-05	1.42E-05	4.36E-07	1.34E-08	1.29E-10	1.22E-13	9.99E-24	7.44E-39	5.57E-54	0.
CS137	9.34E-05	9.85E-04	9.73E-04	9.62E-04	9.29E-04	8.95E-04	8.56E-04	8.00E-04	6.32E-04	4.49E-04	3.17E-04	0.
BA137M	1.97E-07	9.23E-04	9.12E-04	9.01E-04	8.67E-04	8.39E-04	8.00E-04	7.50E-04	5.93E-04	4.20E-04	2.97E-04	0.
CE141	1.90E-07	8.18E-05	1.64E-06	3.30E-08	2.69E-13	2.19E-18	3.59E-25	2.38E-35	0.	0.	0.	0.
CE144	1.99E-03	5.86E-03	3.77E-03	2.40E-03	6.31E-04	1.66E-04	2.79E-05	1.93E-06	2.59E-10	4.07E-16	6.34E-22	0.
PR144	5.47E-07	5.86E-03	3.77E-03	2.40E-03	6.31E-04	1.66E-04	2.79E-05	1.93E-06	2.59E-10	4.07E-16	6.34E-22	0.
PM147	2.72E-14	1.58E-03	1.38E-03	1.21E-03	8.14E-04	5.47E-04	3.21E-04	1.46E-04	1.04E-05	1.96E-07	3.71E-09	0.
EU155	5.00E-06	1.46E-04	1.36E-04	1.27E-04	1.02E-04	8.18E-05	6.11E-05	3.94E-05	9.22E-06	1.04E-06	1.17E-07	0.
TOTAL	1.31E-01	3.65E-02	2.12E-02	1.52E-02	7.50E-03	4.93E-03	3.73E-03	3.09E-03	2.25E-03	1.55E-03	1.08E-03	0.

ANNIE
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.16E+02	1.16E+04
1.00E+00	3.83E+01	2.39E+03
2.00E+00	1.50E+01	9.36E+02
3.00E+00	7.71E+00	5.48E+02
4.00E+00	4.61E+00	3.84E+02
6.00E+00	2.31E+00	2.42E+02
9.00E+00	1.36E+00	1.60E+02
1.20E+01	1.00E+00	1.20E+02
1.50E+01	7.85E-01	9.50E+01
1.80E+01	6.37E-01	7.81E+01
2.10E+01	5.29E-01	6.57E+01
1.00E+00 DAYS	4.42E-01	5.56E+01
2.00E+00	1.95E-01	2.42E+01
5.00E+00	8.39E-02	9.46E+00
1.00E+01	4.05E-02	4.61E+00
2.00E+01	1.58E-02	1.97E+00
3.00E+01	8.55E-03	1.19E+00
5.00E+01	3.41E-03	6.33E-01
1.00E+02	7.61E-04	2.53E-01
2.00E+02	1.94E-04	7.76E-02
3.00E+02	8.19E-05	3.66E-02
1.00E+00 YEARS	5.62E-05	2.71E-02
1.50E+00	3.18E-05	1.70E-02
2.00E+00	2.46E-05	1.29E-02
3.50E+00	1.60E-05	7.31E-03
5.00E+00	1.27E-05	5.29E-03
7.00E+00	1.09E-05	4.29E-03
1.00E+01	9.74E-06	3.74E-03
2.00E+01	7.52E-06	2.85E-03
3.50E+01	5.32E-06	1.98E-03
5.00E+01	3.75E-06	1.38E-03

ANNIE MICROCURIES/SQ METER
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.100
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BE 7	2.46E-06	2.45E-06	2.45E-06	2.45E-06	2.45E-06	2.45E-06	2.45E-06	2.44E-06	2.43E-06	2.43E-06	2.43E-06
NA 24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MN 54	8.41E-06	8.41E-06	8.41E-06	8.41E-06	8.41E-06	8.41E-06	8.41E-06	8.34E-06	8.34E-06	8.34E-06	8.34E-06
FE 55	1.82E-05	1.82E-05	1.82E-05	1.82E-05	1.82E-05	1.82E-05	1.82E-05	1.82E-05	1.82E-05	1.82E-05	1.82E-05
FE 59	5.94E-05	5.93E-05	5.93E-05	5.93E-05	5.93E-05	5.92E-05	5.91E-05	5.90E-05	5.89E-05	5.88E-05	5.87E-05
CO 57	1.31E-05	1.31E-05	1.31E-05	1.31E-05	1.31E-05	1.31E-05	1.31E-05	1.31E-05	1.31E-05	1.31E-05	1.31E-05
CO 58	1.15E-04	1.15E-04	1.15E-04	1.15E-04	1.15E-04	1.15E-04	1.15E-04	1.15E-04	1.15E-04	1.15E-04	1.14E-04
CO 60	9.17E-06	9.17E-06	9.17E-06	9.17E-06	9.17E-06	9.17E-06	9.17E-06	9.17E-06	9.17E-06	9.17E-06	9.17E-06
CU 64	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CU 67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	2.69E-02	2.68E-02	2.67E-02	2.66E-02	2.65E-02	2.62E-02	2.59E-02	2.56E-02	2.52E-02	2.49E-02	2.46E-02
U239	5.42E+02	9.24E+01	1.58E+01	2.69E+00	4.56E-01	1.33E-02	6.59E-05	3.25E-07	1.61E-09	7.95E-12	3.93E-14
U240	9.25E-02	8.82E-02	8.40E-02	7.99E-02	7.61E-02	6.89E-02	5.95E-02	5.13E-02	4.43E-02	3.81E-02	3.29E-02
NP239	1.85E-03	3.11E+00	3.59E+00	3.65E+00	3.62E+00	3.53E+00	3.39E+00	3.28E+00	3.16E+00	3.05E+00	2.94E+00
NP240M	1.46E-04	8.85E-02	8.47E-02	8.06E-02	7.68E-02	6.94E-02	6.00E-02	5.18E-02	4.46E-02	3.85E-02	3.32E-02
NP240	3.71E-12	1.91E-12	9.90E-13	5.11E-13	2.64E-13	7.07E-14	9.74E-15	1.35E-15	1.85E-16	2.55E-17	3.53E-18
AM241	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09
CM242	7.90E-08	7.90E-08	7.90E-08	7.90E-08	7.90E-08	7.90E-08	7.86E-08	7.86E-08	7.86E-08	7.86E-08	7.86E-08
GE 75	9.88E-06	4.79E-02	2.88E-02	1.74E-02	1.05E-02	3.79E-03	8.28E-04	1.81E-04	3.96E-05	8.62E-06	1.89E-06
GE 77	6.66E-03	1.71E-02	1.61E-02	1.52E-02	1.43E-02	1.26E-02	1.05E-02	8.73E-03	7.28E-03	6.04E-03	5.03E-03
AS 77	6.88E-05	1.09E-02	1.10E-02	1.11E-02	1.11E-02	1.12E-02	1.12E-02	1.11E-02	1.10E-02	1.08E-02	1.05E-02
SE 77M	2.71E-09	3.26E-05	3.30E-05	3.33E-05	3.33E-05	3.35E-05	3.38E-05	3.35E-05	3.30E-05	3.23E-05	3.13E-05
GE 78	1.04E+00	6.47E-01	4.03E-01	2.52E-01	1.57E-01	6.11E-02	1.49E-02	3.60E-03	8.78E-04	2.13E-04	5.18E-05
AS 78	1.86E-02	3.09E-01	3.81E-01	3.57E-01	2.99E-01	1.76E-01	6.55E-02	2.17E-02	6.73E-03	2.01E-03	5.83E-04
AS 79	2.02E+01	1.99E-01	1.96E-03	1.93E-05	1.90E-07	1.84E-11	1.76E-17	1.68E-23	1.60E-29	1.53E-35	1.46E-41
SE 79M	3.00E-02	3.52E-01	3.47E-03	3.42E-05	3.36E-07	3.25E-11	3.10E-17	2.96E-23	2.83E-29	2.70E-35	2.57E-41
BR 80	1.25E-01	1.18E-02	1.11E-03	1.04E-04	9.82E-06	8.71E-08	7.29E-11	6.07E-14	5.06E-17	4.23E-20	3.53E-23
SE 81M	1.02E-01	4.78E+00	2.31E+00	1.11E+00	5.33E-01	1.25E-01	1.39E-02	1.56E-03	1.75E-04	1.96E-05	2.20E-06
SE 81	1.25E+00	5.65E+00	3.27E+00	1.63E+00	7.92E-01	1.85E-01	2.07E-02	2.32E-03	2.60E-04	2.91E-05	3.26E-06
BR 82	6.14E-04	6.03E-04	5.91E-04	5.80E-04	5.68E-04	5.46E-04	5.15E-04	4.85E-04	4.58E-04	4.31E-04	4.07E-04
SE 83	5.62E+01	1.06E+01	2.92E+00	3.83E-01	7.23E-02	2.60E-03	1.77E-05	1.20E-07	8.22E-10	5.57E-12	3.54E-14
BR 83	4.67E-01	6.97E+00	6.45E+00	5.08E+00	3.85E+00	2.18E+00	9.20E-01	3.87E-01	1.64E-01	6.90E-02	2.91E-02
KR 83M	2.41E-05	1.58E+00	3.22E+00	4.00E+00	4.13E+00	3.44E+00	2.03E+00	1.05E+00	5.04E-01	2.33E-01	1.05E-01

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BR 84	1.17E-01	2.03E+01	5.48E+00	1.48E+00	4.01E-01	2.93E-02	5.79E-04	1.14E-05	2.26E-07	4.48E-09	8.84E-11	
KR 85M	5.53E-03	1.18E+01	1.01E+01	8.61E+00	7.36E+00	5.37E+00	3.35E+00	2.09E+00	1.30E+00	8.09E-01	5.05E-01	
KR 87	9.21E+01	5.31E+01	3.08E+01	1.78E+01	1.03E+01	3.44E+00	6.67E-01	1.29E-01	2.50E-02	4.85E-03	9.37E-04	
KR 88	5.23E+01	4.08E+01	3.19E+01	2.49E+01	1.94E+01	1.18E+01	5.63E+00	2.68E+00	1.27E+00	6.07E-01	2.89E-01	
RB 88	1.33E+01	4.13E+01	3.52E+01	2.78E+01	2.17E+01	1.32E+01	6.31E+00	3.01E+00	1.43E+00	6.80E-01	3.23E-01	
RB 89	6.39E+01	6.00E+01	4.04E+00	2.71E-01	1.82E-02	8.23E-05	2.49E-08	7.51E-12	2.29E-15	6.93E-19	2.10E-22	
SR 89	4.90E-06	1.72E-01	1.83E-01	1.83E-01	1.83E-01	1.83E-01	1.83E-01	1.82E-01	1.82E-01	1.82E-01	1.82E-01	
SR 90	9.83E-06	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	
SR 91	1.03E+00	1.92E+01	1.79E+01	1.66E+01	1.55E+01	1.34E+01	1.08E+01	8.74E+00	7.06E+00	5.67E+00	4.57E+00	
Y 91M	6.93E-05	6.61E+00	9.00E+00	9.65E+00	9.52E+00	8.55E+00	6.99E+00	5.63E+00	4.54E+00	3.66E+00	2.95E+00	
Y 91	2.84E-08	5.87E-03	1.35E-02	2.16E-02	2.95E-02	4.42E-02	6.28E-02	7.77E-02	9.00E-02	9.97E-02	1.07E-01	
SR 92	1.70E+00	7.61E+00	5.89E+00	4.56E+00	3.53E+00	2.12E+00	9.82E-01	4.56E-01	2.12E-01	9.82E-02	4.57E-02	
Y 92	7.85E-02	1.60E+00	2.51E+00	2.99E+00	3.17E+00	3.02E+00	2.31E+00	1.58E+00	1.01E+00	6.24E-01	3.76E-01	
SR 93	6.92E+01	1.19E+00	6.58E-03	3.64E-05	2.00E-07	6.13E-12	1.03E-18	1.74E-25	2.94E-32	4.96E-39	8.36E-46	
Y 93	8.44E-02	2.73E+00	2.56E+00	2.40E+00	2.24E+00	1.96E+00	1.59E+00	1.30E+00	1.06E+00	8.68E-01	7.05E-01	
Y 94	1.01E+01	1.38E+01	1.77E+00	2.29E-01	2.95E-02	4.90E-04	1.05E-06	2.25E-09	4.82E-12	1.05E-14	5.83E-16	
Y 95	4.37E+01	4.12E+00	9.08E-02	2.00E-03	4.41E-05	2.14E-08	2.29E-13	2.45E-18	2.62E-23	2.80E-28	2.99E-33	
ZR 95	1.64E-04	2.15E-02	2.19E-02	2.19E-02	2.19E-02	2.19E-02	2.19E-02	2.18E-02	2.18E-02	2.18E-02	2.18E-02	
NB 95	1.83E-11	1.33E-05	3.09E-05	4.86E-05	6.63E-05	1.02E-04	1.54E-04	2.08E-04	2.59E-04	3.12E-04	3.64E-04	
ZR 97	3.99E-01	1.74E+00	1.66E+00	1.60E+00	1.53E+00	1.42E+00	1.25E+00	1.11E+00	9.83E-01	8.66E-01	7.70E-01	
NB 97M	2.06E-03	1.67E+00	1.60E+00	1.54E+00	1.48E+00	1.36E+00	1.20E+00	1.07E+00	9.42E-01	8.32E-01	7.35E-01	
NB 97	2.00E-01	8.73E-01	1.23E+00	1.40E+00	1.47E+00	1.46E+00	1.33E+00	1.19E+00	1.05E+00	9.28E-01	8.25E-01	
NB 98	2.27E+00	1.01E+00	4.45E-01	1.97E-01	8.72E-02	1.71E-02	1.48E-03	1.27E-04	1.11E-05	9.62E-07	8.27E-08	
MO 99	1.21E-03	5.00E-01	4.94E-01	4.90E-01	4.84E-01	4.74E-01	4.60E-01	4.46E-01	4.33E-01	4.19E-01	4.06E-01	
TC 99M	1.13E-08	4.76E-02	8.94E-02	1.26E-01	1.59E-01	2.12E-01	2.69E-01	3.05E-01	3.28E-01	3.40E-01	3.45E-01	
MO101	1.76E+02	7.96E+01	4.62E+00	2.68E-01	1.56E-02	5.21E-05	1.01E-08	1.97E-12	3.83E-16	7.44E-20	1.45E-23	
TC101	7.44E+00	2.23E+02	2.44E+01	2.00E+00	1.46E-01	6.58E-04	1.64E-07	3.68E-11	7.81E-15	1.61E-18	3.25E-22	
MO102	1.48E+03	3.39E+01	7.70E-01	1.76E-02	4.01E-04	2.08E-07	2.48E-12	2.94E-17	3.48E-22	4.13E-27	4.91E-32	
TC102M	9.54E-01	2.86E+01	6.56E-01	1.50E-02	3.41E-04	1.77E-07	2.10E-12	2.49E-17	2.95E-22	3.50E-27	4.16E-32	
TC102	4.47E+03	1.70E+01	3.89E-01	8.83E-03	2.02E-04	1.05E-07	1.25E-12	1.48E-17	1.76E-22	2.08E-27	2.47E-32	
RU103	1.09E-04	2.52E-01	2.52E-01	2.52E-01	2.52E-01	2.51E-01	2.50E-01	2.50E-01	2.49E-01	2.49E-01	2.48E-01	
RH103M	7.25E-09	1.30E-01	1.93E-01	2.24E-01	2.38E-01	2.48E-01	2.50E-01	2.50E-01	2.49E-01	2.49E-01	2.49E-01	
TC104	9.51E+01	6.83E+01	6.83E+00	6.77E-01	6.69E-02	6.59E-04	6.44E-07	6.29E-10	6.14E-13	6.00E-16	5.86E-19	
RU105	7.86E-01	2.72E+01	2.32E+01	1.99E+01	1.70E+01	1.24E+01	7.80E+00	4.88E+00	3.05E+00	1.91E+00	1.20E+00	
RH105M	5.17E-03	2.73E+01	2.33E+01	2.00E+01	1.70E+01	1.25E+01	7.80E+00	4.89E+00	3.06E+00	1.92E+00	1.20E+00	
RH105	8.49E-09	5.53E-01	1.03E+00	1.42E+00	1.74E+00	2.23E+00	2.67E+00	2.87E+00	2.93E+00	2.90E+00	2.82E+00	
RU106	6.88E-04	1.30E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02	
RH106	7.44E-06	1.30E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02	1.30E-02	
RH107	1.76E-01	2.39E+01	3.62E+00	5.45E-01	8.22E-02	1.88E-03	6.46E-06	2.23E-08	7.67E-11	2.62E-14	2.61E-17	
PD107M	3.65E-04	4.86E+00	7.34E-01	1.11E-01	1.67E-02	3.82E-04	1.31E-06	4.53E-09	1.56E-11	5.38E-14	1.84E-16	

1

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	1.02E-02	8.48E-01	8.06E-01	7.64E-01	7.25E-01	6.55E-01	5.63E-01	4.82E-01	4.13E-01	3.54E-01	3.04E-01	3.04E-01
AG109M	5.89E-05	8.48E-01	8.06E-01	7.66E-01	7.27E-01	6.56E-01	5.63E-01	4.82E-01	4.13E-01	3.54E-01	3.04E-01	3.04E-01
PD111M	1.23E+00	1.09E+00	9.58E-01	8.48E-01	7.46E-01	5.80E-01	3.97E-01	2.72E-01	1.87E-01	1.28E-01	8.75E-02	8.75E-02
PD111	4.39E-01	7.92E-01	7.60E-01	6.77E-01	5.99E-01	4.65E-01	3.19E-01	2.19E-01	1.50E-01	1.03E-01	7.05E-02	7.05E-02
AG111M	3.49E-03	1.07E+00	1.00E+00	8.98E-01	7.92E-01	6.13E-01	4.19E-01	2.87E-01	1.97E-01	1.35E-01	9.21E-02	9.21E-02
AG111	1.24E-09	3.69E-03	7.74E-03	1.14E-02	1.46E-02	1.99E-02	2.56E-02	2.93E-02	3.17E-02	3.33E-02	3.42E-02	3.42E-02
PD112	2.35E-01	2.28E-01	2.20E-01	2.13E-01	2.06E-01	1.93E-01	1.75E-01	1.58E-01	1.43E-01	1.30E-01	1.18E-01	1.18E-01
AG112	7.08E-06	4.51E-02	7.96E-02	1.07E-01	1.27E-01	1.52E-01	1.67E-01	1.66E-01	1.58E-01	1.48E-01	1.36E-01	1.36E-01
AG113	2.11E-03	4.51E-01	3.95E-01	3.47E-01	3.04E-01	2.34E-01	1.59E-01	1.07E-01	7.23E-02	4.88E-02	3.30E-02	3.30E-02
AG115	7.25E-01	7.77E-01	9.67E-02	1.21E-02	1.51E-03	2.36E-05	4.62E-08	9.03E-11	1.75E-13	1.74E-16	1.61E-16	1.61E-16
CD115M	5.93E-09	1.58E-04	1.77E-04	1.80E-04	1.80E-04	1.80E-04	1.79E-04	1.79E-04	1.78E-04	1.78E-04	1.78E-04	1.78E-04
CD115	2.29E-06	4.32E-02	4.64E-02	4.63E-02	4.57E-02	4.46E-02	4.29E-02	4.13E-02	3.97E-02	3.82E-02	3.67E-02	3.67E-02
IN115M	2.85E-11	4.76E-03	1.06E-02	1.57E-02	2.00E-02	2.67E-02	3.30E-02	3.63E-02	3.79E-02	3.82E-02	3.79E-02	3.79E-02
CD117	5.08E-02	8.46E-01	6.38E-01	4.76E-01	3.57E-01	2.00E-01	8.40E-02	3.54E-02	1.49E-02	6.26E-03	2.63E-03	2.63E-03
IN117M	2.44E-06	2.94E-01	4.26E-01	4.63E-01	4.47E-01	3.52E-01	2.01E-01	1.03E-01	4.95E-02	2.29E-02	1.04E-02	1.04E-02
IN117	9.84E-11	5.37E-02	1.30E-01	1.81E-01	2.01E-01	1.85E-01	1.18E-01	6.32E-02	3.14E-02	1.48E-02	6.80E-03	6.80E-03
CD118	3.36E+00	1.44E+00	6.17E-01	2.63E-01	1.13E-01	2.06E-02	1.62E-03	1.26E-04	9.95E-06	7.79E-07	6.11E-08	6.11E-08
IN118	2.22E-01	1.44E+00	6.17E-01	2.64E-01	1.13E-01	2.07E-02	1.62E-03	1.27E-04	9.95E-06	7.79E-07	6.11E-08	6.11E-08
CD119	8.37E+00	1.31E-01	2.04E-03	3.19E-05	4.98E-07	1.22E-10	4.64E-16	1.77E-21	6.75E-27	2.58E-32	9.87E-38	9.87E-38
IN119M	1.26E-02	1.41E+00	1.54E-01	1.55E-02	1.54E-03	1.52E-05	1.48E-08	1.45E-11	1.41E-14	1.38E-17	1.35E-20	1.35E-20
IN119	6.22E-01	7.43E-02	8.62E-03	8.74E-04	8.74E-05	8.56E-07	8.37E-10	8.18E-13	7.99E-16	7.81E-19	7.62E-22	7.62E-22
SN121	1.04E-03	1.07E-01	1.04E-01	1.01E-01	9.87E-02	9.39E-02	8.65E-02	8.05E-02	7.44E-02	6.89E-02	6.40E-02	6.40E-02
SN123M	5.94E-01	1.11E+00	3.94E-01	1.39E-01	4.92E-02	6.14E-03	2.72E-04	1.20E-05	5.33E-07	2.35E-08	1.04E-09	1.04E-09
SN123	5.58E-06	5.84E-04	5.84E-04	5.84E-04	5.84E-04	5.84E-04	5.84E-04	5.84E-04	5.84E-04	5.84E-04	5.84E-04	5.84E-04
SN125	1.59E-02	1.58E-02	1.58E-02	1.57E-02	1.56E-02	1.56E-02	1.54E-02	1.53E-02	1.51E-02	1.50E-02	1.49E-02	1.49E-02
SB125	9.52E-05	9.56E-05	9.60E-05	9.64E-05	9.68E-05	9.77E-05	9.93E-05	1.01E-04	1.02E-04	1.03E-04	1.04E-04	1.04E-04
SB126	2.95E-03	2.94E-03	2.94E-03	2.94E-03	2.93E-03	2.91E-03	2.89E-03	2.87E-03	2.85E-03	2.83E-03	2.81E-03	2.81E-03
SN127	4.14E+00	2.97E+00	2.14E+00	1.54E+00	1.11E+00	5.71E-01	2.12E-01	7.90E-02	2.93E-02	1.09E-02	4.04E-03	4.04E-03
SB127	4.83E-02	1.67E-01	1.84E-01	1.96E-01	2.05E-01	2.14E-01	2.17E-01	2.15E-01	2.12E-01	2.07E-01	2.03E-01	2.03E-01
TE127	2.73E-02	3.40E-02	4.13E-02	4.90E-02	5.66E-02	7.10E-02	9.09E-02	1.06E-01	1.18E-01	1.27E-01	1.33E-01	1.33E-01
SN128	2.78E+01	1.37E+01	6.80E+00	3.36E+00	1.66E+00	4.05E-01	4.90E-02	5.91E-03	7.13E-04	8.64E-05	1.04E-05	1.04E-05
SB128M	1.42E-02	1.57E+01	8.12E+00	4.01E+00	1.98E+00	4.84E-01	5.83E-02	7.05E-03	8.49E-04	1.03E-04	1.24E-05	1.24E-05
SB128	1.17E+00	1.13E+00	1.06E+00	9.97E-01	9.31E-01	7.98E-01	6.37E-01	5.05E-01	4.01E-01	3.18E-01	2.53E-01	2.53E-01
SN129M	1.78E+01	8.85E+00	4.44E+00	2.22E+00	1.11E+00	2.78E-01	3.47E-02	4.34E-03	5.42E-04	6.78E-05	8.48E-06	8.48E-06
SN129	1.19E+02	1.16E+00	1.15E-02	1.13E-04	1.11E-06	1.08E-10	1.03E-16	9.83E-23	9.38E-29	8.93E-35	8.55E-41	8.55E-41
SB129	6.67E+00	1.12E+01	1.05E+01	9.38E+00	8.25E+00	6.13E+00	3.82E+00	2.36E+00	1.46E+00	9.00E-01	5.54E-01	5.54E-01
TE129M	1.26E-07	1.40E-03	2.87E-03	4.22E-03	5.42E-03	7.35E-03	9.30E-03	1.05E-02	1.13E-02	1.17E-02	1.20E-02	1.20E-02
TE129	4.80E+00	6.60E+00	7.73E+00	8.03E+00	7.73E+00	6.40E+00	4.26E+00	2.69E+00	1.67E+00	1.04E+00	6.42E-01	6.42E-01
SB130M	6.75E-01	1.27E+00	3.35E-03	8.79E-06	2.31E-08	1.60E-13	2.91E-21	5.29E-29	9.59E-37	1.74E-44	3.17E-52	3.17E-52
SB130	1.16E+02	3.50E+01	9.96E+00	2.82E+00	7.98E-01	6.42E-02	1.46E-03	3.34E-05	7.62E-07	1.74E-08	3.96E-10	3.96E-10

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	3.22E-02	3.05E-02	2.89E-02	2.72E-02	2.58E-02	2.31E-02	1.95E-02	1.65E-02	1.39E-02	1.18E-02	9.96E-03
SB131	2.67E+02	6.98E+01	1.14E+01	1.87E+00	3.07E-01	8.27E-03	3.64E-05	1.61E-07	7.08E-10	3.12E-12	1.56E-14
TE131M	1.29E-04	6.73E-01	7.67E-01	7.68E-01	7.53E-01	7.20E-01	6.72E-01	6.27E-01	5.85E-01	5.46E-01	5.09E-01
TE131	1.18E+02	1.29E+02	4.19E+01	1.09E+01	2.65E+00	2.49E-01	1.23E-01	1.14E-01	1.06E-01	9.96E-02	9.28E-02
I131	1.72E-02	5.96E-01	8.77E-01	9.62E-01	9.79E-01	9.87E-01	9.87E-01	9.79E-01	9.79E-01	9.70E-01	9.70E-01
TE132	1.36E+00	3.30E+00	3.27E+00	3.24E+00	3.21E+00	3.15E+00	3.07E+00	2.99E+00	2.91E+00	2.83E+00	2.76E+00
I132	3.33E+00	3.32E+00	3.31E+00	3.30E+00	3.27E+00	3.23E+00	3.16E+00	3.08E+00	2.99E+00	2.92E+00	2.85E+00
TE133M	1.64E-01	5.69E+01	2.48E+01	1.08E+01	4.69E+00	8.91E-01	7.33E-02	6.05E-03	4.99E-04	4.11E-05	3.39E-06
TE133	9.22E+02	5.23E+01	5.81E+00	1.92E+00	8.13E-01	1.54E-01	1.27E-02	1.05E-03	8.68E-05	7.14E-06	5.89E-07
I133	1.43E+00	1.54E+01	1.66E+01	1.66E+01	1.63E+01	1.55E+01	1.41E+01	1.27E+01	1.15E+01	1.05E+01	9.46E+00
XE133M	6.09E-08	3.46E-03	8.36E-03	1.34E-02	1.82E-02	2.74E-02	3.96E-02	5.03E-02	5.92E-02	6.70E-02	7.34E-02
XE133	1.06E-06	6.05E-02	1.47E-01	2.34E-01	3.22E-01	4.88E-01	7.15E-01	9.14E-01	1.09E+00	1.25E+00	1.39E+00
TE134	2.91E+02	1.35E+02	5.03E+01	1.87E+01	6.94E+00	9.61E-01	4.91E-02	2.52E-03	1.29E-04	6.62E-06	3.40E-07
I134	1.34E+02	1.79E+02	1.25E+02	7.33E+01	3.94E+01	1.00E+01	1.10E+00	1.12E-01	1.10E-02	1.05E-03	1.00E-04
I135	2.42E+01	4.27E+01	3.85E+01	3.47E+01	3.13E+01	2.54E+01	1.87E+01	1.37E+01	1.00E+01	7.38E+00	5.39E+00
XE135M	2.68E-03	1.23E+01	1.20E+01	1.09E+01	9.75E+00	7.94E+00	5.83E+00	4.27E+00	3.13E+00	2.30E+00	1.69E+00
XE135	2.79E+00	5.52E+00	8.08E+00	1.02E+01	1.18E+01	1.42E+01	1.57E+01	1.58E+01	1.50E+01	1.37E+01	1.23E+01
CS136	8.89E-03	8.86E-03	8.85E-03	8.84E-03	8.81E-03	8.76E-03	8.71E-03	8.65E-03	8.59E-03	8.54E-03	8.48E-03
CS137	1.19E-04	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03
BA137M	2.51E-07	1.20E-03	1.20E-03	1.20E-03	1.20E-03	1.20E-03	1.20E-03	1.20E-03	1.20E-03	1.20E-03	1.20E-03
XE138	9.12E+02	7.85E+01	6.82E+00	5.91E-01	5.12E-02	3.84E-04	2.50E-07	1.62E-10	1.05E-13	6.84E-17	4.45E-20
CS138	1.36E+02	2.28E+02	7.92E+01	2.33E+01	6.52E+00	4.96E-01	1.03E-02	2.14E-04	4.45E-06	9.26E-08	1.92E-09
CS139	8.76E+02	2.80E+01	3.51E-01	4.41E-03	5.53E-05	8.68E-09	1.73E-14	3.41E-20	6.76E-26	1.34E-31	2.65E-37
BA139	1.62E+01	1.80E+02	1.11E+02	6.76E+01	4.09E+01	1.50E+01	3.33E+00	7.39E-01	1.64E-01	3.64E-02	8.09E-03
BA140	1.22E-01	7.58E-01	7.58E-01	7.52E-01	7.52E-01	7.47E-01	7.47E-01	7.41E-01	7.35E-01	7.29E-01	7.23E-01
LA140	2.89E-07	1.30E-02	2.57E-02	3.81E-02	5.04E-02	7.41E-02	1.08E-01	1.40E-01	1.70E-01	1.99E-01	2.25E-01
BA141	1.26E+02	3.82E+01	3.79E+00	3.76E-01	3.73E-02	3.70E-04	3.61E-07	3.52E-10	3.43E-13	3.37E-16	3.28E-19
LA141	1.17E+00	2.47E+01	2.31E+01	1.96E+01	1.64E+01	1.15E+01	6.74E+00	3.94E+00	2.32E+00	1.36E+00	7.97E-01
CE141	1.44E-07	1.61E-02	3.76E-02	5.66E-02	7.25E-02	9.72E-02	1.21E-01	1.34E-01	1.42E-01	1.47E-01	1.49E-01
BA142	8.49E+01	3.37E+00	7.69E-02	1.75E-03	4.00E-05	2.08E-08	2.47E-13	2.93E-18	3.47E-23	4.12E-28	4.89E-33
LA142	1.95E+00	1.35E+01	8.92E+00	5.67E+00	3.61E+00	1.46E+00	3.77E-01	9.71E-02	2.50E-02	6.44E-03	1.66E-03
LA143	3.19E+01	6.22E+00	3.19E-01	1.64E-02	8.42E-04	2.20E-06	2.97E-10	4.01E-14	5.40E-18	7.28E-22	9.83E-26
CE143	1.27E-02	8.12E-01	8.42E-01	8.19E-01	8.04E-01	7.75E-01	7.25E-01	6.81E-01	6.40E-01	6.00E-01	5.64E-01
PR143	3.72E-09	1.24E-03	3.00E-03	4.74E-03	6.45E-03	9.76E-03	1.44E-02	1.88E-02	2.28E-02	2.66E-02	3.01E-02
CE144	5.09E-04	3.65E-03	3.65E-03	3.65E-03	3.65E-03	3.65E-03	3.64E-03	3.64E-03	3.64E-03	3.64E-03	3.64E-03
PR144	1.40E-07	3.32E-03	3.61E-03	3.64E-03	3.65E-03	3.65E-03	3.65E-03	3.65E-03	3.64E-03	3.64E-03	3.64E-03
PR145	2.05E-02	3.01E+00	2.68E+00	2.38E+00	2.13E+00	1.68E+00	1.19E+00	8.38E-01	5.94E-01	4.19E-01	2.97E-01
CE146	6.03E+01	3.09E+00	1.58E-01	8.10E-03	4.17E-04	1.10E-06	1.48E-10	1.99E-14	2.68E-18	3.62E-22	4.88E-26
PR146	1.25E+00	1.08E+01	2.46E+00	4.62E-01	8.31E-02	2.61E-03	1.44E-05	7.96E-08	4.41E-10	2.44E-12	1.33E-14
PR147	7.00E+00	2.02E+00	6.32E-02	1.97E-03	6.18E-05	6.03E-08	1.84E-12	5.62E-17	1.71E-21	5.24E-26	1.60E-30

1

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	2.50E-06	4.70E-02	4.83E-02	4.82E-02	4.81E-02	4.79E-02	4.75E-02	4.71E-02	4.68E-02	4.64E-02	4.60E-02	
ND149	3.62E+00	2.47E+00	1.68E+00	1.14E+00	7.74E-01	3.60E-01	1.13E-01	3.57E-02	1.12E-02	3.54E-03	1.12E-03	
PM149	5.05E-04	3.95E-02	6.55E-02	8.29E-02	9.39E-02	1.06E-01	1.10E-01	1.08E-01	1.05E-01	1.01E-01	9.73E-02	
PM150	4.18E-02	3.23E-02	2.50E-02	1.93E-02	1.49E-02	8.96E-03	4.15E-03	1.92E-03	8.90E-04	4.12E-04	1.91E-04	
ND151	1.43E+01	4.48E-01	1.40E-02	4.38E-04	1.37E-05	1.34E-08	4.09E-13	1.25E-17	3.81E-22	1.16E-26	3.55E-31	
PM151	9.10E-03	1.06E-01	1.07E-01	1.04E-01	1.02E-01	9.67E-02	8.97E-02	8.33E-02	7.75E-02	7.17E-02	6.66E-02	
PM152	2.31E+01	2.26E-02	2.21E-05	2.16E-08	2.11E-11	2.01E-17	1.87E-26	1.75E-35	1.63E-44	1.52E-53	1.41E-62	
SM153	3.10E-02	3.06E-02	3.02E-02	2.97E-02	2.93E-02	2.84E-02	2.72E-02	2.60E-02	2.49E-02	2.38E-02	2.28E-02	
SM155	1.74E+00	2.85E-01	4.67E-02	7.64E-03	1.25E-03	3.37E-05	1.49E-07	6.55E-10	2.89E-12	1.29E-14	3.16E-17	
EU155	1.28E-06	3.64E-05	4.21E-05	4.30E-05	4.32E-05	4.32E-05	4.32E-05	4.32E-05	4.32E-05	4.32E-05	4.32E-05	
SM156	3.03E-02	2.81E-02	2.61E-02	2.43E-02	2.25E-02	1.95E-02	1.56E-02	1.25E-02	1.00E-02	8.03E-03	6.43E-03	
EU156	8.86E-05	1.45E-04	1.96E-04	2.44E-04	2.89E-04	3.69E-04	4.69E-04	5.43E-04	6.08E-04	6.56E-04	6.90E-04	
EU157	4.93E-03	1.63E-02	1.56E-02	1.49E-02	1.42E-02	1.30E-02	1.13E-02	9.90E-03	8.62E-03	7.50E-03	6.54E-03	
EU158	1.82E-01	7.36E-02	2.97E-02	1.21E-02	4.88E-03	7.99E-04	5.32E-05	3.53E-06	2.34E-07	1.56E-08	1.03E-09	
EU159	2.20E-01	2.18E-02	2.16E-03	2.15E-04	2.13E-05	2.10E-07	2.05E-10	2.00E-13	1.96E-16	1.91E-19	1.87E-22	
GD159	9.41E-04	4.12E-03	4.29E-03	4.16E-03	4.00E-03	3.71E-03	3.30E-03	2.95E-03	2.62E-03	2.33E-03	2.08E-03	
TB161	1.20E-05	8.61E-05	8.56E-05	8.53E-05	8.50E-05	8.42E-05	8.33E-05	8.22E-05	8.10E-05	8.02E-05	7.91E-05	
TOTAL	1.16E+04	2.39E+03	9.36E+02	5.48E+02	3.84E+02	2.42E+02	1.60E+02	1.20E+02	9.50E+01	7.81E+01	6.57E+01	

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	2.46E-06	2.43E-06	2.39E-06	2.30E-06	2.16E-06	1.89E-06	1.66E-06	1.28E-06	6.70E-07	1.82E-07	4.95E-08
NA 24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MN 54	8.41E-06	8.34E-06	8.34E-06	8.19E-06	8.11E-06	7.96E-06	7.82E-06	7.44E-06	6.65E-06	5.28E-06	4.21E-06
FE 55	1.82E-05	1.82E-05	1.82E-05	1.81E-05	1.80E-05	1.79E-05	1.78E-05	1.75E-05	1.68E-05	1.57E-05	1.46E-05
CE 59	5.94E-05	5.85E-05	5.76E-05	5.50E-05	5.09E-05	4.37E-05	3.74E-05	2.75E-05	1.28E-05	2.72E-06	5.85E-07
CG 57	1.31E-05	1.31E-05	1.30E-05	1.30E-05	1.28E-05	1.24E-05	1.21E-05	1.15E-05	1.02E-05	7.85E-06	6.08E-06
CO 58	1.15E-04	1.14E-04	1.13E-04	1.10E-04	1.05E-04	9.51E-05	8.62E-05	7.10E-05	4.37E-05	1.65E-05	6.24E-06
CO 60	9.17E-06	9.17E-06	9.17E-06	9.17E-06	9.12E-06	9.12E-06	9.06E-06	9.01E-06	8.79E-06	8.52E-06	8.19E-06
CU 64	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CU 67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	2.69E-02	2.43E-02	2.19E-02	1.61E-02	9.64E-03	3.45E-03	1.24E-03	1.58E-04	9.35E-07	1.00E-10	6.78E-11
U240	9.25E-02	2.85E-02	8.75E-03	2.54E-04	6.96E-07	5.23E-12	3.94E-17	2.22E-27	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	1.85E-03	2.83E+00	2.11E+00	8.69E-01	1.99E-01	1.04E-02	5.44E-04	1.49E-06	5.87E-13	1.40E-22	1.40E-22
NP240M	1.46E-04	2.87E-02	8.82E-03	2.55E-04	7.01E-07	5.28E-12	3.97E-17	2.24E-27	0.	0.	0.
AM241	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.58E-09
CM242	7.90E-08	7.86E-08	7.82E-08	7.74E-08	7.57E-08	7.25E-08	6.96E-08	6.39E-08	5.20E-08	3.38E-08	2.21E-08
GE 77	6.66E-03	4.19E-03	9.59E-04	1.16E-05	7.37E-09	2.98E-15	1.20E-21	1.97E-34	0.	0.	0.
AS 77	6.88E-05	1.02E-02	7.35E-03	2.13E-03	2.49E-04	3.38E-06	4.59E-08	8.46E-12	3.92E-21	8.41E-40	1.81E-58
SE 77M	2.71E-09	3.06E-05	2.20E-05	6.39E-06	7.45E-07	1.01E-08	1.38E-10	2.54E-14	1.18E-23	2.52E-42	5.43E-61
AS 78	1.86E-02	1.66E-04	4.86E-09	4.10E-23	0.	0.	0.	0.	0.	0.	0.
BR 82	6.14E-04	3.84E-04	2.40E-04	5.82E-05	5.52E-06	4.96E-08	4.45E-10	3.59E-14	2.10E-24	7.20E-45	2.45E-65
BR 83	4.67E-01	1.23E-02	1.24E-05	1.26E-14	1.28E-29	0.	0.	0.	0.	0.	0.
KR 83M	2.41E-05	5.38E-02	6.11E-05	5.49E-14	5.63E-29	0.	0.	0.	0.	0.	0.
KR 85M	5.53E-03	3.16E-01	7.19E-03	8.53E-08	5.26E-16	2.00E-32	7.58E-49	0.	0.	0.	0.
KR 85	5.72E-06	1.50E-04	1.53E-04	1.53E-04	1.53E-04	1.53E-04	1.53E-04	1.52E-04	1.51E-04	1.48E-04	1.46E-04
KR 87	9.21E+01	1.82E-04	3.59E-10	2.79E-27	0.	0.	0.	0.	0.	0.	0.
KR 88	5.23E+01	1.38E-01	3.61E-04	6.56E-12	8.26E-25	0.	0.	0.	0.	0.	0.
RB 88	1.33E+01	1.53E-01	4.04E-04	7.34E-12	9.20E-25	0.	0.	0.	0.	0.	0.
SR 89	4.90E-06	1.47E-01	1.45E-01	1.39E-01	1.30E-01	1.14E-01	9.95E-02	7.66E-02	3.91E-02	1.03E-02	2.72E-03
SR 90	9.83E-06	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.01E-03	1.00E-03	1.00E-03	9.92E-04
Y 90	1.46E-11	2.32E-04	4.09E-04	7.36E-04	9.39E-04	1.00E-03	1.01E-03	1.01E-03	1.00E-03	1.00E-03	9.92E-04
SR 91	1.03E+00	3.68E+00	6.61E-01	3.79E-03	6.93E-07	2.35E-14	7.97E-22	9.07E-37	0.	0.	0.

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
Y 91M	6.93E-05	2.38E+00	4.26E-01	2.45E-03	4.49E-07	1.52E-14	5.13E-22	5.85E-37	0.	0.	0.	0.
Y 91	2.84E-08	1.13E-01	1.34E-01	1.34E-01	1.26E-01	1.12E-01	9.97E-02	7.90E-02	4.37E-02	1.35E-02	4.14E-03	0.
SR 92	1.70E+00	2.12E-02	4.58E-05	4.60E-13	2.16E-26	0.	0.	0.	0.	0.	0.	0.
Y 92	7.85E-02	2.23E-01	2.47E-03	1.90E-09	1.11E-19	3.80E-40	1.30E-60	0.	0.	0.	0.	0.
Y 93	8.44E-02	5.70E-01	1.11E-01	8.36E-04	2.41E-07	1.99E-14	1.64E-21	1.12E-35	0.	0.	0.	0.
ZR 95	1.64E-04	2.05E-02	2.03E-02	1.97E-02	1.87E-02	1.67E-02	1.51E-02	1.22E-02	7.13E-03	2.46E-03	8.43E-04	0.
NB 95M	3.50E-12	6.95E-05	1.27E-04	2.42E-04	3.26E-04	3.44E-04	3.18E-04	2.58E-04	1.51E-04	5.21E-05	1.79E-05	0.
NB 95	1.83E-11	3.97E-04	7.86E-04	1.88E-03	3.50E-03	6.03E-03	7.78E-03	9.66E-03	9.30E-03	4.47E-03	1.72E-03	0.
ZR 97	3.99E-01	6.80E-01	2.56E-01	1.35E-02	1.02E-04	5.73E-09	3.22E-13	1.02E-21	5.74E-43	0.	0.	0.
NB 97M	2.06E-03	6.53E-01	2.45E-01	1.31E-02	9.76E-05	5.50E-09	3.09E-13	9.76E-22	5.52E-43	0.	0.	0.
NB 97	2.00E-01	6.83E-01	2.56E-01	1.36E-02	1.02E-04	6.17E-09	3.46E-13	1.10E-21	6.19E-43	0.	0.	0.
MO 99	1.21E-03	3.94E-01	3.08E-01	1.46E-01	4.22E-02	3.52E-03	2.94E-04	2.05E-06	8.33E-12	1.37E-22	2.26E-33	0.
TC 99M	1.13E-08	3.46E-01	2.91E-01	1.40E-01	4.02E-02	3.36E-03	2.81E-04	1.96E-06	7.94E-12	1.31E-22	2.16E-33	0.
RU103	1.09E-04	2.48E-01	2.43E-01	2.31E-01	2.12E-01	1.78E-01	1.49E-01	1.05E-01	4.38E-02	7.59E-03	1.32E-03	0.
RH103M	7.25E-09	2.48E-01	2.44E-01	2.31E-01	2.12E-01	1.78E-01	1.49E-01	1.05E-01	4.38E-02	7.59E-03	1.32E-03	0.
RU105	7.86E-01	7.52E-01	1.77E-02	2.32E-07	1.70E-15	9.06E-32	4.86E-48	0.	0.	0.	0.	0.
RH105M	5.17E-03	7.52E-01	1.77E-02	2.33E-07	1.70E-15	9.12E-32	4.87E-48	0.	0.	0.	0.	0.
RH105	8.49E-09	2.71E+00	1.77E+00	4.42E-01	4.35E-02	4.23E-04	4.11E-06	3.88E-10	3.37E-20	2.53E-40	1.90E-60	0.
RU106	6.88E-04	1.30E-02	1.30E-02	1.29E-02	1.28E-02	1.26E-02	1.23E-02	1.18E-02	1.08E-02	8.91E-03	7.39E-03	0.
RH106	7.44E-06	1.30E-02	1.30E-02	1.29E-02	1.28E-02	1.26E-02	1.23E-02	1.18E-02	1.08E-02	8.91E-03	7.39E-03	0.
PD109	1.02E-02	2.60E-01	7.58E-02	1.88E-03	3.96E-06	1.77E-11	7.87E-17	1.56E-27	0.	0.	0.	0.
AG109M	5.89E-05	2.60E-01	7.60E-02	1.88E-03	3.98E-06	1.77E-11	7.87E-17	1.56E-27	0.	0.	0.	0.
PD111M	1.23E+00	5.99E-02	2.91E-03	3.34E-07	9.03E-14	6.59E-27	4.84E-40	0.	0.	0.	0.	0.
PD111	4.39E-01	4.84E-02	2.34E-03	2.69E-07	7.28E-14	5.30E-27	3.88E-40	0.	0.	0.	0.	0.
AG111M	3.49E-03	6.31E-02	3.07E-03	3.53E-07	9.54E-14	7.00E-27	5.11E-40	0.	0.	0.	0.	0.
AG111	1.24E-09	3.43E-02	3.30E-02	2.51E-02	1.58E-02	6.27E-03	2.49E-03	3.92E-04	3.86E-06	3.74E-10	3.62E-14	0.
PD112	2.35E-01	1.07E-01	4.83E-02	4.49E-03	8.53E-05	3.10E-08	1.13E-11	1.48E-18	9.32E-36	0.	0.	0.
AG112	7.08E-06	1.24E-01	5.70E-02	5.29E-03	1.01E-04	3.66E-08	1.33E-11	1.75E-18	1.10E-35	0.	0.	0.
AG113	2.11E-03	2.23E-02	9.64E-04	7.83E-08	1.20E-14	2.80E-28	6.55E-42	0.	0.	0.	0.	0.
CD115M	5.93E-09	1.71E-04	1.69E-04	1.61E-04	1.48E-04	1.26E-04	1.08E-04	7.77E-05	3.48E-05	6.90E-06	1.38E-06	0.
CD115	2.29E-06	3.45E-02	2.53E-02	9.95E-03	2.10E-03	9.38E-05	4.18E-06	8.34E-09	1.47E-15	4.61E-29	1.44E-42	0.
IN115M	2.85E-11	3.64E-02	2.76E-02	1.09E-02	2.29E-03	1.02E-04	4.56E-06	9.09E-09	1.61E-15	5.04E-29	1.58E-42	0.
CD117	5.08E-02	1.11E-03	1.08E-06	1.01E-15	8.94E-31	0.	0.	0.	0.	0.	0.	0.
IN117M	2.44E-06	4.60E-03	5.33E-06	5.14E-15	4.57E-30	0.	0.	0.	0.	0.	0.	0.
IN117	9.84E-11	3.03E-03	3.59E-06	3.48E-15	3.09E-30	0.	0.	0.	0.	0.	0.	0.
SN121	1.04E-03	5.91E-02	3.19E-02	5.02E-03	2.30E-04	4.86E-07	1.02E-09	4.57E-15	1.91E-28	0.	0.	0.
SN123	5.58E-06	5.84E-04	5.79E-04	5.68E-04	5.53E-04	5.22E-04	4.96E-04	4.43E-04	3.36E-04	1.93E-04	1.11E-04	0.
SN125	1.59E-02	1.47E-02	1.37E-02	1.10E-02	7.57E-03	3.63E-03	1.73E-03	3.97E-04	9.93E-06	6.25E-09	3.92E-12	0.
SB125	9.52E-05	1.06E-04	1.15E-04	1.41E-04	1.73E-04	2.09E-04	2.26E-04	2.35E-04	2.31E-04	2.15E-04	2.01E-04	0.
SB126	2.95E-03	2.80E-03	2.65E-03	2.24E-03	1.70E-03	9.72E-04	5.61E-04	1.85E-04	1.15E-05	5.61E-08	1.13E-08	0.

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
SN127	4.14E+00	1.50E-03	5.45E-07	2.60E-17	1.63E-34	0.	0.	0.	0.	0.	0.	0.
SB127	4.83E-02	1.98E-01	1.66E-01	9.69E-02	3.97E-02	6.63E-03	1.11E-03	3.10E-05	4.04E-09	6.90E-17	1.17E-24	0.
TE127M	3.91E-10	3.03E-04	5.54E-04	1.07E-03	1.49E-03	1.64E-03	1.58E-03	1.40E-03	1.02E-03	5.39E-04	2.85E-04	0.
TE127	2.73E-02	1.42E-01	1.39E-01	8.49E-02	3.59E-02	7.36E-03	2.52E-03	1.41E-03	1.01E-03	5.33E-04	2.82E-04	0.
SB128	1.17E+00	2.00E-01	3.16E-02	1.23E-04	1.20E-08	1.12E-16	1.06E-24	9.31E-41	0.	0.	0.	0.
SB129	6.67E+00	3.41E-01	7.13E-03	6.49E-08	2.58E-16	4.07E-33	6.43E-50	0.	0.	0.	0.	0.
TE129M	1.26E-07	1.33E-02	1.33E-02	1.25E-02	1.13E-02	9.23E-03	7.50E-03	5.00E-03	1.80E-03	2.35E-04	3.05E-05	0.
TE129	4.80E+00	4.00E-01	1.67E-02	8.03E-03	7.24E-03	5.91E-03	4.82E-03	3.20E-03	1.16E-03	1.51E-04	1.96E-05	0.
I130	3.22E-02	8.42E-03	2.20E-03	3.94E-05	4.81E-08	7.17E-14	1.07E-19	2.38E-31	0.	0.	0.	0.
TE131M	1.29E-04	4.49E-01	2.58E-01	4.89E-02	3.06E-03	1.19E-05	4.66E-08	7.12E-13	6.47E-25	0.	0.	0.
TE131	1.18E+02	8.20E-02	4.71E-02	8.94E-03	5.58E-04	2.18E-06	8.50E-09	1.30E-13	1.18E-25	0.	0.	0.
I131	1.72E-02	9.28E-01	8.77E-01	7.05E-01	4.64E-01	1.96E-01	8.29E-02	1.48E-02	2.00E-04	3.64E-08	6.64E-12	0.
XE131M	4.66E-11	4.30E-04	8.16E-04	1.70E-03	2.43E-03	2.41E-03	1.79E-03	7.38E-04	4.92E-05	1.47E-07	4.15E-10	0.
TE132	1.36E+00	2.69E+00	2.17E+00	1.14E+00	3.94E-01	4.67E-02	5.53E-03	7.77E-05	1.82E-09	9.95E-19	5.43E-28	0.
I132	3.33E+00	2.77E+00	2.24E+00	1.18E+00	4.06E-01	4.81E-02	5.70E-03	8.01E-05	1.88E-09	1.02E-18	5.59E-28	0.
I133	1.43E+00	7.97E+00	3.60E+00	3.34E-01	6.36E-03	2.31E-06	8.36E-10	1.10E-16	6.92E-34	0.	0.	0.
XE133M	6.09E-08	7.53E-02	8.91E-02	5.23E-02	1.23E-02	5.76E-04	2.68E-05	5.81E-08	1.27E-14	6.09E-28	2.92E-41	0.
XE133	1.06E-06	1.45E+00	1.94E+00	1.74E+00	9.46E-01	2.56E-01	6.87E-02	4.95E-03	6.89E-06	1.34E-11	2.59E-17	0.
I135	2.42E+01	3.96E+00	3.30E-01	1.92E-04	7.80E-10	1.29E-20	2.12E-31	5.75E-53	0.	0.	0.	0.
XE135M	2.68E-03	1.23E+00	1.03E-01	6.00E-05	2.44E-10	4.01E-21	6.61E-32	1.80E-53	0.	0.	0.	0.
XE135	2.79E+00	1.07E+01	2.60E+00	1.49E-02	1.82E-06	2.56E-14	3.59E-22	7.10E-38	0.	0.	0.	0.
CS136	8.89E-03	8.42E-03	7.98E-03	6.81E-03	5.22E-03	3.06E-03	1.80E-03	6.18E-04	4.30E-05	2.07E-07	1.00E-09	0.
CS137	1.19E-04	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.28E-03	1.27E-03	1.26E-03	0.
BA137M	2.51E-07	1.20E-03	1.20E-03	1.20E-03	1.20E-03	1.20E-03	1.20E-03	1.20E-03	1.19E-03	1.18E-03	1.18E-03	0.
BA139	1.62E+01	1.73E-03	1.02E-08	2.10E-24	0.	0.	0.	0.	0.	0.	0.	0.
BA140	1.22E-01	7.18E-01	6.83E-01	5.79E-01	4.42E-01	2.57E-01	1.49E-01	5.06E-02	3.38E-03	1.50E-05	6.66E-08	0.
LA140	2.89E-07	2.50E-01	4.02E-01	5.56E-01	4.94E-01	2.96E-01	1.72E-01	5.85E-02	3.88E-03	1.73E-05	7.70E-08	0.
LA141	1.17E+00	4.63E-01	6.50E-03	1.80E-08	9.84E-18	2.94E-36	8.76E-55	0.	0.	0.	0.	0.
CE141	1.44E-07	1.60E-01	1.59E-01	1.49E-01	1.34E-01	1.08E-01	8.73E-02	5.69E-02	1.95E-02	2.30E-03	2.71E-04	0.
LA142	1.95E+00	4.27E-04	8.27E-09	6.08E-23	0.	0.	0.	0.	0.	0.	0.	0.
CE143	1.27E-02	5.24E-01	3.17E-01	6.97E-02	5.61E-03	3.63E-05	2.35E-07	9.83E-12	1.11E-22	0.	0.	0.
PR143	3.72E-09	3.35E-02	5.21E-02	6.73E-02	5.77E-02	3.52E-02	2.12E-02	7.67E-03	6.14E-04	3.89E-06	2.47E-08	0.
CE144	5.09E-04	3.64E-03	3.62E-03	3.60E-03	3.55E-03	3.47E-03	3.39E-03	3.23E-03	2.85E-03	2.23E-03	1.75E-03	0.
PR144	1.40E-07	3.64E-03	3.62E-03	3.60E-03	3.55E-03	3.47E-03	3.39E-03	3.23E-03	2.85E-03	2.23E-03	1.75E-03	0.
PR145	2.05E-02	2.10E-01	1.30E-02	3.07E-06	2.80E-12	2.32E-24	1.93E-36	0.	0.	0.	0.	0.
ND147	2.50E-06	4.20E-02	3.94E-02	3.27E-02	2.39E-02	1.29E-02	6.86E-03	1.97E-03	8.64E-05	1.68E-07	3.27E-10	0.
PM147	6.93E-15	3.14E-05	6.08E-05	1.39E-04	2.40E-04	3.66E-04	4.33E-04	4.82E-04	4.87E-04	4.54E-04	4.22E-04	0.
ND149	3.62E+00	3.51E-04	3.40E-08	3.10E-20	2.64E-40	0.	0.	0.	0.	0.	0.	0.
PM149	5.05E-04	9.32E-02	6.82E-02	2.67E-02	5.56E-03	2.43E-04	1.06E-05	2.01E-08	3.17E-15	7.81E-29	1.95E-42	0.
PM150	4.18E-02	8.83E-05	1.86E-07	1.75E-15	7.30E-29	0.	0.	0.	0.	0.	0.	0.

1

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	9.10E-03	6.20E-02	3.42E-02	5.76E-03	2.95E-04	7.75E-07	2.04E-09	1.41E-14	1.77E-27	0.	0.	0.
SM153	3.10E-02	2.18E-02	1.53E-02	5.29E-03	8.99E-04	2.62E-05	7.60E-07	6.38E-10	1.32E-17	5.61E-33	2.38E-48	0.
SM156	3.03E-02	5.17E-03	8.81E-04	4.34E-06	6.25E-10	1.29E-17	2.65E-25	1.13E-40	0.	0.	0.	0.
EU155	1.28E-06	4.32E-05	4.32E-05	4.32E-05	4.30E-05	4.29E-05	4.27E-05	4.24E-05	4.16E-05	3.99E-05	3.83E-05	0.
EU156	8.86E-05	7.21E-04	7.99E-04	7.16E-04	5.69E-04	3.57E-04	2.25E-04	8.94E-05	8.86E-06	8.73E-08	8.60E-10	0.
EU157	4.93E-03	5.69E-03	1.92E-03	7.18E-05	3.02E-07	5.32E-12	9.42E-17	2.93E-26	0.	0.	0.	0.
GD159	9.41E-04	1.85E-03	7.38E-04	4.60E-05	4.53E-07	4.39E-11	4.25E-15	3.99E-23	3.41E-43	0.	0.	0.
TB161	1.20E-05	7.82E-05	7.06E-05	5.22E-05	3.16E-05	1.16E-05	4.24E-06	5.68E-07	3.76E-09	1.62E-13	7.06E-18	0.
TOTAL	3.56E+02	5.56E+01	2.42E+01	9.46E+00	4.61E+00	1.97E+00	1.19E+00	6.33E-01	2.53E-01	7.76E-02	3.66E-02	0.

ANNIE MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	2.46E-06	2.12E-08	1.97E-09	1.83E-10	1.47E-13	1.18E-16	8.82E-21	5.66E-27	0.	0.	0.
MN 54	8.41E-06	3.62E-06	2.39E-06	1.57E-06	4.49E-07	1.28E-07	2.41E-08	1.97E-09	4.63E-13	1.67E-18	6.06E-24
FE 59	5.94E-05	2.14E-07	1.29E-08	7.73E-10	1.68E-13	3.63E-17	4.72E-22	2.22E-29	0.	0.	0.
CO 57	1.31E-05	5.15E-06	3.22E-06	2.02E-06	4.98E-07	1.23E-07	1.90E-09	1.15E-09	1.01E-13	8.26E-20	0.
CO 58	1.15E-04	3.32E-06	5.62E-07	9.53E-08	4.64E-10	2.26E-12	1.86E-15	4.42E-20	1.69E-35	0.	0.
CO 60	9.17E-06	8.03E-06	7.49E-06	7.00E-06	5.75E-06	4.73E-06	3.63E-06	2.45E-06	6.57E-07	9.12E-08	1.26E-08
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	2.69E-02	6.72E-11	6.54E-11	6.37E-11	5.96E-11	5.53E-11	5.03E-11	4.36E-11	2.72E-11	1.33E-11	6.54E-12
AM241	1.58E-09	1.58E-09	1.58E-09	1.58E-09	1.59E-09	1.59E-09	1.59E-09	1.60E-09	1.61E-09	1.59E-09	1.57E-09
CM242	7.90E-08	1.67E-08	7.70E-09	3.54E-09	3.45E-10	3.36E-11	1.51E-12	1.42E-14	4.09E-19	3.82E-19	3.56E-19
KR 85	5.72E-06	1.42E-04	1.38E-04	1.33E-04	1.21E-04	1.10E-04	9.64E-05	7.95E-05	4.20E-05	1.60E-05	6.13E-06
SR 89	4.90E-06	1.15E-03	1.00E-04	8.80E-06	5.93E-09	4.00E-12	2.36E-16	1.07E-22	7.80E-44	0.	0.
SR 90	9.83E-06	9.83E-04	9.75E-04	9.66E-04	9.30E-04	8.94E-04	8.51E-04	7.90E-04	6.18E-04	4.26E-04	2.95E-04
Y 90	1.46E-11	9.83E-04	9.75E-04	9.66E-04	9.30E-04	8.94E-04	8.51E-04	7.90E-04	6.18E-04	4.26E-04	2.95E-04
Y 91	2.84E-08	1.92E-03	2.23E-04	2.59E-05	4.06E-08	6.37E-11	1.17E-14	2.86E-20	5.78E-39	0.	0.
ZR 95	1.64E-04	4.22E-04	6.02E-05	8.58E-06	2.50E-08	7.28E-11	3.01E-14	2.54E-19	3.11E-36	0.	0.
NB 95M	3.50E-12	8.94E-06	1.28E-06	1.82E-07	5.30E-10	1.54E-12	6.39E-16	5.39E-21	6.61E-38	0.	0.
NB 95	1.83E-11	9.08E-04	1.30E-04	1.86E-05	5.39E-08	1.56E-10	6.53E-14	5.51E-19	6.75E-36	0.	0.
RU103	1.09E-04	4.22E-04	1.73E-05	7.11E-07	4.85E-11	3.32E-15	9.34E-21	4.39E-29	0.	0.	0.
RH103M	7.25E-09	4.23E-04	1.73E-05	7.11E-07	4.86E-11	3.33E-15	9.34E-21	4.40E-29	0.	0.	0.
RU106	6.88E-04	6.54E-03	4.63E-03	3.28E-03	1.17E-03	4.14E-04	1.04E-04	1.32E-05	1.33E-08	4.28E-13	1.38E-17
RH106	7.44E-06	6.54E-03	4.63E-03	3.28E-03	1.17E-03	4.14E-04	1.04E-04	1.32E-05	1.33E-08	4.28E-13	1.38E-17
SN123	5.58E-06	7.73E-05	2.81E-05	1.02E-05	4.89E-07	2.35E-08	4.09E-10	9.42E-13	1.51E-21	9.73E-35	6.25E-48
SB125	9.52E-05	1.92E-04	1.68E-04	1.48E-04	1.01E-04	6.87E-05	4.11E-05	1.90E-05	1.46E-06	3.11E-08	6.62E-10
TE125M	2.56E-12	7.82E-05	6.95E-05	6.13E-05	4.18E-05	2.84E-05	1.70E-05	7.86E-06	6.04E-07	1.29E-08	2.74E-10
TE127M	3.91E-10	1.87E-04	5.85E-05	1.83E-05	5.63E-07	1.73E-08	1.67E-10	1.57E-13	1.29E-23	9.62E-39	7.17E-54
TE127	2.73E-02	1.85E-04	5.79E-05	1.81E-05	5.57E-07	1.71E-08	1.65E-10	1.55E-13	1.27E-23	9.49E-39	7.10E-54
CS137	1.19E-04	1.26E-03	1.24E-03	1.23E-03	1.18E-03	1.14E-03	1.09E-03	1.02E-03	8.06E-04	5.73E-04	4.05E-04
BA137M	2.51E-07	1.18E-03	1.16E-03	1.15E-03	1.11E-03	1.07E-03	1.02E-03	9.56E-04	7.56E-04	5.35E-04	3.79E-04
CE141	1.44E-07	6.23E-05	1.25E-06	2.52E-08	2.05E-13	1.67E-18	2.74E-25	1.81E-35	0.	0.	0.
CE144	5.09E-04	1.49E-03	9.61E-04	6.13E-04	1.61E-04	4.23E-05	7.11E-06	4.91E-07	6.61E-11	1.04E-16	1.62E-22
PR144	1.40E-07	1.49E-03	9.61E-04	6.13E-04	1.61E-04	4.23E-05	7.11E-06	4.91E-07	6.61E-11	1.04E-16	1.62E-22
PM147	6.93E-15	4.03E-04	3.52E-04	3.09E-04	2.08E-04	1.40E-04	8.20E-05	3.72E-05	2.64E-06	5.00E-08	9.46E-10
EU155	1.28E-06	3.74E-05	3.47E-05	3.23E-05	2.60E-05	2.09E-05	1.56E-05	1.01E-05	2.35E-06	2.64E-07	2.98E-08
TOTAL	5.61E-02	2.71E-02	1.70E-02	1.29E-02	7.31E-03	5.29E-03	4.29E-03	3.74E-03	2.85E-03	1.98E-03	1.38E-03

APPENDIX 8
ANNIE EVENT

<u>mR/hr</u>	<u>Page</u>
Fraction of refractories present = 1.0	8-1
Fraction of refractories present = 0.5	8-11
Fraction of refractories present = 0.1	8-21

DEBRIS DECAY FROM 1 TO 21 HOURS

ZERO TIME 1.00E+00 2.00E+00 3.00E+00 4.00E+00 6.00E+00 9.00E+00 1.20E+01 1.50E+01 1.80E+01 2.10E+01

BE	7	1.27E-08	1.26E-08	1.26E-08	1.26E-08	1.26E-08	1.26E-08	1.26E-08	1.26E-08	1.25E-08	1.25E-08	1.25E-08
NA	24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MN	54	6.96E-07	6.96E-07	6.96E-07	6.96E-07	6.96E-07	6.96E-07	6.96E-07	6.90E-07	6.90E-07	6.90E-07	6.90E-07
FE	55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE	59	6.64E-06	6.63E-06	6.63E-06	6.63E-06	6.63E-06	6.62E-06	6.61E-06	6.60E-06	6.58E-06	6.57E-06	6.56E-06
CO	57	1.48E-07	1.48E-07	1.48E-07	1.48E-07	1.48E-07	1.48E-07	1.48E-07	1.48E-07	1.48E-07	1.48E-07	1.48E-07
CO	58	1.13E-05	1.13E-05	1.13E-05	1.13E-05	1.12E-05	1.12E-05	1.12E-05	1.12E-05	1.12E-05	1.12E-05	1.12E-05
CO	60	2.13E-06	2.13E-06	2.13E-06	2.13E-06	2.13E-06	2.13E-06	2.13E-06	2.13E-06	2.13E-06	2.13E-06	2.13E-06
CU	64	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CU	67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W	188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU	199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB	203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237		3.46E-04	3.44E-04	3.43E-04	3.41E-04	3.40E-04	3.37E-04	3.32E-04	3.29E-04	3.24E-04	3.20E-04	3.16E-04
U239		2.47E+00	4.21E-01	7.18E-02	1.22E-02	2.08E-03	6.05E-05	3.00E-07	1.48E-09	7.33E-12	3.62E-14	1.79E-16
U240		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239		2.93E-05	4.91E-02	5.68E-02	5.77E-02	5.72E-02	5.59E-02	5.36E-02	5.18E-02	5.00E-02	4.82E-02	4.64E-02
NP240M		4.81E-06	2.91E-03	2.78E-03	2.65E-03	2.52E-03	2.28E-03	1.97E-03	1.70E-03	1.47E-03	1.26E-03	1.09E-03
NP240		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AM241		2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12
CM242		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE75		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE77		7.44E-05	1.92E-04	1.80E-04	1.70E-04	1.60E-04	1.41E-04	1.17E-04	9.76E-05	8.13E-05	6.75E-05	5.62E-05
AS77		6.71E-09	1.06E-06	1.07E-06	1.08E-06	1.09E-06	1.09E-06	1.09E-06	1.09E-06	1.07E-06	1.05E-06	1.02E-06
SE77M		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE78		2.76E-03	1.73E-03	1.07E-03	6.72E-04	4.19E-04	1.63E-04	3.96E-05	9.60E-06	2.34E-06	5.69E-07	1.38E-07
AS78		2.09E-04	3.48E-03	4.28E-03	4.01E-03	3.36E-03	1.98E-03	7.36E-04	2.44E-04	7.56E-05	2.26E-05	6.55E-06
AS79		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SE79M		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
BR80		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SE81M		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SE81		0.	0.	0.								

ANNIE MR/HR
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BR 84	1.77E-03	3.06E-01	8.25E-02	2.24E-02	6.04E-03	4.42E-04	8.73E-06	1.72E-07	3.41E-09	6.74E-11	1.33E-12	
KR 85M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 87	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RB 88	7.42E-02	2.31E-01	1.97E-01	1.55E-01	1.21E-01	7.38E-02	3.52E-02	1.68E-02	7.99E-03	3.80E-03	1.80E-03	
RB 89	1.20E+00	1.12E+00	7.55E-02	5.08E-03	3.40E-04	1.54E-06	4.66E-10	1.41E-13	4.29E-17	1.30E-20	3.94E-24	
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 91	9.03E-03	1.68E-01	1.57E-01	1.46E-01	1.36E-01	1.17E-01	9.48E-02	7.66E-02	6.19E-02	4.97E-02	4.01E-02	
Y 91M	4.88E-07	4.65E-02	6.34E-02	6.80E-02	6.71E-02	6.02E-02	4.93E-02	3.96E-02	3.20E-02	2.58E-02	2.08E-02	
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 92	2.08E-01	9.30E-01	7.21E-01	5.58E-01	4.32E-01	2.59E-01	1.20E-01	5.58E-02	2.59E-02	1.20E-02	5.59E-03	
Y 92	1.90E-03	3.86E-02	6.06E-02	7.21E-02	7.65E-02	7.29E-02	5.59E-02	3.81E-02	2.45E-02	1.51E-02	9.09E-03	
SR 93	1.50E+01	2.58E-01	1.42E-03	7.86E-06	4.33E-08	1.33E-12	2.23E-19	3.77E-26	6.36E-33	1.07E-39	1.81E-46	
Y 93	6.83E-04	2.21E-02	2.07E-02	1.94E-02	1.81E-02	1.58E-02	1.29E-02	1.05E-02	8.55E-03	7.02E-03	5.71E-03	
Y 94	7.48E-01	1.02E+00	1.31E-01	1.69E-02	2.19E-03	3.63E-05	7.79E-08	1.67E-10	3.57E-13	7.79E-16	4.32E-17	
Y 95	4.75E+00	4.48E-01	9.87E-03	2.18E-04	4.79E-06	2.33E-09	2.49E-14	2.66E-19	2.84E-24	3.04E-29	3.25E-34	
ZR 95	1.22E-05	1.59E-03	1.62E-03	1.62E-03	1.62E-03	1.62E-03	1.62E-03	1.62E-03	1.62E-03	1.61E-03	1.61E-03	
NB 95	1.40E-12	1.02E-06	2.37E-06	3.72E-06	5.08E-06	7.78E-06	1.18E-05	1.59E-05	1.99E-05	2.39E-05	2.79E-05	
ZR 97	6.83E-03	2.97E-02	2.85E-02	2.74E-02	2.62E-02	2.42E-02	2.14E-02	1.89E-02	1.68E-02	1.48E-02	1.32E-02	
NB 97M	1.51E-04	1.23E-01	1.18E-01	1.13E-01	1.09E-01	1.00E-01	8.84E-02	7.83E-02	6.92E-02	6.11E-02	5.40E-02	
NB 97	1.33E-02	5.82E-02	8.21E-02	9.35E-02	9.81E-02	9.76E-02	8.89E-02	7.93E-02	7.01E-02	6.19E-02	5.50E-02	
NB 98	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MO 98	1.94E-05	7.99E-03	7.90E-03	7.83E-03	7.74E-03	7.58E-03	7.36E-03	7.13E-03	6.92E-03	6.71E-03	6.50E-03	
TC 99M	1.33E-10	5.65E-04	1.06E-03	1.50E-03	1.88E-03	2.51E-03	3.19E-03	3.62E-03	3.88E-03	4.03E-03	4.10E-03	
MO101	2.58E+00	1.17E+00	6.76E-02	3.92E-03	2.28E-04	7.52E-07	1.48E-10	2.89E-14	5.61E-18	1.09E-21	2.12E-25	
TC101	2.52E-02	7.57E-01	8.28E-02	6.79E-03	4.95E-04	2.23E-06	5.58E-10	1.25E-13	2.65E-17	5.45E-21	1.10E-24	
MO102	6.04E+00	1.38E-01	3.13E-03	7.16E-05	1.63E-06	8.48E-10	1.01E-14					

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD111M	4.33E-03	3.81E-03	3.36E-03	2.97E-03	2.62E-03	2.04E-03	1.39E-03	9.55E-04	6.54E-04	4.48E-04	3.07E-04	3.07E-04
PD111	1.09E-04	1.97E-04	1.89E-04	1.68E-04	1.49E-04	1.16E-04	7.93E-05	5.43E-05	3.72E-05	2.55E-05	1.75E-05	1.75E-05
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG111	2.98E-13	8.83E-07	1.85E-06	2.73E-06	3.50E-06	4.77E-06	6.13E-06	7.02E-06	7.61E-06	7.97E-06	8.19E-06	8.19E-06
PD112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG112	4.42E-08	2.81E-04	4.96E-04	6.66E-04	7.91E-04	9.48E-04	1.04E-03	1.04E-03	9.88E-04	9.21E-04	8.49E-04	8.49E-04
AG113	1.47E-06	3.15E-04	2.76E-04	2.42E-04	2.12E-04	1.63E-04	1.11E-04	7.47E-05	5.04E-05	3.40E-05	2.30E-05	2.30E-05
AG115	4.52E-03	4.84E-03	6.03E-04	7.54E-05	9.44E-06	1.47E-07	2.88E-10	5.63E-13	1.09E-15	1.08E-16	1.00E-18	1.00E-18
CD115M	1.26E-12	3.34E-08	3.75E-08	3.80E-08	3.80E-08	3.80E-08	3.79E-08	3.79E-08	3.78E-08	3.77E-08	3.77E-08	3.77E-08
CD115	5.47E-09	1.03E-04	1.11E-04	1.11E-04	1.09E-04	1.07E-04	1.03E-04	9.86E-05	9.49E-05	9.13E-05	8.77E-05	8.77E-05
IN115M	4.60E-14	7.68E-06	1.71E-05	2.53E-05	3.23E-05	4.30E-05	5.31E-05	5.85E-05	6.10E-05	6.16E-05	6.11E-05	6.11E-05
CD117	5.09E-04	8.47E-03	6.38E-03	4.76E-03	3.57E-03	2.00E-03	8.41E-04	3.54E-04	1.49E-04	6.26E-05	2.64E-05	2.64E-05
IN117M	1.84E-09	2.22E-04	3.21E-04	3.48E-04	3.37E-04	2.65E-04	1.52E-04	7.77E-05	3.73E-05	1.73E-05	7.81E-06	7.81E-06
IN117	6.86E-13	3.75E-04	9.07E-04	1.26E-03	1.41E-03	1.29E-03	8.24E-04	4.41E-04	2.19E-04	1.03E-04	4.74E-05	4.74E-05
CD118	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN118	5.48E-04	3.54E-03	1.52E-03	6.50E-04	2.78E-04	5.09E-05	3.99E-06	3.13E-07	2.45E-08	1.92E-09	1.51E-10	1.51E-10
CD119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN119M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN121	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN123M	7.81E-04	1.46E-03	5.18E-04	1.83E-04	6.47E-05	8.08E-06	3.58E-07	1.58E-08	7.01E-10	3.09E-11	1.37E-12	1.37E-12
SN123	3.72E-10	3.89E-08	3.89E-08	3.89E-08	3.89E-08	3.89E-08	3.89E-08	3.89E-08	3.89E-08	3.89E-08	3.89E-08	3.89E-08
SN125	4.63E-05	4.62E-05	4.61E-05	4.59E-05	4.57E-05	4.55E-05	4.51E-05	4.46E-05	4.42E-05	4.38E-05	4.34E-05	4.34E-05
SB125	4.06E-07	4.08E-07	4.10E-07	4.11E-07	4.13E-07	4.17E-07	4.24E-07	4.29E-07	4.34E-07	4.40E-07	4.45E-07	4.45E-07
SB126	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN127	7.36E-02	5.29E-02	3.80E-02	2.74E-02	1.97E-02	1.02E-02	3.78E-03	1.40E-03	5.20E-04	1.94E-04	7.19E-05	7.19E-05
SB127	3.37E-04	1.16E-03	1.29E-03	1.37E-03	1.43E-03	1.49E-03	1.51E-03	1.50E-03	1.48E-03	1.44E-03	1.42E-03	1.42E-03
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN128	1.82E-01	8.99E-02	4.45E-02	2.20E-02	1.09E-02	2.65E-03	3.21E-04	3.87E-05	4.66E-06	5.66E-07	6.82E-08	6.82E-08
SB128M	2.73E-04	3.02E-01	1.57E-01	7.73E-02	3.81E-02	9.33E-03	1.12E-03	1.36E-04	1.64E-05	1.98E-06	2.39E-07	2.39E-07
SB128	3.68E-02	3.54E-02	3.34E-02	3.13E-02	2.92E-02	2.50E-02	2.00E-02	1.58E-02	1.26E-02	9.99E-03	7.92E-03	7.92E-03
SN129M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN129	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SB129	8.90E-02	1.49E-01	1.40E-01	1.25E-01	1.10E-01	8.18E-02	5.09E-02	3.15E-02	1.94E-02	1.20E-02	7.39E-03	7.39E-03
TE129M	3.79E-11	4.20E-07	8.64E-07	1.27E-06	1.63E-06	2.21E-06	2.80E-06	3.16E-06	3.38E-06	3.52E-06	3.61E-06	3.61E-06
TE129	2.70E-03	3.72E-03	4.35E-03	4.52E-03	4.35E-03	3.60E-03	2.40E-03	1.51E-03	9.42E-04	5.83E-04	3.62E-04	3.62E-04
SB130M	1.75E-02	3.30E-02	8.68E-05	2.28E-07	6.00E-10	4.14E-15	7.54E-23	1.37E-30	2.49E-38	4.52E-46	8.22E-54	8.22E-54
SB130	3.72E+00	1.12E+00	3.20E-01	9.05E-02	2.56E-02	2.06E-03	4.70E-05	1.07E-06	2.45E-08	5.57E-10	1.27E-11	1.27E-11

1

ANNIE MR/HR
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	6.98E-04	6.60E-04	6.25E-04	5.90E-04	5.59E-04	5.00E-04	4.22E-04	3.57E-04	3.02E-04	2.56E-04	2.16E-04	
SB131	4.84E+00	1.26E+00	2.06E-01	3.39E-02	5.56E-03	1.50E-04	6.59E-07	2.91E-09	1.28E-11	5.65E-14	2.82E-16	
TE131M	1.79E-06	9.34E-03	1.07E-02	1.07E-02	1.05E-02	1.00E-02	9.33E-03	8.71E-03	8.13E-03	7.58E-03	7.07E-03	
TE131	4.82E-01	5.23E-01	1.70E-01	4.43E-02	1.08E-02	1.01E-03	5.02E-04	4.64E-04	4.33E-04	4.05E-04	3.78E-04	
I131	6.71E-05	2.33E-03	3.42E-03	3.75E-03	3.82E-03	3.85E-03	3.85E-03	3.82E-03	3.82E-03	3.79E-03	3.79E-03	
TE132	2.83E-03	6.88E-03	6.82E-03	6.76E-03	6.69E-03	6.57E-03	6.40E-03	6.23E-03	6.08E-03	5.91E-03	5.75E-03	
I132	7.53E-02	7.51E-02	7.49E-02	7.45E-02	7.40E-02	7.31E-02	7.14E-02	6.95E-02	6.77E-02	6.60E-02	6.43E-02	
TE133M	3.65E-03	1.26E+00	5.51E-01	2.40E-01	1.04E-01	1.98E-02	1.63E-03	1.34E-04	1.11E-05	9.14E-07	7.54E-08	
TE133	8.32E+00	4.71E-01	5.24E-02	1.73E-02	7.33E-03	1.39E-03	1.15E-04	9.44E-06	7.82E-07	6.43E-08	5.31E-09	
I133	8.83E-03	9.51E-02	1.03E-01	1.03E-01	1.01E-01	9.56E-02	8.69E-02	7.87E-02	7.09E-02	6.47E-02	5.84E-02	
XE133M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE133	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
TE134	2.50E+00	1.16E+00	4.32E-01	1.60E-01	5.95E-02	8.25E-03	4.22E-04	2.16E-05	1.11E-06	5.69E-08	2.91E-09	
I134	3.41E+00	4.55E+00	3.19E+00	1.87E+00	1.00E+00	2.55E-01	2.80E-02	2.86E-03	2.80E-04	2.69E-05	2.55E-06	
I135	3.49E-01	6.14E-01	5.54E-01	4.99E-01	4.51E-01	3.66E-01	2.69E-01	1.96E-01	1.44E-01	1.06E-01	7.76E-02	
XE135M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE135	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS136	1.88E-04	1.87E-04	1.87E-04	1.87E-04	1.86E-04	1.85E-04	1.84E-04	1.83E-04	1.82E-04	1.80E-04	1.79E-04	
CS137	6.83E-07	7.36E-06	7.36E-06	7.36E-06	7.36E-06	7.36E-06	7.36E-06	7.36E-06	7.36E-06	7.36E-06	7.36E-06	
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE138	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS138	2.84E+00	4.78E+00	1.66E+00	4.87E-01	1.36E-01	1.04E-02	2.16E-04	4.48E-06	9.31E-08	1.94E-09	4.01E-11	
CS139	2.32E+00	7.39E-02	9.27E-04	1.16E-05	1.46E-07	2.29E-11	4.57E-17	9.02E-23	1.79E-28	3.54E-34	6.99E-40	
BA139	5.71E-03	6.36E-02	3.92E-02	2.38E-02	1.44E-02	5.29E-03	1.17E-03	2.61E-04	5.79E-05	1.28E-05	2.85E-06	
BA140	2.48E-04	1.55E-03	1.55E-03	1.53E-03	1.53E-03	1.52E-03	1.52E-03	1.51E-03	1.50E-03	1.49E-03	1.47E-03	
LA140	8.14E-09	3.65E-04	7.24E-04	1.07E-03	1.42E-03	2.09E-03	3.05E-03	3.95E-03	4.79E-03	5.59E-03	6.34E-03	
BA141	2.60E+00	7.85E-01	7.79E-02	7.72E-03	7.66E-04	7.60E-06	7.41E-09	7.23E-12	7.04E-15	6.92E-18	6.74E-21	
LA141	1.12E-03	2.38E-02	2.22E-02	1.88E-02	1.58E-02	1.11E-02	6.49E-03	3.80E-03	2.23E-03	1.31E-03	7.68E-04	
CE141	2.45E-10	2.72E-05	6.38E-05	9.59E-05	1.23E-04	1.65E-04	2.05E-04	2.28E-04	2.41E-04	2.48E-04	2.53E-04	
BA142	8.54E+00	3.40E-01	7.75E-03	1.77E-04	4.02E-06	2.09E-09	2.48E-14	2.95E-19	3.50E-24	4.15E-29	4.92E-34	
LA142	4.26E-01	2.96E+00	1.95E+00	1.24E+00	7.89E-01	3.19E-01	8.24E-02	2.12E-02	5.47E-03	1.41E-03	3.63E-04	
LA143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE143	3.33E-04	2.12E-02	2.20E-02	2.14E-02	2.10E-02	2.02E-02	1.89E-02	1.78E-02	1.67E-02	1.57E-02	1.47E-02	
PR143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE144	7.95E-07	5.70E-06	5.70E-06	5.70E-06	5.70E-06	5.70E-06	5.68E-06	5.68E-06	5.68E-06	5.68E-06	5.68E-06	
PR144	3.89E-10	9.24E-06	1.01E-05	1.01E-05	1.02E-05	1.02E-05	1.02E-05	1.02E-05	1.01E-05	1.01E-05	1.01E-05	
PR145	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE146	1.88E+00	9.64E-02	4.94E-03	2.53E-04	1.30E-05	3.43E-08	4.61E-12	6.22E-16	8.37E-20	1.13E-23	1.52E-27	
PR146	1.32E-01	1.15E+00	2.61E-01	4.91E-02	8.83E-03	2.78E-04	1.53E-06	8.45E-09	4.68E-11	2.59E-13	1.41E-15	
PR147	4.92E-01	1.42E-01	4.45E-03	1.39E-04	4.35E-06	4.24E-09	1.29E-13	3.96E-18	1.21E-22	3.69E-27	1.12E-31	

ANNIE
MR/HR AT H+12 HOURS = MR/HR
FRACTION OF REFRACTORIES PRESENT = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	3.42E-08	6.44E-04	6.62E-04	6.61E-04	6.59E-04	6.56E-04	6.51E-04	6.46E-04	6.41E-04	6.36E-04	6.31E-04	
ND149	1.35E-01	9.20E-02	6.26E-02	4.27E-02	2.89E-02	1.34E-02	4.22E-03	1.33E-03	4.19E-04	1.32E-04	4.17E-05	
PM149	5.86E-07	4.58E-05	7.60E-05	9.63E-05	1.09E-04	1.23E-04	1.27E-04	1.25E-04	1.22E-04	1.17E-04	1.13E-04	
PM150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
ND151	8.09E-01	2.53E-02	7.91E-04	2.47E-05	7.73E-07	7.55E-10	2.30E-14	7.04E-19	2.15E-23	6.54E-28	2.00E-32	
PM151	2.88E-04	3.37E-03	3.39E-03	3.31E-03	3.23E-03	3.06E-03	2.84E-03	2.64E-03	2.46E-03	2.27E-03	2.11E-03	
PM152	6.77E-01	6.63E-04	6.46E-07	6.31E-10	6.17E-13	5.89E-19	5.48E-28	5.11E-37	4.76E-46	4.45E-55	4.13E-64	
SM153	1.63E-04	1.60E-04	1.58E-04	1.56E-04	1.53E-04	1.49E-04	1.42E-04	1.36E-04	1.30E-04	1.25E-04	1.19E-04	
SM155	1.67E-02	2.75E-03	4.50E-04	7.36E-05	1.21E-05	3.25E-07	1.43E-09	6.31E-12	2.78E-14	1.24E-16	3.05E-19	
EU155	6.78E-09	1.93E-07	2.24E-07	2.29E-07	2.30E-07	2.30E-07	2.30E-07	2.30E-07	2.30E-07	2.30E-07	2.30E-07	
SM156	3.29E-04	3.06E-04	2.84E-04	2.64E-04	2.45E-04	2.11E-04	1.69E-04	1.36E-04	1.09E-04	8.73E-05	6.98E-05	
EU156	1.08E-05	1.76E-05	2.39E-05	2.97E-05	3.52E-05	4.48E-05	5.71E-05	6.60E-05	7.40E-05	7.98E-05	8.40E-05	
EU157	1.18E-04	3.91E-04	3.74E-04	3.57E-04	3.40E-04	3.11E-04	2.72E-04	2.37E-04	2.07E-04	1.80E-04	1.57E-04	
EU158	2.39E-02	9.68E-03	3.91E-03	1.59E-03	6.42E-04	1.05E-04	7.00E-06	4.64E-07	3.08E-08	2.05E-09	1.36E-10	
EU159	6.09E-03	6.05E-04	6.00E-05	5.96E-06	5.91E-07	5.83E-09	5.69E-12	5.56E-15	5.42E-18	5.30E-21	5.18E-24	
GD159	3.82E-06	1.67E-05	1.74E-05	1.69E-05	1.62E-05	1.50E-05	1.34E-05	1.20E-05	1.06E-05	9.47E-06	8.45E-06	
TB161	9.17E-09	6.60E-08	6.55E-08	6.53E-08	6.51E-08	6.44E-08	6.38E-08	6.29E-08	6.21E-08	6.14E-08	6.05E-08	
TOTAL	1.06E+02	3.16E+01	1.27E+01	6.94E+00	4.43E+00	2.37E+00	1.39E+00	1.00E+00	7.84E-01	6.43E-01	5.42E-01	

1

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	1.27E-08	1.25E-08	1.23E-08	1.19E-08	1.11E-08	9.76E-09	8.57E-09	6.59E-09	3.45E-09	9.37E-10	2.55E-10
NA 24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MN 54	6.96E-07	6.90E-07	6.90E-07	6.78E-07	6.71E-07	6.59E-07	6.47E-07	6.16E-07	5.50E-07	4.37E-07	3.49E-07
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	6.64E-06	6.54E-06	6.44E-06	6.15E-06	5.69E-06	4.88E-06	4.18E-06	3.07E-06	1.43E-06	3.04E-07	6.54E-08
CO 57	1.48E-07	1.48E-07	1.47E-07	1.47E-07	1.44E-07	1.40E-07	1.37E-07	1.30E-07	1.15E-07	8.87E-08	6.87E-08
CO 58	1.13E-05	1.12E-05	1.10E-05	1.07E-05	1.02E-05	9.27E-06	8.41E-06	6.93E-06	4.27E-06	1.61E-06	6.09E-07
CO 60	2.13E-06	2.13E-06	2.13E-06	2.13E-06	2.12E-06	2.12E-06	2.11E-06	2.10E-06	2.05E-06	1.98E-06	1.91E-06
CU 64	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CU 67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	3.46E-04	3.12E-04	2.81E-04	2.07E-04	1.24E-04	4.44E-05	1.59E-05	2.03E-06	1.20E-08	1.29E-12	8.71E-13
U240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	2.93E-05	4.47E-02	3.33E-02	1.37E-02	3.15E-03	1.64E-04	8.61E-06	2.36E-08	9.28E-15	2.22E-24	2.22E-24
NP240M	4.81E-06	9.42E-04	2.90E-04	8.39E-06	2.30E-08	1.74E-13	1.30E-18	7.36E-29	0.	0.	0.
AM241	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.88E-12
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 77	7.44E-05	4.69E-05	1.07E-05	1.30E-07	8.24E-11	3.34E-17	1.35E-23	2.20E-36	0.	0.	0.
AS 77	6.71E-09	9.91E-07	7.17E-07	2.07E-07	2.43E-08	3.30E-10	4.48E-12	8.25E-16	3.83E-25	8.21E-44	1.76E-62
SE 77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AS 78	2.09E-04	1.86E-06	5.46E-11	4.61E-25	0.	0.	0.	0.	0.	0.	0.
BR 82	1.60E-05	9.97E-06	6.23E-06	1.51E-06	1.43E-07	1.29E-09	1.16E-11	9.34E-16	5.45E-26	1.87E-46	6.37E-67
BR 83	3.63E-05	9.57E-07	9.62E-10	9.77E-19	9.97E-34	0.	0.	0.	0.	0.	0.
KR 83M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 87	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RB 88	7.42E-02	8.56E-04	2.26E-06	4.10E-14	5.14E-27	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 91	9.03E-03	3.23E-02	5.79E-03	3.32E-05	6.07E-09	2.06E-16	6.98E-24	7.95E-39	0.	0.	0.

ANNIE MR/HR
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 1.000
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

		ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02										
Y 91M	4.	88E-07	1.	68E-02	3.	00E-03	1.	72E-05	3.	17E-09	1.	07E-16	3.	61E-24	4.	12E-39	0.						
Y 91	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.
SR 92	2.	08E-01	2.	60E-03	5.	60E-06	5.	63E-14	2.	64E-27	0.		0.		0.		0.		0.		0.		0.
Y 92	1.	90E-03	5.	38E-03	5.	97E-05	4.	59E-11	2.	68E-21	9.	16E-42	3.	14E-62	0.		0.		0.		0.		0.
Y 93	6.	83E-04	4.	61E-03	9.	00E-04	6.	77E-06	1.	95E-09	1.	61E-16	1.	33E-23	9.	06E-38	0.		0.		0.		0.
ZR 95	1.	22E-05	1.	52E-03	1.	51E-03	1.	46E-03	1.	38E-03	1.	24E-03	1.	12E-03	9.	03E-04	5.	29E-04	1.	62E-04	6.	25E-05	
NB 95M	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.
NB 95	1.	40E-12	3.	04E-05	6.	02E-05	1.	44E-04	2.	68E-04	4.	62E-04	5.	96E-04	7.	40E-04	7.	12E-04	3.	42E-04	1.	31E-04	
ZR 97	6.	83E-03	1.	16E-02	4.	37E-03	2.	32E-04	1.	74E-06	9.	79E-11	5.	50E-15	1.	74E-23	9.	82E-45	0.				
NB 97M	1.	51E-04	4.	80E-02	1.	80E-02	9.	60E-04	7.	17E-06	4.	04E-10	2.	27E-14	7.	17E-23	4.	06E-44	0.				
NB 97	1.	33E-02	4.	55E-02	1.	71E-02	9.	08E-04	6.	83E-06	4.	11E-10	2.	31E-14	7.	33E-23	4.	13E-44	0.				
M0 99	1.	94E-05	6.	30E-03	4.	92E-03	2.	33E-03	6.	75E-04	5.	64E-05	4.	70E-06	3.	28E-08	1.	33E-13	2.	19E-24	3.	61E-35	
TC 99M	1.	33E-10	4.	10E-03	3.	46E-03	1.	65E-03	4.	77E-04	3.	99E-05	3.	33E-06	2.	32E-08	9.	42E-14	1.	55E-24	2.	56E-35	
RUI 03	5.	27E-07	1.	20E-03	1.	18E-03	1.	12E-03	1.	03E-03	8.	61E-04	7.	23E-04	5.	10E-04	2.	12E-04	3.	68E-05	6.	42E-06	
RHI 03M	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.
RUI 05	6.	12E-03	5.	85E-03	1.	37E-04	1.	81E-09	1.	32E-17	7.	05E-34	3.	78E-50	0.		0.		0.		0.		0.
RHI 05M	1.	29E-06	1.	88E-04	4.	43E-06	5.	83E-11	4.	26E-19	2.	28E-35	1.	22E-51	0.		0.		0.		0.		0.
RHI 05	6.	71E-12	2.	15E-03	1.	40E-03	3.	49E-04	3.	44E-05	3.	35E-07	3.	25E-09	0.		0.		0.		0.		0.
RUI 06	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.
RHI 06	1.	55E-08	2.	71E-05	2.	70E-05	2.	69E-05	2.	66E-05	2.	62E-05	2.	56E-05	2.	46E-05	2.	24E-05	1.	85E-05	1.	54E-05	
PDI 09	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.
AGI 09M	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.
PDI 11M	4.	33E-03	2.	10E-04	1.	02E-05	1.	17E-09	3.	17E-16	2.	31E-29	1.	70E-42	0.		0.		0.		0.		0.
PDI 11	1.	09E-04	1.	20E-05	5.	81E-07	6.	67E-11	1.	81E-17	1.	32E-30	9.	64E-44	0.		0.		0.		0.		0.
AGI 11M	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.
AGI 11	2.	98E-13	8.	22E-06	7.	90E-06	6.	02E-06	3.	79E-06	1.	50E-06	5.	96E-07	9.	39E-08	9.	24E-10	8.	95E-14	8.	68E-18	
PDI 12	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.
AGI 12	4.	42E-08	7.	73E-04	3.	55E-04	3.	30E-05	6.	30E-07	2.	28E-10	8.	27E-14	1.	09E-20	6.	84E-38	0.				
AGI 13	1.	47E-06	1.	55E-05	6.	72E-07	5.	46E-11	8.	36E-18	1.	96E-31	4.	57E-45	0.		0.		0.		0.		0.
CDI 15M	1.	26E-12	3.	63E-08	3.	57E-08	3.	40E-08	3.	14E-08	2.	67E-08	8.	28E-08	1.	65E-08	7.	36E-09	1.	46E-09	2.	92E-10	
CDI 15	5.	47E-09	8.	24E-05	6.	04E-05	2.	38E-05	5.	02E-06	2.	24E-07	1.	00E-08	1.	99E-11	3.	52E-18	1.	10E-31	3.	45E-45	
INI 15M	4.	60E-14	5.	86E-05	4.	44E-05	1.	75E-05	3.	69E-06	1.	65E-07	7.	35E-09	1.	47E-11	2.	60E-18	8.	12E-32	2.	54E-45	
CDI 17	5.	09E-04	1.	11E-05	1.	08E-08	1.	01E-17	8.	94E-33	0.		0.		0.		0.		0.		0.		0.
INI 17M	1.	84E-09	3.	47E-06	4.	01E-09	3.	87E-18	3.	44E-33	0.		0.		0.		0.		0.		0.		0.
INI 17	6.	86E-13	2.	12E-05	2.	51E-08	2.	43E-17	2.	15E-32	0.		0.		0.		0.		0.		0.		0.
SN1 21	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.
SN1 23	3.	72E-10	3.	89E-08	3.	86E-08	3.	79E-08	3.	69E-08	3.	48E-08	5.	31E-08	2.	96E-08	2.	24E-08	1.	29E-08	7.	41E-09	
SN1 25	4.	63E-05	4.	30E-05	4.	00E-05	3.	20E-05	2.	21E-05	1.	06E-05	5.	07E-06	1.	16E-06	2.	90E-08	1.	83E-11	1.	14E-14	
SB1 25	4.	06E-07	4.	50E-07	4.	93E-07	6.	02E-07	7.	38E-07	8.	94E-07	9.	62E-07	1.	00E-06	9.	84E-07	9.	18E-07	8.	57E-07	
SB1 26	0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.		0.

1

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	2.88E-04	1.96E-03	1.08E-03	1.82E-04	9.36E-06	2.46E-08	6.47E-11	4.46E-16	5.60E-29	0.	0.	0.
SM153	1.63E-04	1.14E-04	8.02E-05	2.77E-05	4.71E-06	1.37E-07	3.98E-09	3.34E-12	6.90E-20	2.94E-35	1.25E-50	0.
SM156	3.29E-04	5.62E-05	9.58E-06	4.72E-08	6.80E-12	1.40E-19	2.88E-27	1.23E-42	0.	0.	0.	0.
EU155	6.78E-09	2.30E-07	2.29E-07	2.29E-07	2.29E-07	2.28E-07	2.27E-07	2.25E-07	2.21E-07	2.12E-07	2.04E-07	0.
EU156	1.08E-05	8.77E-05	9.72E-05	8.72E-05	6.92E-05	4.35E-05	2.74E-05	1.09E-05	1.08E-06	1.06E-08	1.05E-10	0.
EU157	1.18E-04	1.36E-04	4.59E-05	1.72E-06	7.23E-09	1.27E-13	2.26E-18	7.02E-28	0.	0.	0.	0.
GD159	3.82E-06	7.52E-06	2.99E-06	1.87E-07	1.84E-09	1.78E-13	1.72E-17	1.62E-25	1.38E-45	0.	0.	0.
TB161	9.17E-09	5.99E-08	5.41E-08	4.00E-08	2.42E-08	8.87E-09	3.24E-09	4.35E-10	2.88E-12	1.24E-16	5.41E-21	0.
TOTAL	2.02E+00	4.60E-01	2.11E-01	7.84E-02	3.52E-02	1.43E-02	8.47E-03	4.18E-03	1.66E-03	6.07E-04	2.35E-04	0.

1

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 2.873E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	1.27E-08	1.09E-10	1.02E-11	9.43E-13	7.59E-16	6.08E-19	4.54E-23	2.91E-29	0.	0.	0.	0.
MN 54	6.96E-07	3.00E-07	1.98E-07	1.30E-07	3.71E-08	1.06E-08	2.00E-09	1.63E-10	3.83E-14	1.39E-19	5.01E-25	0.
FE 59	6.64E-06	2.40E-08	1.44E-09	8.65E-11	1.88E-14	4.05E-18	5.28E-23	2.48E-30	0.	0.	0.	0.
CO 57	1.48E-07	5.82E-08	3.64E-08	2.29E-08	5.63E-09	1.39E-09	2.14E-11	1.30E-11	1.14E-15	9.34E-22	0.	0.
CO 58	1.13E-05	3.24E-07	5.49E-08	9.30E-09	4.53E-11	2.20E-13	1.82E-16	4.31E-21	1.65E-36	0.	0.	0.
CO 60	2.13E-06	1.87E-06	1.74E-06	1.63E-06	1.34E-06	1.10E-06	8.45E-07	5.70E-07	1.53E-07	2.12E-08	2.93E-09	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	3.46E-04	8.63E-13	8.41E-13	8.18E-13	7.66E-13	7.11E-13	6.46E-13	5.61E-13	3.49E-13	1.71E-13	8.41E-14	0.
AM241	2.88E-12	2.88E-12	2.88E-12	2.88E-12	2.90E-12	2.91E-12	2.91E-12	2.93E-12	2.94E-12	2.91E-12	2.87E-12	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZR 95	1.22E-05	3.13E-05	4.46E-06	6.36E-07	1.85E-09	5.39E-12	2.23E-15	1.89E-20	2.31E-37	0.	0.	0.
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	1.40E-12	6.95E-05	9.99E-06	1.42E-06	4.13E-09	1.20E-11	5.00E-15	4.22E-20	5.17E-37	0.	0.	0.
RU103	5.27E-07	2.05E-06	8.38E-08	3.45E-09	2.35E-13	1.61E-17	4.53E-23	2.13E-31	0.	0.	0.	0.
RH103M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU106	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RH106	1.55E-08	1.36E-05	9.63E-06	6.83E-06	2.43E-06	8.62E-07	2.17E-07	2.75E-08	2.77E-11	8.90E-16	2.86E-20	0.
SN123	3.72E-10	5.16E-09	1.87E-09	6.80E-10	3.26E-11	1.56E-12	2.73E-14	6.28E-17	1.01E-25	6.49E-39	4.17E-52	0.
SB125	4.06E-07	8.18E-07	7.19E-07	6.32E-07	4.31E-07	2.93E-07	1.75E-07	8.11E-08	6.23E-09	1.33E-10	2.83E-12	0.
TE125M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS137	6.83E-07	7.20E-06	7.11E-06	7.03E-06	6.79E-06	6.54E-06	6.26E-06	5.85E-06	4.62E-06	3.28E-06	2.32E-06	0.
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE141	2.45E-10	1.06E-07	2.12E-09	4.27E-11	3.47E-16	2.83E-21	4.64E-28	3.08E-38	0.	0.	0.	0.
CE144	7.95E-07	2.34E-06	1.50E-06	9.58E-07	2.51E-07	6.61E-08	1.11E-08	7.67E-10	1.03E-13	1.62E-19	2.53E-25	0.
PR144	3.89E-10	4.16E-06	2.68E-06	1.71E-06	4.48E-07	1.18E-07	1.98E-08	1.37E-09	1.84E-13	2.89E-19	4.50E-25	0.
PM147	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EU155	6.78E-09	1.98E-07	1.84E-07	1.72E-07	1.38E-07	1.11E-07	8.27E-08	5.34E-08	1.25E-08	1.40E-09	1.58E-10	0.
TOTAL	3.81E-04	1.34E-04	3.84E-05	2.12E-05	1.19E-05	9.10E-06	7.61E-06	6.58E-06	4.79E-06	3.31E-06	2.32E-06	0.

DEBRIS DECAY FROM 1 TO 21 HOURS

[illegible]

ANNIE MR/HR
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.500
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

		ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BR 84		2.25E-03	3.88E-01	1.05E-01	2.84E-02	7.66E-03	5.61E-04	1.11E-05	2.19E-07	4.33E-09	8.56E-11	1.69E-12	
KR 85M		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
KR 87		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
KR 88		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
RB 88		9.42E-02	2.93E-01	2.50E-01	1.97E-01	1.54E-01	9.37E-02	4.47E-02	2.13E-02	1.01E-02	4.82E-03	2.29E-03	
RB 89		1.52E+00	1.43E+00	9.59E-02	6.44E-03	4.32E-04	1.96E-06	5.92E-10	1.79E-13	5.44E-17	1.65E-20	5.00E-24	
SR 89		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SR 90		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SR 91		1.00E-02	1.87E-01	1.74E-01	1.62E-01	1.51E-01	1.31E-01	1.05E-01	8.51E-02	6.87E-02	5.52E-02	4.45E-02	
Y 91M		5.42E-07	5.17E-02	7.04E-02	7.55E-02	7.45E-02	6.69E-02	5.47E-02	4.40E-02	3.55E-02	2.86E-02	2.31E-02	
Y 91		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SR 92		1.32E-01	5.90E-01	4.58E-01	3.54E-01	2.74E-01	1.64E-01	7.63E-02	3.54E-02	1.64E-02	7.63E-03	3.55E-03	
Y 92		1.20E-03	2.45E-02	3.85E-02	4.58E-02	4.86E-02	4.63E-02	3.55E-02	2.42E-02	1.55E-02	9.57E-03	5.77E-03	
SR 93		9.50E+00	1.63E-01	9.03E-04	4.99E-06	2.75E-08	8.41E-13	1.42E-19	2.39E-26	4.04E-33	6.81E-40	1.15E-46	
Y 93		4.34E-04	1.40E-02	1.32E-02	1.23E-02	1.15E-02	1.01E-02	8.19E-03	6.69E-03	5.43E-03	4.46E-03	3.62E-03	
Y 94		4.75E-01	6.49E-01	8.35E-02	1.08E-02	1.39E-03	2.31E-05	4.94E-08	1.06E-10	2.27E-13	4.94E-16	2.74E-17	
Y 95		3.02E+00	2.84E-01	6.27E-03	1.38E-04	3.04E-06	1.48E-09	1.58E-14	1.69E-19	1.81E-24	1.93E-29	2.06E-34	
ZR 95		7.73E-06	1.01E-03	1.03E-03	1.03E-03	1.03E-03	1.03E-03	1.03E-03	1.03E-03	1.03E-03	1.02E-03	1.02E-03	
NB 95		8.90E-13	6.45E-07	1.50E-06	2.36E-06	3.22E-06	4.94E-06	7.50E-06	1.01E-05	1.26E-05	1.52E-05	1.77E-05	
ZR 97		4.34E-03	1.89E-02	1.81E-02	1.74E-02	1.66E-02	1.54E-02	1.36E-02	1.20E-02	1.07E-02	9.41E-03	8.36E-03	
NB 97M		9.59E-05	7.79E-02	7.47E-02	7.18E-02	6.89E-02	6.35E-02	5.61E-02	4.97E-02	4.39E-02	3.88E-02	3.43E-02	
NB 97		8.47E-03	3.70E-02	5.21E-02	5.94E-02	6.23E-02	6.20E-02	5.65E-02	5.04E-02	4.45E-02	3.93E-02	3.49E-02	
NB 98		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
MO 99		1.23E-05	5.07E-03	5.02E-03	4.97E-03	4.92E-03	4.81E-03	4.67E-03	4.53E-03	4.39E-03	4.26E-03	4.13E-03	
TC 99M		8.47E-11	3.59E-04	6.73E-04	9.52E-04	1.20E-03	1.60E-03	2.03E-03	2.30E-03	2.47E-03	2.56E-03	2.60E-03	
MO101		3.28E+00	1.48E+00	8.59E-02	4.98E-03	2.89E-04	9.68E-07	1.88E-10	3.67E-14	7.12E-18	1.38E-21	2.70E-25	
TC101		3.20E-02	9.61E-01	1.05E-01	8.62E-03	6.28E-04	2.83E-06	7.08E-10	1.59E-13	3.36E-17	6.92E-21	1.40E-24	
MO102		7.67E+00	1.75E-01	3.98									

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD111M	5.50E-03	4.84E-03	4.27E-03	3.78E-03	3.32E-03	2.59E-03	1.77E-03	1.21E-03	8.31E-04	5.68E-04	3.90E-04	2.22E-05
PD111	1.39E-04	2.50E-04	2.40E-04	2.13E-04	1.89E-04	1.47E-04	1.01E-04	6.90E-05	4.72E-05	3.24E-05	2.22E-05	0.
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG111	3.78E-13	1.12E-06	2.35E-06	3.46E-06	4.44E-06	6.05E-06	7.78E-06	8.91E-06	9.66E-06	1.01E-05	1.04E-05	0.
PD112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG112	5.61E-08	3.57E-04	6.30E-04	8.46E-04	1.00E-03	1.20E-03	1.32E-03	1.32E-03	1.25E-03	1.17E-03	1.08E-03	0.
AG113	1.87E-06	4.00E-04	3.50E-04	3.08E-04	2.70E-04	2.08E-04	1.41E-04	9.49E-05	6.40E-05	4.32E-05	2.92E-05	0.
AG115	5.74E-03	6.15E-03	7.66E-04	9.57E-05	1.20E-05	1.87E-07	3.66E-10	7.15E-13	1.39E-15	1.38E-16	1.28E-18	0.
CD115M	1.59E-12	4.24E-08	4.77E-08	4.83E-08	4.83E-08	4.83E-08	4.81E-08	4.81E-08	4.80E-08	4.78E-08	4.78E-08	0.
CD115	6.95E-09	1.31E-04	1.41E-04	1.41E-04	1.39E-04	1.35E-04	1.30E-04	1.25E-04	1.20E-04	1.16E-04	1.11E-04	0.
IN115M	5.84E-14	9.75E-06	2.17E-05	3.21E-05	4.10E-05	5.46E-05	6.75E-05	7.43E-05	7.75E-05	7.82E-05	7.76E-05	0.
CD117	6.46E-04	1.08E-02	8.10E-03	6.05E-03	4.54E-03	2.54E-03	1.07E-03	4.50E-04	1.89E-04	7.95E-05	3.35E-05	0.
IN117M	2.34E-09	2.82E-04	4.08E-04	4.43E-04	4.28E-04	3.37E-04	1.93E-04	9.87E-05	4.74E-05	2.20E-05	9.92E-06	0.
IN117	8.71E-13	4.76E-04	1.15E-03	1.60E-03	1.79E-03	1.64E-03	1.05E-03	5.60E-04	2.78E-04	1.31E-04	6.02E-05	0.
CD118	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN118	6.96E-04	4.50E-03	1.93E-03	8.25E-04	3.53E-04	6.47E-05	5.06E-06	3.98E-07	3.11E-08	2.44E-09	1.91E-10	0.
CD119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN119M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN121	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN123M	9.92E-04	1.86E-03	6.58E-04	2.33E-04	8.22E-05	1.03E-05	4.54E-07	2.01E-08	8.89E-10	3.93E-11	1.74E-12	0.
SN123	4.73E-10	4.94E-08	4.94E-08	4.94E-08	4.94E-08	4.94E-08	4.94E-08	4.94E-08	4.94E-08	4.94E-08	4.94E-08	0.
SN125	5.88E-05	5.86E-05	5.85E-05	5.83E-05	5.80E-05	5.77E-05	5.73E-05	5.66E-05	5.62E-05	5.56E-05	5.51E-05	0.
SB125	5.16E-07	5.18E-07	5.20E-07	5.22E-07	5.25E-07	5.29E-07	5.38E-07	5.45E-07	5.52E-07	5.58E-07	5.65E-07	0.
SB126	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN127	9.35E-02	6.71E-02	4.82E-02	3.48E-02	2.50E-02	1.29E-02	4.79E-03	1.78E-03	6.61E-04	2.46E-04	9.12E-05	0.
SB127	4.28E-04	1.48E-03	1.63E-03	1.74E-03	1.82E-03	1.89E-03	1.92E-03	1.90E-03	1.88E-03	1.83E-03	1.80E-03	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN128	2.31E-01	1.14E-01	5.65E-02	2.79E-02	1.38E-02	3.37E-03	4.07E-04	4.91E-05	5.92E-06	7.18E-07	8.66E-08	0.
SB128M	3.47E-04	3.83E-01	1.99E-01	9.81E-02	4.84E-02	1.19E-02	1.43E-03	1.72E-04	2.08E-05	2.51E-06	3.04E-07	0.
SB128	4.68E-02	4.50E-02	4.24E-02	3.97E-02	3.71E-02	3.18E-02	2.54E-02	2.01E-02	1.60E-02	1.27E-02	1.01E-02	0.
SN129M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN129	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SB129	1.13E-01	1.89E-01	1.78E-01	1.59E-01	1.40E-01	1.04E-01	6.47E-02	4.00E-02	2.47E-02	1.53E-02	9.38E-03	0.
TE129M	4.81E-11	5.33E-07	1.10E-06	1.61E-06	2.07E-06	2.81E-06	3.55E-06	4.01E-06	4.30E-06	4.47E-06	4.58E-06	0.
TE129	3.43E-03	4.72E-03	5.53E-03	5.74E-03	5.53E-03	4.58E-03	3.05E-03	1.92E-03	1.20E-03	7.40E-04	4.59E-04	0.
SB130M	2.22E-02	4.20E-02	1.10E-04	2.89E-07	7.62E-10	5.26E-15	9.57E-23	1.74E-30	3.16E-38	5.74E-46	1.04E-53	0.
SB130	4.72E+00	1.43E+00	4.06E-01	1.15E-01	3.25E-02	2.62E-03	5.97E-05	1.36E-06	3.11E-08	7.08E-10	1.62E-11	0.

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	8.87E-04	8.38E-04	7.94E-04	7.50E-04	7.09E-04	6.35E-04	5.36E-04	4.53E-04	3.83E-04	3.24E-04	2.74E-04	
SB131	6.14E+00	1.60E+00	2.62E-01	4.30E-02	7.06E-03	1.90E-04	8.37E-07	3.70E-09	1.63E-11	7.18E-14	3.58E-16	
TE131M	2.27E-06	1.19E-02	1.35E-02	1.35E-02	1.33E-02	1.27E-02	1.19E-02	1.11E-02	1.03E-02	9.63E-03	8.98E-03	
TE131	6.11E-01	6.64E-01	2.16E-01	5.63E-02	1.37E-02	1.28E-03	6.38E-04	5.89E-04	5.50E-04	5.15E-04	4.79E-04	
I131	8.52E-05	2.95E-03	4.35E-03	4.77E-03	4.85E-03	4.89E-03	4.89E-03	4.85E-03	4.85E-03	4.81E-03	4.81E-03	
TE132	3.60E-03	8.74E-03	8.65E-03	8.59E-03	8.50E-03	8.35E-03	8.13E-03	7.91E-03	7.72E-03	7.50E-03	7.30E-03	
I132	9.56E-02	9.54E-02	9.51E-02	9.47E-02	9.39E-02	9.28E-02	9.06E-02	8.83E-02	8.59E-02	8.38E-02	8.17E-02	
TE133M	4.63E-03	1.61E+00	6.99E-01	3.04E-01	1.32E-01	2.52E-02	2.07E-03	1.71E-04	1.41E-05	1.16E-06	9.58E-08	
TE133	1.06E+01	5.99E-01	6.66E-02	2.20E-02	9.31E-03	1.76E-03	1.46E-04	1.20E-05	9.93E-07	8.17E-08	6.74E-09	
I133	1.12E-02	1.21E-01	1.31E-01	1.31E-01	1.28E-01	1.21E-01	1.10E-01	9.99E-02	9.01E-02	8.21E-02	7.42E-02	
XE133M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE133	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
TE134	3.18E+00	1.47E+00	5.48E-01	2.04E-01	7.56E-02	1.05E-02	5.36E-04	2.74E-05	1.41E-06	7.22E-08	3.70E-09	
I134	4.32E+00	5.78E+00	4.05E+00	2.37E+00	1.28E+00	3.24E-01	3.56E-02	3.63E-03	3.56E-04	3.41E-05	3.24E-06	
I135	4.43E-01	7.80E-01	7.04E-01	6.34E-01	5.73E-01	4.64E-01	3.41E-01	2.49E-01	1.83E-01	1.35E-01	9.85E-02	
XE135M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE135	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS136	2.38E-04	2.38E-04	2.37E-04	2.37E-04	2.36E-04	2.35E-04	2.34E-04	2.32E-04	2.30E-04	2.29E-04	2.27E-04	
CS137	8.67E-07	9.34E-06	9.34E-06	9.34E-06	9.34E-06	9.34E-06	9.34E-06	9.34E-06	9.34E-06	9.34E-06	9.34E-06	
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
XE138	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CS138	3.61E+00	6.07E+00	2.10E+00	6.18E-01	1.73E-01	1.32E-02	2.74E-04	5.69E-06	1.18E-07	2.46E-09	5.09E-11	
CS139	2.94E+00	9.39E-02	1.18E-03	1.48E-05	1.86E-07	2.91E-11	5.80E-17	1.15E-22	2.27E-28	4.50E-34	8.88E-40	
BA139	7.24E-03	8.07E-02	4.98E-02	3.03E-02	1.83E-02	6.72E-03	1.49E-03	3.31E-04	7.36E-05	1.63E-05	3.62E-06	
BA140	2.67E-04	1.67E-03	1.67E-03	1.66E-03	1.66E-03	1.64E-03	1.64E-03	1.63E-03	1.62E-03	1.60E-03	1.59E-03	
LA140	8.78E-09	3.94E-04	7.81E-04	1.16E-03	1.53E-03	2.25E-03	3.29E-03	4.26E-03	5.17E-03	6.04E-03	6.85E-03	
BA141	2.19E+00	6.63E-01	6.57E-02	6.52E-03	6.47E-04	6.42E-06	6.26E-09	6.10E-12	5.95E-15	5.84E-18	5.69E-21	
LA141	9.49E-04	2.01E-02	1.88E-02	1.59E-02	1.33E-02	9.35E-03	5.48E-03	3.21E-03	1.89E-03	1.11E-03	6.48E-04	
CE141	2.07E-10	2.30E-05	5.39E-05	8.10E-05	1.04E-04	1.39E-04	1.73E-04	1.92E-04	2.03E-04	2.10E-04	2.13E-04	
BA142	5.42E+00	2.16E-01	4.92E-03	1.12E-04	2.56E-06	1.33E-09	1.58E-14	1.87E-19	2.22E-24	2.63E-29	3.13E-34	
LA142	2.70E-01	1.88E+00	1.24E+00	7.88E-01	5.01E-01	2.03E-01	5.23E-02	1.35E-02	3.47E-03	8.94E-04	2.31E-04	
LA143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE143	2.11E-04	1.35E-02	1.40E-02	1.36E-02	1.33E-02	1.28E-02	1.20E-02	1.13E-02	1.06E-02	9.95E-03	9.35E-03	
PR143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE144	5.05E-07	3.62E-06	3.62E-06	3.62E-06	3.62E-06	3.62E-06	3.61E-06	3.61E-06	3.61E-06	3.61E-06	3.61E-06	
PR144	2.47E-10	5.87E-06	6.39E-06	6.43E-06	6.45E-06	6.45E-06	6.45E-06	6.45E-06	6.43E-06	6.43E-06	6.43E-06	
PR145	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CE146	1.19E+00	6.12E-02	3.14E-03	1.60E-04	8.26E-06	2.18E-08	2.93E-12	3.95E-16	5.31E-20	7.17E-24	9.67E-28	
PR146	8.41E-02	7.32E-01	1.66E-01	3.12E-02	5.61E-03	1.76E-04	9.74E-07	5.37E-09	2.97E-11	1.64E-13	8.98E-16	
PR147	3.13E-01	9.05E-02	2.82E-03	8.82E-05	2.76E-06	2.69E-09	8.22E-14	2.51E-18	7.66E-23	2.34E-27	7.13E-32	

1

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	2.17E-08	4.09E-04	4.21E-04	4.20E-04	4.19E-04	4.17E-04	4.13E-04	4.10E-04	4.07E-04	4.04E-04	4.01E-04	
ND149	8.58E-02	5.84E-02	3.98E-02	2.71E-02	1.83E-02	8.52E-03	2.68E-03	8.45E-04	2.66E-04	8.37E-05	2.64E-05	
PM149	3.72E-07	2.91E-05	4.83E-05	6.11E-05	6.92E-05	7.78E-05	8.08E-05	7.93E-05	7.73E-05	7.42E-05	7.17E-05	
PM150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
ND151	5.14E-01	1.61E-02	5.02E-04	1.57E-05	4.91E-07	4.79E-10	1.46E-14	4.47E-19	1.36E-23	4.15E-28	1.27E-32	
PM151	1.83E-04	2.14E-03	2.15E-03	2.10E-03	2.05E-03	1.95E-03	1.80E-03	1.68E-03	1.56E-03	1.44E-03	1.34E-03	
PM152	4.30E-01	4.21E-04	4.10E-07	4.01E-10	3.91E-13	3.74E-19	3.48E-28	3.25E-37	3.02E-46	2.82E-55	2.63E-64	
SM153	1.03E-04	1.02E-04	1.00E-04	9.88E-05	9.74E-05	9.45E-05	9.05E-05	8.64E-05	8.27E-05	7.93E-05	7.58E-05	
SM155	1.06E-02	1.74E-03	2.86E-04	4.68E-05	7.66E-06	2.06E-07	9.10E-10	4.01E-12	1.77E-14	7.87E-17	1.93E-19	
EU155	4.30E-09	1.23E-07	1.42E-07	1.45E-07	1.46E-07	1.46E-07	1.46E-07	1.46E-07	1.46E-07	1.46E-07	1.46E-07	
SM156	2.09E-04	1.94E-04	1.80E-04	1.67E-04	1.56E-04	1.34E-04	1.08E-04	8.63E-05	6.92E-05	5.54E-05	4.43E-05	
EU156	6.84E-06	1.12E-05	1.52E-05	1.89E-05	2.23E-05	2.85E-05	3.62E-05	4.19E-05	4.70E-05	5.06E-05	5.33E-05	
EU157	7.50E-05	2.48E-04	2.37E-04	2.27E-04	2.16E-04	1.97E-04	1.72E-04	1.51E-04	1.31E-04	1.14E-04	9.96E-05	
EU158	1.52E-02	6.15E-03	2.48E-03	1.01E-03	4.08E-04	6.67E-05	4.45E-06	2.95E-07	1.96E-08	1.30E-09	8.63E-11	
EU159	3.87E-03	3.84E-04	3.81E-05	3.78E-06	3.75E-07	3.70E-09	3.61E-12	3.53E-15	3.44E-18	3.37E-21	3.29E-24	
GD159	2.42E-06	1.06E-05	1.10E-05	1.07E-05	1.03E-05	9.55E-06	8.51E-06	7.59E-06	6.75E-06	6.01E-06	5.36E-06	
TB161	5.82E-09	4.19E-08	4.16E-08	4.15E-08	4.13E-08	4.09E-08	4.05E-08	4.00E-08	3.94E-08	3.90E-08	3.84E-08	
TOTAL	1.10E+02	3.46E+01	1.37E+01	7.28E+00	4.51E+00	2.34E+00	1.38E+00	1.00E+00	7.84E-01	6.40E-01	5.36E-01	

1

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	8.03E-09	7.93E-09	7.82E-09	7.53E-09	7.06E-09	6.19E-09	5.44E-09	4.19E-09	2.19E-09	5.95E-10	1.62E-10
NA 24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MN 54	4.42E-07	4.38E-07	4.38E-07	4.30E-07	4.26E-07	4.18E-07	4.11E-07	3.91E-07	3.49E-07	2.78E-07	2.21E-07
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	4.22E-06	4.15E-06	4.09E-06	3.90E-06	3.61E-06	3.10E-06	2.66E-06	1.95E-06	9.06E-07	1.93E-07	4.15E-08
CO 57	9.37E-08	9.37E-08	9.30E-08	9.30E-08	9.16E-08	8.89E-08	8.68E-08	8.26E-08	7.29E-08	5.63E-08	4.36E-08
CO 58	7.15E-06	7.09E-06	7.01E-06	6.80E-06	6.50E-06	5.89E-06	5.34E-06	4.40E-06	2.71E-06	1.02E-06	3.86E-07
CO 60	1.36E-06	1.36E-06	1.36E-06	1.36E-06	1.35E-06	1.35E-06	1.34E-06	1.33E-06	1.30E-06	1.26E-06	1.21E-06
CU 64	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CU 67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	2.20E-04	1.98E-04	1.79E-04	1.32E-04	7.86E-05	2.82E-05	1.01E-05	1.29E-06	7.62E-09	8.20E-13	5.53E-13
U240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	1.86E-05	2.84E-02	2.11E-02	8.73E-03	2.00E-03	1.04E-04	5.47E-06	1.50E-08	5.89E-15	1.41E-24	1.41E-24
NP240M	3.05E-06	5.98E-04	1.84E-04	5.33E-06	1.46E-08	1.10E-13	8.28E-19	4.67E-29	0.	0.	0.
AM241	1.83E-12	1.83E-12	1.83E-12	1.83E-12	1.83E-12	1.83E-12	1.83E-12	1.83E-12	1.83E-12	1.83E-12	1.83E-12
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 77	9.45E-05	5.95E-05	1.36E-05	1.65E-07	1.05E-10	4.24E-17	1.71E-23	2.79E-36	0.	0.	0.
AS 77	8.53E-09	1.26E-06	9.11E-07	2.63E-07	3.09E-08	4.19E-10	5.68E-12	1.05E-15	4.86E-25	1.04E-43	2.24E-62
SE 77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AS 78	2.66E-04	2.37E-06	6.93E-11	5.85E-25	0.	0.	0.	0.	0.	0.	0.
BR 82	2.03E-05	1.27E-05	7.91E-06	1.92E-06	1.82E-07	1.64E-09	1.47E-11	1.19E-15	6.93E-26	2.38E-46	8.09E-67
BR 83	4.61E-05	1.21E-06	1.22E-09	1.24E-18	1.27E-33	0.	0.	0.	0.	0.	0.
KR 83M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 87	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RB 88	9.42E-02	1.09E-03	2.87E-06	5.20E-14	6.52E-27	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 91	1.00E-02	3.59E-02	6.43E-03	3.69E-05	6.75E-09	2.29E-16	7.76E-24	8.83E-39	0.	0.	0.

ANNIE MR/HR
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.500
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

		ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
Y 91M		5.42E-07	1.87E-02	3.33E-03	1.92E-05	3.52E-09	1.19E-16	4.01E-24	4.58E-39	0.	0.	0.	
Y 91		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
SR 92		1.32E-01	1.65E-03	3.56E-06	3.57E-14	1.67E-27	0.	0.	0.	0.	0.	0.	
Y 92		1.20E-03	3.41E-03	3.79E-05	2.92E-11	1.70E-21	5.82E-42	1.99E-62	0.	0.	0.	0.	
Y 93		4.34E-04	2.93E-03	5.71E-04	4.30E-06	1.24E-09	1.02E-16	8.43E-24	5.75E-38	0.	0.	0.	
ZR 95		7.73E-06	9.66E-04	9.56E-04	9.26E-04	8.78E-04	7.87E-04	7.09E-04	5.73E-04	3.36E-04	1.16E-04	3.97E-05	
NB 95M		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
NB 95		8.90E-13	1.93E-05	3.82E-05	9.15E-05	1.70E-04	2.93E-04	3.78E-04	4.70E-04	4.52E-04	2.17E-04	8.34E-05	
ZR 97		4.34E-03	7.38E-03	2.78E-03	1.47E-04	1.10E-06	6.22E-11	3.49E-15	1.10E-23	6.23E-45	0.	0.	
NB 97M		9.59E-05	3.05E-02	1.14E-02	6.09E-04	4.55E-06	2.57E-10	1.44E-14	4.55E-23	2.58E-44	0.	0.	
NB 97		8.47E-03	2.89E-02	1.09E-02	5.76E-04	4.34E-06	2.61E-10	1.47E-14	4.66E-23	2.62E-44	0.	0.	
MO 99		1.23E-05	4.00E-03	3.12E-03	1.48E-03	4.28E-04	3.58E-05	2.98E-06	2.08E-08	8.46E-14	1.39E-24	2.29E-35	
TC 99M		8.47E-11	2.61E-03	2.19E-03	1.05E-03	3.03E-04	2.53E-05	2.11E-06	1.47E-08	5.98E-14	9.87E-25	1.63E-35	
RU103		6.69E-07	1.53E-03	1.50E-03	1.42E-03	1.30E-03	1.09E-03	9.18E-04	6.48E-04	2.69E-04	4.67E-05	8.15E-06	
RH103M		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
RU105		7.77E-03	7.43E-03	1.75E-04	2.30E-09	1.68E-17	8.96E-34	4.80E-50	0.	0.	0.	0.	
RH105M		1.64E-06	2.39E-04	5.63E-06	7.40E-11	5.41E-19	2.90E-35	1.55E-51	0.	0.	0.	0.	
RH105		8.52E-12	2.72E-03	1.78E-03	4.43E-04	4.37E-05	4.25E-07	4.13E-09	3.90E-13	3.38E-23	2.54E-43	1.91E-63	
RU106		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
RH106		1.97E-08	3.44E-05	3.43E-05	3.41E-05	3.38E-05	3.32E-05	3.25E-05	3.13E-05	2.85E-05	2.35E-05	1.95E-05	
PD109		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AG109M		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
PD111M		5.50E-03	2.67E-04	1.30E-05	1.49E-09	4.02E-16	2.93E-29	2.15E-42	0.	0.	0.	0.	
PD111		1.39E-04	1.52E-05	7.38E-07	8.47E-11	2.29E-17	1.67E-30	1.22E-43	0.	0.	0.	0.	
AG111M		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AG111		3.78E-13	1.04E-05	1.00E-05	7.64E-06	4.81E-06	1.91E-06	7.57E-07	1.19E-07	1.17E-09	1.14E-13	1.10E-17	
PD112		0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AG112		5.61E-08	9.82E-04	4.51E-04	4.19E-05	8.00E-07	2.90E-10	1.05E-13	1.39E-20	8.69E-38	0.	0.	
AG113		1.87E-06	1.97E-05	8.54E-07	6.94E-11	1.06E-17	2.48E-31	5.80E-45	0.	0.	0.	0.	
CD115M		1.59E-12	4.61E-08	4.53E-08	4.32E-08	3.99E-08	3.39E-08	2.89E-08	2.09E-08	9.35E-09	1.86E-09	3.71E-10	
CD115		6.95E-09	1.05E-04	7.67E-05									

1

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	1.83E-04	1.25E-03	6.88E-04	1.16E-04	5.94E-06	1.56E-08	4.11E-11	2.83E-16	3.56E-29	0.	0.	0.
SM153	1.03E-04	7.25E-05	5.09E-05	1.76E-05	2.99E-06	8.70E-08	2.53E-09	2.12E-12	4.38E-20	1.87E-35	7.93E-51	0.
SM156	2.09E-04	3.57E-05	6.08E-06	3.00E-08	4.31E-12	8.87E-20	1.83E-27	7.79E-43	0.	0.	0.	0.
EU155	4.30E-09	1.46E-07	1.46E-07	1.46E-07	1.45E-07	1.45E-07	1.44E-07	1.43E-07	1.40E-07	1.34E-07	1.29E-07	0.
EU156	6.84E-06	5.57E-05	6.17E-05	5.53E-05	4.39E-05	2.76E-05	1.74E-05	6.91E-06	6.84E-07	6.74E-09	6.64E-11	0.
EU157	7.50E-05	8.66E-05	2.91E-05	1.09E-06	4.59E-09	8.09E-14	1.43E-18	4.46E-28	0.	0.	0.	0.
GD159	2.42E-06	4.77E-06	1.90E-06	1.18E-07	1.17E-09	1.13E-13	1.09E-17	1.03E-25	8.77E-46	0.	0.	0.
TB161	5.82E-09	3.80E-08	3.43E-08	2.54E-08	1.54E-08	5.63E-09	2.06E-09	2.76E-10	1.83E-12	7.89E-17	3.43E-21	0.
TOTAL	2.05E+00	4.52E-01	2.04E-01	8.08E-02	3.75E-02	1.49E-02	8.51E-03	3.84E-03	1.27E-03	4.27E-04	1.68E-04	0.

1

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 3.648E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	8.03E-09	6.94E-11	6.45E-12	5.99E-13	4.82E-16	3.86E-19	2.88E-23	1.85E-29	0.	0.	0.
MN 54	4.42E-07	1.90E-07	1.26E-07	8.25E-08	2.36E-08	6.73E-09	1.27E-09	1.04E-10	2.43E-14	8.80E-20	3.18E-25
FE 59	4.22E-06	1.52E-08	9.13E-10	5.49E-11	1.19E-14	2.57E-18	3.35E-23	1.57E-30	0.	0.	0.
CO 57	9.37E-08	3.69E-08	2.31E-08	1.45E-08	3.58E-09	8.82E-10	1.36E-11	8.26E-12	7.22E-16	5.93E-22	0.
CO 58	7.15E-06	2.05E-07	3.48E-08	5.90E-09	2.88E-11	1.40E-13	1.15E-16	2.74E-21	1.05E-36	0.	0.
CO 60	1.36E-06	1.19E-06	1.11E-06	1.03E-06	8.50E-07	6.99E-07	5.37E-07	3.62E-07	9.70E-08	1.35E-08	1.86E-09
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	2.20E-04	5.48E-13	5.34E-13	5.19E-13	4.86E-13	4.51E-13	4.10E-13	3.56E-13	2.22E-13	1.09E-13	5.34E-14
AM241	1.83E-12	1.83E-12	1.83E-12	1.83E-12	1.84E-12	1.85E-12	1.85E-12	1.86E-12	1.87E-12	1.85E-12	1.82E-12
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZR 95	7.73E-06	1.99E-05	2.83E-06	4.04E-07	1.18E-09	3.42E-12	1.42E-15	1.20E-20	1.46E-37	0.	0.
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	8.90E-13	4.41E-05	6.34E-06	9.04E-07	2.62E-09	7.60E-12	3.17E-15	2.68E-20	3.28E-37	0.	0.
RU103	6.69E-07	2.60E-06	1.06E-07	4.37E-09	2.98E-13	2.05E-17	5.75E-23	2.70E-31	0.	0.	0.
RH103M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU106	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RH106	1.97E-08	1.73E-05	1.22E-05	8.67E-06	3.08E-06	1.10E-06	2.76E-07	3.49E-08	3.52E-11	1.13E-15	3.64E-20
SN123	4.73E-10	6.55E-09	2.38E-09	8.63E-10	4.14E-11	1.99E-12	3.46E-14	7.98E-17	1.26E-25	8.24E-39	5.29E-52
SB125	5.16E-07	1.04E-06	9.13E-07	8.03E-07	5.47E-07	3.72E-07	2.22E-07	1.03E-07	7.92E-09	1.68E-10	3.59E-12
TE125M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS137	8.67E-07	9.14E-06	9.03E-06	8.93E-06	8.62E-06	8.31E-06	7.94E-06	7.42E-06	5.87E-06	4.17E-06	2.94E-06
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE141	2.07E-10	8.92E-08	1.79E-09	3.60E-11	2.93E-16	2.39E-21	3.92E-28	2.60E-38	0.	0.	0.
CE144	5.05E-07	1.48E-06	9.53E-07	6.08E-07	1.60E-07	4.20E-08	7.06E-09	4.87E-10	6.56E-14	1.03E-19	1.60E-25
PR144	2.47E-10	2.64E-06	1.70E-06	1.08E-06	2.85E-07	7.48E-08	1.26E-08	8.68E-10	1.17E-13	1.83E-19	2.86E-25
PM147	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EU155	4.30E-09	1.26E-07	1.17E-07	1.09E-07	8.76E-08	7.03E-08	5.25E-08	3.39E-08	7.93E-09	8.91E-10	1.00E-10
TOTAL	2.43E-04	1.00E-04	3.55E-05	2.27E-05	1.37E-05	1.07E-05	9.05E-06	7.96E-06	5.98E-06	4.18E-06	2.95E-06

DEBRIS DECAY FROM 1 TO 21 HOURS

BE	7
NA	24
MN	54
FE	55
FE	59
CO	57
CO	58
CO	60
CU	64
CU	67
W	181
W	185
W	187
W	188
AU1	98
AU1	99
PB	203
	U237
	U239
	U240
NP	239
NP	240M
NP	240
AM	241
CM	242
GE	75
GE	77
AS	77
SE	77M
GE	78
AS	78
AS	79
SE	79M
BR	80
SE	81M
SE	81
BR	82
SE	83
BR	83
BR	83M

[illegible]

1

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
PD109	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG109M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PD111M	7.01E-03	6.18E-03	5.44E-03	4.81E-03	4.24E-03	3.30E-03	2.26E-03	1.55E-03	1.06E-03	7.25E-04	4.97E-04	2.83E-05
PD111	1.77E-04	3.19E-04	3.06E-04	2.72E-04	2.41E-04	1.87E-04	1.28E-04	8.80E-05	6.02E-05	4.13E-05	2.83E-05	0.
AG111M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG111	4.83E-13	1.43E-06	3.00E-06	4.41E-06	5.67E-06	7.72E-06	9.92E-06	1.14E-05	1.23E-05	1.29E-05	1.33E-05	0.
PD112	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AG112	7.15E-08	4.55E-04	8.04E-04	1.08E-03	1.28E-03	1.53E-03	1.69E-03	1.68E-03	1.60E-03	1.49E-03	1.38E-03	0.
AG113	2.38E-06	5.10E-04	4.47E-04	3.92E-04	3.44E-04	2.65E-04	1.79E-04	1.21E-04	8.17E-05	5.51E-05	3.73E-05	0.
AG115	7.32E-03	7.85E-03	9.76E-04	1.22E-04	1.53E-05	2.39E-07	4.67E-10	9.12E-13	1.77E-15	1.76E-16	1.63E-18	0.
CD115M	2.03E-12	5.41E-08	6.08E-08	6.16E-08	6.16E-08	6.16E-08	6.14E-08	6.14E-08	6.12E-08	6.10E-08	6.10E-08	0.
CD115	8.86E-09	1.67E-04	1.80E-04	1.79E-04	1.77E-04	1.73E-04	1.66E-04	1.60E-04	1.54E-04	1.48E-04	1.42E-04	0.
IN115M	7.45E-14	1.24E-05	2.76E-05	4.10E-05	5.23E-05	6.97E-05	8.60E-05	9.48E-05	9.88E-05	9.97E-05	9.90E-05	0.
CD117	8.24E-04	1.37E-02	1.03E-02	7.72E-03	5.78E-03	3.24E-03	1.36E-03	5.74E-04	2.41E-04	1.01E-04	4.27E-05	0.
IN117M	2.98E-09	3.59E-04	5.20E-04	5.64E-04	5.45E-04	4.30E-04	2.46E-04	1.26E-04	6.04E-05	2.80E-05	1.27E-05	0.
IN117	1.11E-12	6.07E-04	1.47E-03	2.04E-03	2.28E-03	2.09E-03	1.33E-03	7.14E-04	3.55E-04	1.67E-04	7.68E-05	0.
CD118	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN118	8.87E-04	5.74E-03	2.46E-03	1.05E-03	4.50E-04	8.25E-05	6.46E-06	5.07E-07	3.97E-08	3.11E-09	2.44E-10	0.
CD119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN119M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
IN119	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN121	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN123M	1.27E-03	2.37E-03	8.39E-04	2.97E-04	1.05E-04	1.31E-05	5.79E-07	2.56E-08	1.13E-09	5.01E-11	2.21E-12	0.
SN123	6.03E-10	6.30E-08	6.30E-08	6.30E-08	6.30E-08	6.30E-08	6.30E-08	6.30E-08	6.30E-08	6.30E-08	6.30E-08	0.
SN125	7.50E-05	7.48E-05	7.46E-05	7.44E-05	7.40E-05	7.36E-05	7.30E-05	7.22E-05	7.16E-05	7.09E-05	7.03E-05	0.
SB125	6.58E-07	6.61E-07	6.63E-07	6.66E-07	6.69E-07	6.75E-07	6.86E-07	6.95E-07	7.03E-07	7.12E-07	7.21E-07	0.
SB126	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN127	1.19E-01	8.56E-02	6.15E-02	4.43E-02	3.19E-02	1.65E-02	6.11E-03	2.27E-03	8.43E-04	3.13E-04	1.16E-04	0.
SB127	5.46E-04	1.88E-03	2.08E-03	2.22E-03	2.32E-03	2.41E-03	2.45E-03	2.43E-03	2.39E-03	2.34E-03	2.29E-03	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN128	2.95E-01	1.46E-01	7.21E-02	3.56E-02	1.76E-02	4.30E-03	5.19E-04	6.26E-05	7.55E-06	9.16E-07	1.10E-07	0.
SB128M	4.42E-04	4.88E-01	2.53E-01	1.25E-01	6.18E-02	1.51E-02	1.82E-03	2.20E-04	2.65E-05	3.20E-06	3.87E-07	0.
SB128	5.96E-02	5.74E-02	5.40E-02	5.06E-02	4.73E-02	4.05E-02	3.23E-02	2.57E-02	2.04E-02	1.62E-02	1.28E-02	0.
SN129M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN129	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SB129	1.44E-01	2.41E-01	2.27E-01	2.03E-01	1.78E-01	1.32E-01	8.25E-02	5.11E-02	3.14E-02	1.94E-02	1.20E-02	0.
TE129M	6.14E-11	6.80E-07	1.40E-06	2.06E-06	2.64E-06	3.58E-06	4.53E-06	5.12E-06	5.48E-06	5.70E-06	5.85E-06	0.
TE129	4.38E-03	6.02E-03	7.05E-03	7.32E-03	7.05E-03	5.84E-03	3.89E-03	2.45E-03	1.53E-03	9.44E-04	5.86E-04	0.
SB130M	2.84E-02	5.35E-02	1.41E-04	3.69E-07	9.72E-10	6.70E-15	1.22E-22	2.22E-30	4.03E-38	7.32E-46	1.33E-53	0.
SB130	6.02E+00	1.82E+00	5.18E-01	1.47E-01	4.15E-02	3.34E-03	7.62E-05	1.74E-06	3.96E-08	9.02E-10	2.06E-11	0.

ANNIE
MR/HR AT H+12 HOURS = MR/HR
FRACTION OF REFRACTORIES PRESENT = 0.100
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
I130	1.13E-03	1.07E-03	1.01E-03	9.56E-04	9.05E-04	8.10E-04	6.84E-04	5.78E-04	4.88E-04	4.14E-04	3.50E-04
SB131	7.83E+00	2.05E+00	3.34E-01	5.49E-02	9.00E-03	2.42E-04	1.07E-06	4.71E-09	2.08E-11	9.15E-14	4.56E-16
TE131M	2.89E-06	1.51E-02	1.73E-02	1.73E-02	1.70E-02	1.62E-02	1.51E-02	1.41E-02	1.32E-02	1.23E-02	1.15E-02
TE131	7.80E-01	8.47E-01	2.76E-01	7.18E-02	1.74E-02	1.64E-03	8.13E-04	7.52E-04	7.01E-04	6.56E-04	6.11E-04
I131	1.09E-04	3.77E-03	5.54E-03	6.08E-03	6.19E-03	6.24E-03	6.24E-03	6.19E-03	6.19E-03	6.13E-03	6.13E-03
TE132	4.59E-03	1.11E-02	1.10E-02	1.10E-02	1.08E-02	1.06E-02	1.04E-02	1.01E-02	9.84E-03	9.56E-03	9.31E-03
I132	1.22E-01	1.22E-01	1.21E-01	1.21E-01	1.20E-01	1.18E-01	1.16E-01	1.13E-01	1.10E-01	1.07E-01	1.04E-01
TE133M	5.91E-03	2.05E+00	8.92E-01	3.88E-01	1.69E-01	3.21E-02	2.64E-03	2.18E-04	1.80E-05	1.48E-06	1.22E-07
TE133	1.35E+01	7.63E-01	8.49E-02	2.81E-02	1.19E-02	2.25E-03	1.86E-04	1.53E-05	1.27E-06	1.04E-07	8.59E-09
I133	1.43E-02	1.54E-01	1.66E-01	1.66E-01	1.63E-01	1.55E-01	1.41E-01	1.27E-01	1.15E-01	1.05E-01	9.46E-02
XE133M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE133	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE134	4.05E+00	1.88E+00	6.99E-01	2.60E-01	9.64E-02	1.34E-02	6.83E-04	3.50E-05	1.79E-06	9.21E-08	4.72E-09
I134	5.52E+00	7.37E+00	5.17E+00	3.03E+00	1.63E+00	4.13E-01	4.54E-02	4.63E-03	4.54E-04	4.35E-05	4.13E-06
I135	5.65E-01	9.95E-01	8.97E-01	8.08E-01	7.30E-01	5.92E-01	4.35E-01	3.18E-01	2.34E-01	1.72E-01	1.26E-01
XE135M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE135	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS136	3.04E-04	3.03E-04	3.03E-04	3.02E-04	3.01E-04	3.00E-04	2.98E-04	2.96E-04	2.94E-04	2.92E-04	2.90E-04
CS137	1.11E-06	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE138	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS138	4.60E+00	7.74E+00	2.68E+00	7.88E-01	2.21E-01	1.68E-02	3.50E-04	7.26E-06	1.51E-07	3.14E-09	6.49E-11
CS139	3.75E+00	1.20E-01	1.50E-03	1.89E-05	2.37E-07	3.71E-11	7.39E-17	1.46E-22	2.89E-28	5.73E-34	1.13E-39
BA139	9.24E-03	1.03E-01	6.35E-02	3.86E-02	2.33E-02	8.56E-03	1.90E-03	4.22E-04	9.38E-05	2.08E-05	4.62E-06
BA140	2.93E-04	1.83E-03	1.83E-03	1.81E-03	1.81E-03	1.80E-03	1.80E-03	1.79E-03	1.77E-03	1.76E-03	1.74E-03
LA140	9.62E-09	4.32E-04	8.56E-04	1.27E-03	1.68E-03	2.47E-03	3.60E-03	4.66E-03	5.67E-03	6.61E-03	7.50E-03
BA141	1.67E+00	5.04E-01	5.01E-02	4.97E-03	4.93E-04	4.89E-06	4.77E-09	4.65E-12	4.53E-15	4.45E-18	4.33E-21
LA141	7.23E-04	1.53E-02	1.43E-02	1.21E-02	1.02E-02	7.12E-03	4.17E-03	2.44E-03	1.44E-03	8.42E-04	4.94E-04
CE141	1.57E-10	1.75E-05	4.10E-05	6.17E-05	7.91E-05	1.06E-04	1.32E-04	1.46E-04	1.55E-04	1.60E-04	1.62E-04
BA142	1.38E+00	5.50E-02	1.25E-03	2.86E-05	6.52E-07	3.39E-10	4.02E-15	4.77E-20	5.66E-25	6.72E-30	7.97E-35
LA142	6.90E-02	4.79E-01	3.16E-01	2.01E-01	1.28E-01	5.17E-02	1.33E-02	3.44E-03	8.86E-04	2.28E-04	5.88E-05
CE143	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PR143	5.39E-05	3.43E-03	3.56E-03	3.47E-03	3.40E-03	3.28E-03	3.07E-03	2.88E-03	2.71E-03	2.54E-03	2.38E-03
CE144	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PR144	1.29E-07	9.22E-07	9.22E-07	9.22E-07	9.22E-07	9.22E-07	9.20E-07	9.20E-07	9.20E-07	9.20E-07	9.20E-07
PR145	6.29E-11	1.50E-06	1.63E-06	1.64E-06	1.64E-06	1.64E-06	1.64E-06	1.64E-06	1.64E-06	1.64E-06	1.64E-06
CE146	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PR146	3.05E-01	1.56E-02	8.00E-04	4.09E-05	2.11E-06	5.55E-09	7.47E-13	1.01E-16	1.36E-20	1.83E-24	2.47E-28
PR147	2.14E-02	1.87E-01	4.23E-02	7.95E-03	1.43E-03	4.50E-05	2.48E-07	1.37E-09	7.58E-12	4.19E-14	2.29E-16
	7.97E-02	2.31E-02	7.20E-04	2.25E-05	7.04E-07	6.87E-10	2.10E-14	6.41E-19	1.95E-23	5.97E-28	1.82E-32

1

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	5.54E-09	1.04E-04	1.07E-04	1.07E-04	1.07E-04	1.06E-04	1.05E-04	1.05E-04	1.04E-04	1.03E-04	1.02E-04	
ND149	2.19E-02	1.49E-02	1.01E-02	6.91E-03	4.68E-03	2.17E-03	6.83E-04	2.16E-04	6.79E-05	2.14E-05	6.75E-06	
PM149	9.49E-08	7.42E-06	1.23E-05	1.56E-05	1.76E-05	1.98E-05	2.06E-05	2.02E-05	1.97E-05	1.89E-05	1.83E-05	
PM150	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
ND151	1.31E-01	4.09E-03	1.28E-04	4.00E-06	1.25E-07	1.22E-10	3.73E-15	1.14E-19	3.47E-24	1.06E-28	3.24E-33	
PM151	4.67E-05	5.46E-04	5.49E-04	5.36E-04	5.23E-04	4.96E-04	4.60E-04	4.27E-04	3.98E-04	3.68E-04	3.42E-04	
PM152	1.10E-01	1.07E-04	1.05E-07	1.02E-10	9.98E-14	9.54E-20	8.88E-29	8.28E-38	7.71E-47	7.20E-56	6.70E-65	
SM153	2.63E-05	2.59E-05	2.56E-05	2.52E-05	2.48E-05	2.41E-05	2.31E-05	2.20E-05	2.11E-05	2.02E-05	1.93E-05	
SM155	2.71E-03	4.45E-04	7.29E-05	1.19E-05	1.95E-06	5.26E-08	2.32E-10	1.02E-12	4.51E-15	2.01E-17	4.93E-20	
EU155	1.10E-09	3.13E-08	3.62E-08	3.70E-08	3.72E-08	3.72E-08	3.72E-08	3.72E-08	3.72E-08	3.72E-08	3.72E-08	
SM156	5.33E-05	4.95E-05	4.60E-05	4.27E-05	3.97E-05	3.42E-05	2.74E-05	2.20E-05	1.77E-05	1.41E-05	1.13E-05	
EU156	1.75E-06	2.85E-06	3.87E-06	4.82E-06	5.70E-06	7.26E-06	9.24E-06	1.07E-05	1.20E-05	1.29E-05	1.36E-05	
EU157	1.91E-05	6.34E-05	6.05E-05	5.78E-05	5.51E-05	5.04E-05	4.40E-05	3.84E-05	3.34E-05	2.91E-05	2.54E-05	
EU158	3.87E-03	1.57E-03	6.34E-04	2.57E-04	1.04E-04	1.70E-05	1.13E-06	7.51E-08	4.99E-09	3.31E-10	2.20E-11	
EU159	9.87E-04	9.80E-05	9.72E-06	9.65E-07	9.56E-08	9.43E-10	9.22E-13	9.00E-16	8.78E-19	8.58E-22	8.39E-25	
GD159	6.18E-07	2.71E-06	2.82E-06	2.73E-06	2.63E-06	2.44E-06	2.17E-06	1.94E-06	1.72E-06	1.53E-06	1.37E-06	
TB161	1.48E-09	1.07E-08	1.06E-08	1.06E-08	1.05E-08	1.04E-08	1.03E-08	1.02E-08	1.00E-08	9.94E-09	9.80E-09	
TOTAL	1.16E+02	3.83E+01	1.50E+01	7.71E+00	4.61E+00	2.31E+00	1.36E+00	1.00E+00	7.85E-01	6.37E-01	5.29E-01	

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	2.05E-09	2.02E-09	2.00E-09	1.92E-09	1.80E-09	1.58E-09	1.39E-09	1.07E-09	5.59E-10	1.52E-10	4.13E-11
NA 24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MN 54	1.13E-07	1.12E-07	1.12E-07	1.10E-07	1.09E-07	1.07E-07	1.05E-07	9.97E-08	8.91E-08	7.08E-08	5.65E-08
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	1.08E-06	1.06E-06	1.04E-06	9.96E-07	9.21E-07	7.91E-07	6.77E-07	4.98E-07	2.31E-07	4.93E-08	1.06E-08
CO 57	2.39E-08	2.39E-08	2.37E-08	2.37E-08	2.34E-08	2.27E-08	2.21E-08	2.11E-08	1.86E-08	1.44E-08	1.11E-08
CO 58	1.82E-06	1.81E-06	1.79E-06	1.73E-06	1.66E-06	1.50E-06	1.36E-06	1.12E-06	6.91E-07	2.61E-07	9.86E-08
CO 60	3.46E-07	3.46E-07	3.46E-07	3.46E-07	3.44E-07	3.44E-07	3.42E-07	3.40E-07	3.31E-07	3.21E-07	3.09E-07
CU 64	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CU 67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	5.60E-05	5.06E-05	4.56E-05	3.35E-05	2.01E-05	7.18E-06	2.58E-06	3.29E-07	1.94E-09	2.09E-13	1.41E-13
U240	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	4.74E-06	7.24E-03	5.39E-03	2.23E-03	5.09E-04	2.66E-05	1.39E-06	3.82E-09	1.50E-15	3.59E-25	3.59E-25
NP240M	7.79E-07	1.53E-04	4.69E-05	1.36E-06	3.73E-09	2.81E-14	2.11E-19	1.19E-29	0.	0.	0.
AM241	4.67E-13	4.67E-13	4.67E-13	4.67E-13	4.67E-13	4.67E-13	4.67E-13	4.67E-13	4.67E-13	4.67E-13	4.67E-13
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 77	1.21E-04	7.59E-05	1.74E-05	2.10E-07	1.33E-10	5.40E-17	2.18E-23	3.56E-36	0.	0.	0.
AS 77	1.09E-08	1.61E-06	1.16E-06	3.36E-07	3.94E-08	5.34E-10	7.25E-12	1.34E-15	6.20E-25	1.33E-43	2.85E-62
SE 77M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AS 78	3.39E-04	3.02E-06	8.84E-11	7.46E-25	0.	0.	0.	0.	0.	0.	0.
BR 82	2.59E-05	1.61E-05	1.01E-05	2.45E-06	2.32E-07	2.09E-09	1.87E-11	1.51E-15	8.83E-26	3.03E-46	1.03E-66
BR 83	5.88E-05	1.55E-06	1.56E-09	1.58E-18	1.62E-33	0.	0.	0.	0.	0.	0.
KR 83M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 87	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RB 88	1.20E-01	1.39E-03	3.66E-06	6.63E-14	8.32E-27	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 91	1.13E-02	4.05E-02	7.27E-03	4.17E-05	7.62E-09	2.59E-16	8.76E-24	9.97E-39	0.	0.	0.

DEBRIS DECAY FROM 1 TO 300 DAYS

ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
6.13E-07	2.11E-02	3.77E-03	2.16E-05	3.97E-09	1.34E-16	4.53E-24	5.16E-39	0.	0.	0.	
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
3.37E-02	4.20E-04	9.07E-07	9.11E-15	4.27E-28	0.	0.	0.	0.	0.	0.	
3.07E-04	8.71E-04	9.67E-06	7.44E-12	4.34E-22	1.48E-42	5.08E-63	0.	0.	0.	0.	
1.11E-04	7.47E-04	1.46E-04	1.10E-06	3.15E-10	2.60E-17	2.15E-24	1.47E-38	0.	0.	0.	
1.97E-06	2.46E-04	2.44E-04	2.36E-04	2.24E-04	2.01E-04	1.81E-04	1.46E-04	8.56E-05	2.95E-05	1.01E-05	
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
2.27E-13	4.92E-06	9.74E-06	2.33E-05	4.33E-05	7.48E-05	9.65E-05	1.20E-04	1.15E-04	5.54E-05	2.13E-05	
1.11E-03	1.88E-03	7.08E-04	3.75E-05	2.82E-07	1.59E-11	8.91E-16	2.82E-24	1.59E-45	0.	0.	
2.45E-05	7.77E-03	2.92E-03	1.55E-04	1.16E-06	6.54E-11	3.68E-15	1.16E-23	6.57E-45	0.	0.	
2.16E-03	7.37E-03	2.77E-03	1.47E-04	1.11E-06	6.66E-11	3.74E-15	1.19E-23	6.68E-45	0.	0.	
3.13E-06	1.02E-03	7.97E-04	3.77E-04	1.09E-04	9.13E-06	7.61E-07	5.31E-09	2.16E-14	3.55E-25	5.85E-36	
2.16E-11	6.65E-04	5.60E-04	2.68E-04	7.73E-05	6.45E-06	5.39E-07	3.76E-09	1.52E-14	2.52E-25	4.14E-36	
8.53E-07	1.95E-03	1.91E-03	1.81E-03	1.66E-03	1.39E-03	1.17E-03	8.26E-04	3.43E-04	5.96E-05	1.04E-05	
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
9.90E-03	9.47E-03	2.23E-04	2.93E-09	2.14E-17	1.14E-33	6.12E-50	0.	0.	0.	0.	
2.09E-06	3.04E-04	7.18E-06	9.43E-11	6.90E-19	3.69E-35	1.97E-51	0.	0.	0.	0.	
1.09E-11	3.47E-03	2.27E-03	5.65E-04	5.57E-05	5.42E-07	5.27E-09	4.97E-13	4.31E-23	3.24E-43	2.43E-63	
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
2.51E-08	4.39E-05	4.37E-05	4.35E-05	4.31E-05	4.24E-05	4.14E-05	3.99E-05	3.63E-05	3.00E-05	2.49E-05	
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
7.01E-03	3.40E-04	1.65E-05	1.90E-09	5.13E-16	3.74E-29	2.75E-42	0.	0.	0.	0.	
1.77E-04	1.94E-05	9.41E-07	1.08E-10	2.93E-17	2.13E-30	1.56E-43	0.	0.	0.	0.	
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
4.83E-13	1.33E-05	1.28E-05	9.74E-06	6.13E-06	2.43E-06	9.65E-07	1.52E-07	1.50E-09	1.45E-13	1.40E-17	
0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
7.15E-08	1.25E-03	5.76E-04	5.34E-05	1.02E-06	3.69E-10	1.34E-13	1.77E-20	1.11E-37	0.	0.	
2.38E-06	2.52E-05	1.09E-06	8.85E-11	1.35E-17	3.17E-31	7.40E-45	0.	0.	0.	0.	
2.03E-12	5.88E-08	5.78E-08	5.51E-08	5.09E-08	4.32E-08	3.69E-08	2.66E-08	1.19E-08	2.37E-09	4.74E-10	
8.86E-09	1.33E-04	9.78E-05	3.85E-05	8.13E-06	3.63E-07	1.62E-08	3.23E-11	5.70E-18	1.79E-31	5.59E-45	
7.45E-14	9.49E-05	7.19E-05	2.84E-05	5.98E-06	2.67E-07	1.19E-08	2.37E-11	4.20E-18	1.32E-31	4.11E-45	
8.24E-04	1.80E-05	1.75E-08	1.63E-17	1.45E-32	0.	0.	0.	0.	0.	0.	
2.98E-09	5.61E-06	6.50E-09	6.27E-18	5.57E-33	0.	0.	0.	0.	0.	0.	
1.11E-12	3.43E-05										

ANNIE MR/HR
MR/HR AT H+12 HOURS = 1.000
FRACTION OF REFRACTORIES PRESENT = 0.100
RELAXATION LENGTH = 0.16 GM/SQCM
BOMB FRACTION PER SQ. METER = 4.652E-13

ZERO TIME 1.00E+00 2.00E+00 5.00E+00 1.00E+01 2.00E+01 3.00E+01 5.00E+01 1.00E+02 2.00E+02 3.00E+02

SN127	1.19E-01	4.32E-05	1.57E-08	7.49E-19	4.70E-36	0.	0.	0.	0.	0.	0.	0.
SB127	5.46E-04	2.24E-03	1.87E-03	1.09E-03	4.48E-04	7.49E-05	1.25E-05	3.50E-07	4.57E-11	7.80E-19	1.33E-26	0.
TE127M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SB128	5.96E-02	1.02E-02	1.61E-03	6.27E-06	6.08E-10	5.70E-18	5.36E-26	4.73E-42	0.	0.	0.	0.
SB129	1.44E-01	7.37E-03	1.54E-04	1.40E-09	5.58E-18	8.80E-35	1.39E-51	0.	0.	0.	0.	0.
TE129M	6.14E-11	6.47E-06	6.47E-06	6.10E-06	5.52E-06	4.49E-06	3.65E-06	2.43E-06	8.77E-07	1.14E-07	1.49E-08	0.
TE129	4.38E-03	3.65E-04	1.52E-05	7.32E-06	6.60E-06	5.39E-06	4.39E-06	2.92E-06	1.05E-06	1.38E-07	1.79E-08	0.
I130	1.13E-03	2.96E-04	7.74E-05	1.38E-06	1.69E-09	2.52E-15	3.75E-21	8.35E-33	0.	0.	0.	0.
TE131M	2.89E-06	1.01E-02	5.80E-03	1.10E-03	6.88E-05	2.68E-07	1.05E-09	1.60E-14	1.46E-26	0.	0.	0.
TE131	7.80E-01	5.40E-04	3.10E-04	5.89E-05	3.67E-06	1.44E-08	5.60E-11	8.58E-16	7.80E-28	0.	0.	0.
I131	1.09E-04	5.86E-03	5.54E-03	4.45E-03	2.93E-03	1.24E-03	5.24E-04	9.36E-05	1.26E-06	2.30E-10	4.20E-14	0.
XE131M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE132	4.59E-03	9.09E-03	7.34E-03	3.86E-03	1.33E-03	1.58E-04	1.87E-05	2.63E-07	6.14E-12	3.36E-21	1.83E-30	0.
I132	1.22E-01	1.01E-01	8.19E-02	4.30E-02	1.49E-02	1.76E-03	2.09E-04	2.93E-06	6.86E-11	3.73E-20	2.05E-29	0.
I133	1.43E-02	7.97E-02	3.60E-02	3.34E-03	6.36E-05	2.31E-08	8.36E-12	1.10E-18	6.92E-36	0.	0.	0.
XE133M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE133	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
I135	5.65E-01	9.22E-02	7.69E-03	4.48E-06	1.82E-11	3.00E-22	4.93E-33	1.34E-54	0.	0.	0.	0.
XE135M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
XE135	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS136	3.04E-04	2.88E-04	2.73E-04	2.33E-04	1.78E-04	1.05E-04	6.16E-05	2.11E-05	1.47E-06	7.08E-09	3.43E-11	0.
CS137	1.11E-06	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.19E-05	1.18E-05	1.17E-05	0.
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
BA139	9.24E-03	9.86E-07	5.82E-12	1.20E-27	0.	0.	0.	0.	0.	0.	0.	0.
BA140	2.93E-04	1.73E-03	1.65E-03	1.39E-03	1.06E-03	6.19E-04	3.60E-04	1.22E-04	8.15E-06	3.63E-08	1.60E-10	0.
LA140	9.62E-09	8.33E-03	1.34E-02	1.85E-02	1.65E-02	9.85E-03	5.72E-03	1.95E-03	1.29E-04	5.76E-07	2.56E-09	0.
LA141	7.23E-04	2.87E-04	4.02E-06	1.11E-11	6.09E-21	1.82E-39	5.42E-58	0.	0.	0.	0.	0.
CE141	1.57E-10	1.75E-04	1.73E-04	1.63E-04	1.46E-04	1.18E-04	9.51E-05	6.20E-05	2.13E-05	2.51E-06	2.95E-07	0.
LA142	6.90E-02	1.51E-05	2.93E-10	2.15E-24	0.	0.	0.	0.	0.	0.	0.	0.
CE143	5.39E-05	2.21E-03	1.34E-03	2.95E-04	2.37E-05	1.53E-07	9.92E-10	4.16E-14	4.69E-25	0.	0.	0.

1

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	4.67E-05	3.18E-04	1.75E-04	2.95E-05	1.51E-06	3.98E-09	1.05E-11	7.23E-17	9.07E-30	0.	0.	0.
SM153	2.63E-05	1.85E-05	1.30E-05	4.49E-06	7.62E-07	2.22E-08	6.44E-10	5.41E-13	1.12E-20	4.76E-36	2.02E-51	0.
SM156	5.33E-05	9.09E-06	1.55E-06	7.64E-09	1.10E-12	2.26E-20	4.67E-28	1.99E-43	0.	0.	0.	0.
EU155	1.10E-09	3.72E-08	3.71E-08	3.71E-08	3.70E-08	3.69E-08	3.67E-08	3.64E-08	3.57E-08	3.43E-08	3.30E-08	0.
EU156	1.75E-06	1.42E-05	1.57E-05	1.41E-05	1.12E-05	7.04E-06	4.44E-06	1.76E-06	1.75E-07	1.72E-09	1.69E-11	0.
EU157	1.91E-05	2.21E-05	7.43E-06	2.79E-07	1.17E-09	2.06E-14	3.65E-19	1.14E-28	0.	0.	0.	0.
GD159	6.18E-07	1.22E-06	4.85E-07	3.02E-08	2.97E-10	2.88E-14	2.79E-18	2.62E-26	2.24E-46	0.	0.	0.
TB161	1.48E-09	9.70E-09	8.75E-09	6.48E-09	3.92E-09	1.44E-09	5.25E-10	7.04E-11	4.66E-13	2.01E-17	8.75E-22	0.
TOTAL	2.10E+00	4.42E-01	1.95E-01	8.39E-02	4.05E-02	1.58E-02	8.55E-03	3.41E-03	7.61E-04	1.94E-04	8.19E-05	0.

ANNIE MR/HR
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 4.652E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	2.05E-09	1.77E-11	1.65E-12	1.53E-13	1.23E-16	9.84E-20	7.36E-24	4.72E-30	0.	0.	0.	0.
MN 54	1.13E-07	4.86E-08	3.20E-08	2.10E-08	6.01E-09	1.72E-09	3.23E-10	2.64E-11	6.20E-15	2.24E-20	8.12E-26	0.
FE 59	1.08E-06	3.88E-09	2.33E-10	1.40E-11	3.04E-15	6.56E-19	8.55E-24	4.01E-31	0.	0.	0.	0.
CO 57	2.39E-08	9.42E-09	5.90E-09	3.70E-09	9.12E-10	2.25E-10	3.47E-12	2.11E-12	1.84E-16	1.51E-22	0.	0.
CO 58	1.82E-06	5.24E-08	8.89E-09	1.51E-09	7.33E-12	3.57E-14	2.95E-17	6.99E-22	2.67E-37	0.	0.	0.
CO 60	3.46E-07	3.03E-07	2.82E-07	2.64E-07	2.17E-07	1.78E-07	1.37E-07	9.23E-08	2.48E-08	3.44E-09	4.75E-10	0.
W 181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W 188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	5.60E-05	1.40E-13	1.36E-13	1.32E-13	1.24E-13	1.15E-13	1.05E-13	9.08E-14	5.65E-14	2.77E-14	1.36E-14	0.
AM241	4.67E-13	4.67E-13	4.67E-13	4.67E-13	4.69E-13	4.71E-13	4.71E-13	4.74E-13	4.76E-13	4.71E-13	4.65E-13	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
KR 85	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 89	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SR 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 90	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
Y 91	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
ZR 95	1.97E-06	5.07E-06	7.23E-07	1.03E-07	3.00E-10	8.73E-13	3.61E-16	3.05E-21	3.74E-38	0.	0.	0.
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	2.27E-13	1.13E-05	1.62E-06	2.31E-07	6.68E-10	1.94E-12	8.10E-16	6.84E-21	8.37E-38	0.	0.	0.
RU103	8.53E-07	3.31E-06	1.36E-07	5.58E-09	3.81E-13	2.61E-17	7.33E-23	3.45E-31	0.	0.	0.	0.
RH103M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU106	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RH106	2.51E-08	2.20E-05	1.56E-05	1.11E-05	3.93E-06	1.40E-06	3.51E-07	4.45E-08	4.48E-11	1.44E-15	4.64E-20	0.
SN123	6.03E-10	8.35E-09	3.03E-09	1.10E-09	5.28E-11	2.53E-12	4.41E-14	1.02E-16	1.63E-25	1.05E-38	6.75E-52	0.
SB125	6.58E-07	1.32E-06	1.16E-06	1.02E-06	6.98E-07	4.75E-07	2.84E-07	1.31E-07	1.01E-08	2.15E-10	4.58E-12	0.
TE125M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TE127	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CS137	1.11E-06	1.17E-05	1.15E-05	1.14E-05	1.10E-05	1.06E-05	1.01E-05	9.47E-06	7.48E-06	5.32E-06	3.75E-06	0.
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE141	1.57E-10	6.79E-08	1.36E-09	2.74E-11	2.23E-16	1.82E-21	2.98E-28	1.98E-38	0.	0.	0.	0.
CE144	1.29E-07	3.78E-07	2.43E-07	1.55E-07	4.07E-08	1.07E-08	1.80E-09	1.24E-10	1.67E-14	2.62E-20	4.09E-26	0.
PR144	6.29E-11	6.74E-07	4.33E-07	2.77E-07	7.26E-08	1.91E-08	3.21E-09	2.21E-10	2.98E-14	4.68E-20	7.29E-26	0.
PM147	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EU155	1.10E-09	3.21E-08	2.99E-08	2.78E-08	2.23E-08	1.79E-08	1.34E-08	8.65E-09	2.02E-09	2.27E-10	2.56E-11	0.
TOTAL	6.42E-05	5.62E-05	3.18E-05	2.46E-05	1.60E-05	1.27E-05	1.09E-05	9.74E-06	7.52E-06	5.32E-06	3.75E-06	0.

APPENDIX 9

ANNIE EVENT

Fit To Sum of Eleven Exponentials

The calculated values are fit to the function

$$\sum_{i=1}^{11} a_i e^{-\lambda_i t}$$

In the first table the a_i 's are the variables and are designated by an odd number in the column under "K"; the i 's are fixed parameters so designated. The quality of fit to each point is shown in the second table.

	<u>Page</u>
Fraction refractories present = 1.0	9-1
Fraction refractories present = 0.5	9-3
Fraction refractories present = 0.1	9-5

1

ANNIE

CI/SQ KM, 1.0 REFRACTORIES PRESENT

K	FINAL VALUE	STND. DEV.	
1	1.7244E+04	2.3185E+03	
2	2.7390E+00	0.	FIXED PARAMETER
3	2.0226E+03	4.3437E+02	
4	8.8130E-01	0.	FIXED PARAMETER
5	3.5833E+02	1.3741E+02	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.6373E+02	2.8367E+01	
8	1.2090E-01	0.	FIXED PARAMETER
9	9.0262E+01	6.8489E+00	
10	3.4400E-02	0.	FIXED PARAMETER
11	2.5607E+01	1.3290E+00	
12	8.8070E-03	0.	FIXED PARAMETER
13	3.3987E+00	1.8519E-01	
14	2.3380E-03	0.	FIXED PARAMETER
15	6.7786E-01	2.4332E-02	
16	4.4040E-04	0.	FIXED PARAMETER
17	4.8623E-02	3.6623E-03	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.4056E-02	9.9803E-04	
20	4.5780E-05	0.	FIXED PARAMETER
21	2.8518E-03	4.9658E-05	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	2.5400E+03	2.5456E+03	-0.22
2	2.000E+00	9.1700E+02	9.0414E+02	1.42
3	3.000E+00	5.4500E+02	5.5375E+02	-1.58
4	4.000E+00	4.0300E+02	4.0537E+02	-0.59
5	6.000E+00	2.7800E+02	2.7431E+02	1.34
6	9.000E+00	1.9600E+02	1.9427E+02	0.89
7	1.200E+01	1.5200E+02	1.5203E+02	-0.02
8	1.500E+01	1.2400E+02	1.2439E+02	-0.31
9	1.800E+01	1.0400E+02	1.0469E+02	-0.66
10	2.100E+01	8.9800E+01	9.0009E+01	-0.23
11	2.400E+01	7.8000E+01	7.8729E+01	-0.93
12	4.800E+01	3.8800E+01	3.8656E+01	0.37
13	1.200E+02	1.4300E+01	1.3630E+01	4.92
14	2.400E+02	5.5200E+00	5.7297E+00	-3.66
15	4.800E+02	2.0200E+00	2.0915E+00	-3.42
16	7.200E+02	1.2500E+00	1.2314E+00	1.51
17	1.200E+03	7.0100E-01	6.6446E-01	5.50
18	2.400E+03	3.1500E-01	3.0063E-01	4.78
19	4.800E+03	1.1900E-01	1.2448E-01	-4.40
20	7.200E+03	6.0200E-02	6.3140E-02	-4.66
21	8.770E+03	4.3800E-02	4.4729E-02	-2.08
22	1.320E+04	2.4500E-02	2.3617E-02	3.74
23	1.750E+04	1.6900E-02	1.6242E-02	4.05
24	3.070E+04	7.6400E-03	7.6566E-03	-0.22
25	4.380E+04	4.6500E-03	4.7909E-03	-2.94
26	6.140E+04	3.2900E-03	3.3089E-03	-0.57
27	8.770E+04	2.5900E-03	2.5010E-03	3.56
28	1.750E+05	1.7900E-03	1.7733E-03	0.94
29	3.070E+05	1.2200E-03	1.2335E-03	-1.09
30	4.380E+05	8.5200E-04	8.6261E-04	-1.23

9-2

PAGE

1

ANNIE

MR/HR, 1.0 REFRACTORIES PRESENT 0.16 GM/SQCM

K	FINAL VALUE	STND. DEV.	
1	1.2011E+02	1.7678E+01	
2	2.7390E+00	0.	FIXED PARAMETER
3	4.1194E+01	2.9251E+00	
4	8.8130E-01	0.	FIXED PARAMETER
5	6.3750E+00	7.5572E-01	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.0595E+00	1.1796E-01	
8	1.2090E-01	0.	FIXED PARAMETER
9	4.7289E-01	2.6496E-02	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.3556E-01	5.0761E-03	
12	8.8070E-03	0.	FIXED PARAMETER
13	2.5513E-02	7.3202E-04	
14	2.3380E-03	0.	FIXED PARAMETER
15	4.5926E-03	6.4576E-05	
16	4.4040E-04	0.	FIXED PARAMETER
17	4.1436E-05	4.7514E-06	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.3970E-05	1.3102E-06	
20	4.5780E-05	0.	FIXED PARAMETER
21	7.7792E-06	8.4495E-08	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	3.1600E+01	3.1592E+01	0.03
2	2.000E+00	1.2700E+01	1.2717E+01	-0.13
3	3.000E+00	6.9400E+00	6.9631E+00	-0.33
4	4.000E+00	4.4300E+00	4.3996E+00	0.69
5	6.000E+00	2.3700E+00	2.3639E+00	0.26
6	9.000E+00	1.3900E+00	1.4017E+00	-0.83
7	1.200E+01	1.0000E+00	1.0076E+00	-0.75
8	1.500E+01	7.8400E-01	7.8473E-01	-0.09
9	1.800E+01	6.4300E-01	6.3880E-01	0.66
10	2.100E+01	5.4200E-01	5.3559E-01	1.20
11	2.400E+01	4.6000E-01	4.5926E-01	0.16
12	4.800E+01	2.1100E-01	2.1311E-01	-0.99
13	1.200E+02	7.8400E-02	7.8425E-02	-0.03
14	2.400E+02	3.5200E-02	3.5248E-02	-0.14
15	4.800E+02	1.4300E-02	1.4062E-02	1.69
16	7.200E+02	8.4700E-03	8.3821E-03	1.05
17	1.200E+03	4.1800E-03	4.3109E-03	-3.04
18	2.400E+03	1.6600E-03	1.7412E-03	-4.67
19	4.800E+03	6.0700E-04	5.9812E-04	1.49
20	7.200E+03	2.3500E-04	2.2898E-04	2.63
21	8.770E+03	1.3400E-04	1.2906E-04	3.82
22	1.320E+04	3.8400E-05	3.8369E-05	0.08
23	1.750E+04	2.1200E-05	2.1639E-05	-2.03
24	3.070E+04	1.1900E-05	1.1938E-05	-0.31
25	4.380E+04	9.1000E-06	9.0970E-06	0.03
26	6.140E+04	7.6100E-06	7.4630E-06	1.97
27	8.770E+04	6.5800E-06	6.3773E-06	3.18
28	1.750E+05	4.7900E-06	4.8291E-06	-0.81
29	3.070E+05	3.3100E-06	3.3647E-06	-1.63
30	4.380E+05	2.3200E-06	2.3530E-06	-1.40

1

ANNIE

CI/SQ KM, 0.5 REFRACTORIES PRESENT

K	FINAL VALUE	STND. DEV.	
1	1.4903E+04	2.7793E+03	
2	2.7390E+00	0.	FIXED PARAMETER
3	2.2553E+03	5.1526E+02	
4	8.8130E-01	0.	FIXED PARAMETER
5	3.5810E+02	1.5779E+02	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.6581E+02	3.0952E+01	
8	1.2090E-01	0.	FIXED PARAMETER
9	7.5362E+01	7.3873E+00	
10	3.4400E-02	0.	FIXED PARAMETER
11	2.0448E+01	1.4653E+00	
12	8.8070E-03	0.	FIXED PARAMETER
13	3.7871E+00	2.1633E-01	
14	2.3380E-03	0.	FIXED PARAMETER
15	5.9999E-01	2.7002E-02	
16	4.4040E-04	0.	FIXED PARAMETER
17	3.5293E-02	4.2902E-03	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.2470E-02	1.2938E-03	
20	4.5780E-05	0.	FIXED PARAMETER
21	3.5741E-03	7.5650E-05	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	2.4700E+03	2.4731E+03	-0.13
2	2.000E+00	9.2500E+02	9.1714E+02	0.86
3	3.000E+00	5.4700E+02	5.5287E+02	-1.06
4	4.000E+00	3.9500E+02	3.9575E+02	-0.19
5	6.000E+00	2.6200E+02	2.5975E+02	0.87
6	9.000E+00	1.8000E+02	1.7964E+02	0.20
7	1.200E+01	1.3800E+02	1.3830E+02	-0.22
8	1.500E+01	1.1100E+02	1.1160E+02	-0.53
9	1.800E+01	9.2800E+01	9.2786E+01	0.02
10	2.100E+01	7.9300E+01	7.8928E+01	0.47
11	2.400E+01	6.8200E+01	6.8418E+01	-0.32
12	4.800E+01	3.2500E+01	3.2681E+01	-0.55
13	1.200E+02	1.2200E+01	1.1802E+01	3.37
14	2.400E+02	5.1200E+00	5.2405E+00	-2.30
15	4.800E+02	2.0000E+00	2.0662E+00	-3.20
16	7.200E+02	1.2200E+00	1.2247E+00	-0.38
17	1.200E+03	6.7200E-01	6.2947E-01	6.76
18	2.400E+03	2.8800E-01	2.6408E-01	9.06
19	4.800E+03	1.0100E-01	1.0671E-01	-5.35
20	7.200E+03	4.9900E-02	5.3466E-02	-6.67
21	8.770E+03	3.6500E-02	3.7722E-02	-3.24
22	1.320E+04	2.1200E-02	2.0154E-02	5.19
23	1.750E+04	1.5200E-02	1.4289E-02	6.38
24	3.070E+04	7.5000E-03	7.4969E-03	0.04
25	4.380E+04	4.9300E-03	5.1173E-03	-3.66
26	6.140E+04	3.7300E-03	3.8101E-03	-2.10
27	8.770E+04	3.0900E-03	3.0401E-03	1.64
28	1.750E+05	2.2500E-03	2.2207E-03	1.32
29	3.070E+05	1.5500E-03	1.5459E-03	0.26
30	4.380E+05	1.0800E-03	1.0811E-03	-0.10

1

ANNIE

MR/HR, 0.5 REFRACTORIES PRESENT 0.16 GM/SQCM

K	FINAL VALUE	STND. DEV.	
1	1.2020E+02	7.2468E+00	
2	2.7390E+00	0.	FIXED PARAMETER
3	5.0221E+01	1.1612E+00	
4	8.8130E-01	0.	FIXED PARAMETER
5	5.0615E+00	2.9202E-01	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.2530E+00	4.4908E-02	
8	1.2090E-01	0.	FIXED PARAMETER
9	4.2007E-01	1.0121E-02	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.3426E-01	1.9940E-03	
12	8.8070E-03	0.	FIXED PARAMETER
13	3.1845E-02	2.7308E-04	
14	2.3380E-03	0.	FIXED PARAMETER
15	3.1491E-03	1.9499E-05	
16	4.4040E-04	0.	FIXED PARAMETER
17	4.0060E-05	1.9088E-06	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.3933E-05	5.7751E-07	
20	4.5780E-05	0.	FIXED PARAMETER
21	9.6948E-06	4.0315E-08	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	3.4600E+01	3.4571E+01	0.08
2	2.000E+00	1.3700E+01	1.3770E+01	-0.51
3	3.000E+00	7.2800E+00	7.2872E+00	-0.10
4	4.000E+00	4.5100E+00	4.4657E+00	0.99
5	6.000E+00	2.3400E+00	2.3369E+00	0.13
6	9.000E+00	1.3800E+00	1.3955E+00	-1.11
7	1.200E+01	1.0000E+00	1.0095E+00	-0.94
8	1.500E+01	7.8400E-01	7.8451E-01	-0.07
9	1.800E+01	6.4000E-01	6.3467E-01	0.84
10	2.100E+01	5.3600E-01	5.2837E-01	1.44
11	2.400E+01	4.5200E-01	4.5016E-01	0.41
12	4.800E+01	2.0400E-01	2.0697E-01	-1.43
13	1.200E+02	8.0800E-02	8.0539E-02	0.32
14	2.400E+02	3.7500E-02	3.7393E-02	0.29
15	4.800E+02	1.4900E-02	1.4936E-02	-0.24
16	7.200E+02	8.5100E-03	8.5053E-03	0.06
17	1.200E+03	3.8400E-03	3.8434E-03	-0.09
18	2.400E+03	1.2700E-03	1.2635E-03	0.51
19	4.800E+03	4.2700E-04	4.2493E-04	0.49
20	7.200E+03	1.6800E-04	1.6963E-04	-0.96
21	8.770E+03	1.0000E-04	1.0005E-04	-0.05
22	1.320E+04	3.5500E-05	3.5568E-05	-0.19
23	1.750E+04	2.2700E-05	2.2604E-05	0.42
24	3.070E+04	1.3700E-05	1.3643E-05	0.42
25	4.380E+04	1.0700E-05	1.0781E-05	-0.75
26	6.140E+04	9.0500E-06	9.0793E-06	-0.32
27	8.770E+04	7.9600E-06	7.8843E-06	0.96
28	1.750E+05	5.9800E-06	6.0171E-06	-0.62
29	3.070E+05	4.1800E-06	4.1933E-06	-0.32
30	4.380E+05	2.9500E-06	2.9325E-06	0.60

1

ANNIE

CI/SQ KM, 0.1 REFRACTORIES PRESENT

K	FINAL VALUE	STND DEV.	
1	1.1857E+04	4.0029E+03	
2	2.7390E+00	0.	FIXED PARAMETER
3	2.6260E+03	7.2784E+02	
4	8.8130E-01	0.	FIXED PARAMETER
5	3.2458E+02	2.1191E+02	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.7563E+02	3.8160E+01	
8	1.2090E-01	0.	FIXED PARAMETER
9	5.5582E+01	8.9115E+00	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.3394E+01	1.8382E+00	
12	8.8070E-03	0.	FIXED PARAMETER
13	4.3496E+00	2.9984E-01	
14	2.3380E-03	0.	FIXED PARAMETER
15	4.9594E-01	3.4195E-02	
16	4.4040E-04	0.	FIXED PARAMETER
17	1.6396E-02	5.8932E-03	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.1030E-02	2.0088E-03	
20	4.5780E-05	0.	FIXED PARAMETER
21	4.4892E-03	1.3999E-04	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	2.3900E+03	2.3901E+03	-0.00
2	2.000E+00	9.3600E+02	9.3538E+02	0.07
3	3.000E+00	5.4800E+02	5.5053E+02	-0.46
4	4.000E+00	3.8400E+02	3.8199E+02	0.53
5	6.000E+00	2.4200E+02	2.4079E+02	0.50
6	9.000E+00	1.6000E+02	1.6147E+02	-0.91
7	1.200E+01	1.2000E+02	1.2128E+02	-1.06
8	1.500E+01	9.5000E+01	9.5533E+01	-0.56
9	1.800E+01	7.8100E+01	7.7617E+01	0.62
10	2.100E+01	6.5700E+01	6.4639E+01	1.64
11	2.400E+01	5.5600E+01	5.4990E+01	1.11
12	4.800E+01	2.4200E+01	2.4675E+01	-1.93
13	1.200E+02	9.4600E+00	9.3386E+00	1.30
14	2.400E+02	4.6100E+00	4.5917E+00	0.40
15	4.800E+02	1.9700E+00	2.0437E+00	-3.61
16	7.200E+02	1.1900E+00	1.2230E+00	-2.70
17	1.200E+03	6.3300E-01	5.8498E-01	8.21
18	2.400E+03	2.5300E-01	2.1514E-01	17.60
19	4.800E+03	7.7600E-02	8.2835E-02	-6.32
20	7.200E+03	3.6600E-02	4.0494E-02	-9.62
21	8.770E+03	2.7100E-02	2.8357E-02	-4.43
22	1.320E+04	1.7000E-02	1.5602E-02	8.96
23	1.750E+04	1.2900E-02	1.1783E-02	9.48
24	3.070E+04	7.3100E-03	7.3688E-03	-0.80
25	4.380E+04	5.2900E-03	5.5924E-03	-5.41
26	6.140E+04	4.2900E-03	4.4773E-03	-4.18
27	8.770E+04	3.7400E-03	3.7334E-03	0.18
28	1.750E+05	2.8500E-03	2.7878E-03	2.23
29	3.070E+05	1.9800E-03	1.9417E-03	1.97
30	4.380E+05	1.3800E-03	1.3579E-03	1.63

1

ANNIE

MR/HR, 0.1 REFRACTORIES PRESENT 0.16 GM/SQCM

K	FINAL VALUE	STND. DEV.	
1	1.1725E+02	4.7930E+01	
2	2.7390E+00	0.	FIXED PARAMETER
3	6.1911E+01	7.4123E+00	
4	8.8130E-01	0.	FIXED PARAMETER
5	3.3997E+00	1.8036E+00	
6	3.8960E-01	0.	FIXED PARAMETER
7	2.4830E+00	2.7210E-01	
8	1.2090E-01	0.	FIXED PARAMETER
9	3.6111E-01	6.1637E-02	
10	3.4400E-02	0.	FIXED PARAMETER
11	1.2881E-01	1.2542E-02	
12	8.8070E-03	0.	FIXED PARAMETER
13	4.0948E-02	1.5952E-03	
14	2.3380E-03	0.	FIXED PARAMETER
15	1.3147E-03	7.4137E-05	
16	4.4040E-04	0.	FIXED PARAMETER
17	1.9928E-05	1.1334E-05	
18	1.1150E-04	0.	FIXED PARAMETER
19	1.8162E-05	3.9683E-06	
20	4.5780E-05	0.	FIXED PARAMETER
21	1.2033E-05	3.0760E-07	
22	2.7300E-06	0.	FIXED PARAMETER

	TIME (HOURS)	INPUT	CALCULATED FUNCTION	PERCENT DEVIATION
1	1.000E+00	3.8300E+01	3.8247E+01	0.14
2	2.000E+00	1.5000E+01	1.5129E+01	-0.85
3	3.000E+00	7.7100E+00	7.7098E+00	0.00
4	4.000E+00	4.6100E+00	4.5525E+00	1.26
5	6.000E+00	2.3100E+00	2.3009E+00	0.40
6	9.000E+00	1.3600E+00	1.3861E+00	-1.88
7	1.200E+01	1.0000E+00	1.0113E+00	-1.12
8	1.500E+01	7.8500E-01	7.8420E-01	0.10
9	1.800E+01	6.3700E-01	6.2977E-01	1.15
10	2.100E+01	5.2900E-01	5.1974E-01	1.78
11	2.400E+01	4.4200E-01	4.3919E-01	0.64
12	4.800E+01	1.9500E-01	1.9910E-01	-2.06
13	1.200E+02	8.3900E-02	8.2817E-02	1.31
14	2.400E+02	4.0500E-02	4.0249E-02	0.62
15	4.800E+02	1.5800E-02	1.6323E-02	-3.20
16	7.200E+02	8.5500E-03	8.8385E-03	-3.26
17	1.200E+03	3.4100E-03	3.3011E-03	3.30
18	2.400E+03	7.6100E-04	6.5008E-04	17.06
19	4.800E+03	1.9400E-04	1.9744E-04	-1.74
20	7.200E+03	8.1900E-05	8.8966E-05	-7.94
21	8.770E+03	5.6200E-05	5.9034E-05	-4.80
22	1.320E+04	3.1800E-05	3.0033E-05	5.88
23	1.750E+04	2.4600E-05	2.3046E-05	6.74
24	3.070E+04	1.6000E-05	1.6171E-05	-1.06
25	4.380E+04	1.2700E-05	1.3273E-05	-4.32
26	6.140E+04	1.0900E-05	1.1289E-05	-3.45
27	8.770E+04	9.7400E-06	9.7996E-06	-0.61
28	1.750E+05	7.5200E-06	7.4684E-06	0.69
29	3.070E+05	5.3200E-06	5.2045E-06	2.22
30	4.380E+05	3.7500E-06	3.6396E-06	3.03

27
5-1-81

Lawrence Livermore National Laboratory

April 22, 1981

TO: Distribution
SUBJECT: ERRATA, UCID-18870

The following pages are in error:

4-2	4-13	4-24
4-7	4-18	4-29
4-11	4-22	4-33

Errata sheets are attached.

Harry G. Hicks
Harry G. Hicks

SMOKY
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	9.91E+01	9.70E+03
1.00E+00	3.09E+01	2.17E+03
2.00E+00	1.25E+01	8.56E+02
3.00E+00	6.90E+00	5.34E+02
4.00E+00	4.43E+00	3.99E+02
6.00E+00	2.39E+00	2.74E+02
9.00E+00	1.40E+00	1.90E+02
1.20E+01	1.00E+00	1.45E+02
1.50E+01	7.77E-01	1.16E+02
1.80E+01	6.31E-01	9.55E+01
2.10E+01	5.28E-01	8.09E+01
1.00E+00 DAYS	4.44E-01	6.90E+01
2.00E+00	1.93E-01	3.12E+01
5.00E+00	6.89E-02	1.10E+01
1.00E+01	3.27E-02	4.75E+00
2.00E+01	1.39E-02	1.96E+00
3.00E+01	8.29E-03	1.22E+00
5.00E+01	4.08E-03	6.86E-01
1.00E+02	1.64E-03	3.10E-01
2.00E+02	6.09E-04	1.17E-01
3.00E+02	2.34E-04	5.81E-02
1.00E+00 YEARS	1.32E-04	4.15E-02
1.50E+00	3.57E-05	2.27E-02
2.00E+00	1.91E-05	1.56E-02
3.50E+00	1.13E-05	7.31E-03
5.00E+00	8.99E-06	4.67E-03
7.00E+00	7.59E-06	3.42E-03
1.00E+01	6.50E-06	2.73E-03
2.00E+01	4.64E-06	1.87E-03
3.50E+01	3.19E-06	1.27E-03
5.00E+01	2.24E-06	8.85E-04

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BE 7	3.57E-04	3.56E-04	3.55E-04	3.56E-04	3.56E-04	3.56E-04	3.55E-04	3.54E-04	3.53E-04	3.53E-04	3.52E-04
NA 24	2.53E-01	2.42E-01	2.31E-01	2.20E-01	2.10E-01	1.92E-01	1.67E-01	1.46E-01	1.27E-01	1.10E-01	9.57E-02
MN 54	1.16E-04	1.16E-04	1.16E-04	1.16E-04	1.16E-04	1.16E-04	1.16E-04	1.15E-04	1.15E-04	1.15E-04	1.15E-04
FE 55	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04	2.99E-04
FE 59	5.12E-04	5.11E-04	5.11E-04	5.11E-04	5.11E-04	5.11E-04	5.10E-04	5.09E-04	5.08E-04	5.07E-04	5.06E-04
CO 57	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06	1.46E-06
CO 58	1.06E-05	1.06E-05	1.06E-05	1.06E-05	1.06E-05	1.06E-05	1.05E-05	1.05E-05	1.05E-05	1.05E-05	1.05E-05
CO 60	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.69E-05
CU 64	1.67E+00	1.58E+00	1.50E+00	1.42E+00	1.34E+00	1.21E+00	1.02E+00	8.71E-01	7.41E-01	6.31E-01	5.36E-01
CU 67	5.27E-05	5.22E-05	5.13E-05	5.09E-05	5.04E-05	4.91E-05	4.73E-05	4.59E-05	4.45E-05	4.28E-05	4.16E-05
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	2.53E-05	2.53E-05	2.53E-05	2.53E-05	2.52E-05	2.52E-05	2.52E-05	2.52E-05	2.52E-05	2.51E-05	2.51E-05
W187	2.28E-03	2.21E-03	2.15E-03	2.09E-03	2.03E-03	1.91E-03	1.76E-03	1.61E-03	1.47E-03	1.36E-03	1.24E-03
W188	1.73E-07	1.73E-07	1.73E-07	1.73E-07	1.73E-07	1.73E-07	1.72E-07	1.72E-07	1.72E-07	1.72E-07	1.71E-07
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	3.47E-04	3.42E-04	3.37E-04	3.32E-04	3.27E-04	3.20E-04	3.08E-04	2.96E-04	2.84E-04	2.71E-04	2.62E-04
U237	2.74E-01	2.73E-01	2.72E-01	2.71E-01	2.69E-01	2.67E-01	2.63E-01	2.60E-01	2.57E-01	2.53E-01	2.50E-01
U239	1.39E+03	2.38E+02	4.06E+01	6.92E+00	1.17E+00	3.42E-02	1.70E-04	8.37E-07	4.14E-09	2.05E-11	1.01E-13
U240	2.29E+00	2.18E+00	2.08E+00	1.98E+00	1.88E+00	1.70E+00	1.47E+00	1.27E+00	1.09E+00	9.43E-01	8.13E-01
NP239	4.77E-03	8.00E+00	9.25E+00	9.40E+00	9.32E+00	9.10E+00	8.74E+00	8.44E+00	8.15E+00	7.86E+00	7.56E+00
NP240M	3.62E-03	2.19E+00	2.09E+00	1.99E+00	1.90E+00	1.72E+00	1.48E+00	1.28E+00	1.10E+00	9.51E-01	8.22E-01
NP240	9.17E-11	4.71E-11	2.45E-11	1.26E-11	6.53E-12	1.75E-12	2.41E-13	3.32E-14	4.58E-15	6.31E-16	8.73E-17
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.48E-05	1.47E-05	1.47E-05	1.47E-05	1.47E-05	1.47E-05
GE 75	1.19E-05	5.76E-02	3.47E-02	2.09E-02	1.26E-02	4.56E-03	9.96E-04	2.18E-04	4.76E-05	1.04E-05	2.27E-06
GE 77	4.99E-03	1.28E-02	1.21E-02	1.14E-02	1.07E-02	9.46E-03	7.87E-03	6.54E-03	5.45E-03	4.53E-03	3.77E-03
AS 77	5.16E-05	8.15E-03	8.24E-03	8.30E-03	8.35E-03	8.41E-03	8.41E-03	8.35E-03	8.22E-03	8.06E-03	7.85E-03
SE 77M	2.03E-09	2.44E-05	2.48E-05	2.49E-05	2.49E-05	2.51E-05	2.53E-05	2.51E-05	2.48E-05	2.42E-05	2.35E-05
GE 78	6.54E-01	4.09E-01	2.54E-01	1.59E-01	9.92E-02	3.86E-02	9.38E-03	2.27E-03	5.54E-04	1.35E-04	3.27E-05
AS 78	1.18E-02	1.95E-01	2.41E-01	2.25E-01	1.88E-01	1.11E-01	4.13E-02	1.37E-02	4.25E-03	1.27E-03	3.68E-04
AS 79	1.25E+01	1.23E-01	1.21E-03	1.19E-05	1.18E-07	1.14E-11	1.09E-17	1.04E-23	9.89E-30	9.44E-36	9.02E-42
SE 79M	1.85E-02	2.17E-01	2.14E-03	2.11E-05	2.08E-07	2.01E-11	1.92E-17	1.83E-23	1.75E-29	1.67E-35	1.59E-41
BR 80	7.85E-02	7.40E-03	6.96E-04	6.54E-05	6.16E-06	5.46E-03	4.57E-11	3.81E-14	3.18E-17	2.65E-20	2.21E-23
SE 81M	6.44E-02	3.01E+00	1.45E+00	6.97E-01	3.35E-01	7.84E-02	8.77E-03	9.83E-04	1.10E-04	1.24E-05	1.39E-06
SE 81	7.87E-01	3.55E+00	2.03E+00	1.03E+00	4.98E-01	1.16E-01	1.30E-02	1.46E-03	1.63E-04	1.83E-05	2.05E-06
BR 82	3.95E-04	3.88E-04	3.80E-04	3.73E-04	3.65E-04	3.51E-04	3.31E-04	3.12E-04	2.95E-04	2.78E-04	2.62E-04
SE 83	3.73E-01	7.16E+00	1.36E+00	2.57E-01	4.86E-02	1.75E-03	1.19E-05	8.09E-08	5.53E-10	3.75E-12	2.38E-14
BR 83	3.14E-01	4.69E+00	4.34E+00	3.41E+00	2.59E+00	1.46E+00	6.19E-01	2.60E-01	1.10E-01	4.64E-02	1.96E-02
KR 83M	1.62E-05	1.09E+00	2.17E+00	2.63E+00	2.78E+00	2.32E+00	1.37E+00	7.03E-01	3.39E-01	1.57E-01	7.03E-02

1

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

PAGE 8

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1	00E+00	2.00E+00	5	00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	3.57E-04	3.52E-04	3.48E-04	3.35E-04	3.13E-04	2.75E-04	2.42E-04	1.86E-04	9.73E-05	2.64E-05	7.19E-06			
NA 24	2.53E-01	8.35E-02	2.75E-02	9.87E-04	3.86E-06	5.90E-11	9.01E-16	2.10E-25	0.	0.	0.			
MN 54	1.16E-04	1.15E-04	1.15E-04	1.12E-04	1.11E-04	1.09E-04	1.07E-04	1.02E-04	9.13E-05	7.26E-05	5.79E-05			
FE 55	2.99E-04	2.99E-04	2.99E-04	2.98E-04	2.97E-04	2.95E-04	2.92E-04	2.89E-04	2.77E-04	2.59E-04	2.40E-04			
FE 59	5.12E-04	5.04E-04	4.97E-04	4.74E-04	4.39E-04	3.77E-04	3.23E-04	2.37E-04	1.10E-04	2.35E-05	5.04E-06			
CO 57	1.46E-06	1.46E-06	1.45E-06	1.45E-06	1.43E-06	1.38E-06	1.35E-06	1.29E-06	1.13E-06	8.77E-07	6.79E-07			
CO 58	1.06E-05	1.05E-05	1.04E-05	1.01E-05	9.62E-06	8.71E-06	7.90E-06	6.51E-06	4.01E-06	1.52E-06	5.72E-07			
CO 60	5.69E-05	5.69E-05	5.69E-05	5.69E-05	5.66E-05	5.66E-05	5.63E-05	5.59E-05	5.46E-05	5.29E-05	5.09E-05			
CU 64	1.67E+00	4.55E-01	1.24E-01	2.52E-03	3.78E-06	8.60E-12	1.95E-17	1.00E-28	0.	0.	0.			
CU 67	5.27E-05	4.02E-05	3.07E-05	1.36E-05	3.55E-06	2.40E-07	1.62E-08	7.34E-11	1.03E-16	0.	0.			
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
W185	2.53E-05	2.51E-05	2.46E-05	2.41E-05	2.31E-05	2.10E-05	1.92E-05	1.59E-05	1.00E-05	3.99E-06	1.59E-06			
W187	2.28E-03	1.14E-03	5.65E-04	7.05E-05	2.16E-06	2.06E-09	1.95E-12	1.76E-20	0.	0.	0.			
W188	1.73E-07	1.71E-07	1.69E-07	1.65E-07	1.57E-07	1.41E-07	1.28E-07	1.05E-07	6.36E-08	2.35E-08	8.63E-09			
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
PB203	2.52E-04	1.83E-04	7.00E-05	1.42E-05	5.84E-07	2.39E-08	4.02E-11	4.70E-18	0.	0.	0.			
U237	2.74E-01	2.47E-01	2.23E-01	1.64E-01	9.81E-02	3.51E-02	1.26E-02	1.61E-03	9.51E-06	1.02E-09	6.90E-10			
U240	2.29E+00	7.05E-01	2.16E-01	6.27E-03	1.72E-05	1.29E-10	9.73E-16	5.49E-26	0.	0.	0.			
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
NP239	4.77E-03	7.28E+00	5.43E+00	2.24E+00	5.12E-01	2.68E-02	1.40E-03	3.85E-06	1.51E-12	3.61E-22	3.61E-22			
NP240M	3.62E-03	7.09E-01	2.18E-01	6.31E-03	1.73E-05	1.31E-10	9.81E-16	5.53E-26	0.	0.	0.			
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.			
CM242	1.48E-05	1.47E-05	1.46E-05	1.45E-05	1.42E-05	1.36E-05	1.30E-05	1.19E-05	9.72E-06	6.32E-06	4.13E-06			
GE 77	4.99E-03	3.14E-03	7.19E-04	8.68E-06	5.53E-09	2.24E-15	9.02E-22	1.47E-34	0.	0.	0.			
AS 77	5.16E-05	7.61E-03	5.51E-03	1.59E-03	1.87E-04	2.53E-06	3.44E-08	6.34E-12	2.94E-21	6.30E-40	1.35E-58			
SE 77M	2.03E-09	2.29E-05	1.65E-05	4.79E-06	5.58E-07	7.59E-09	1.03E-10	1.90E-14	8.81E-24	1.88E-42	4.07E-61			
AS 78	1.18E-02	1.05E-04	3.07E-09	2.59E-23	0.	0.	0.	0.	0.	0.	0.			
BR 82	3.95E-04	2.47E-04	1.54E-04	3.75E-05	3.55E-06	3.19E-08	2.86E-10	2.31E-14	1.35E-24	4.63E-45	1.58E-65			
BR 83	3.14E-01	8.27E-03	8.31E-06	8.45E-15	8.62E-30	0.	0.	0.	0.	0.	0.			
KR 83M	1.62E-05	3.62E-02	4.11E-05	3.69E-14	3.79E-29	0.	0.	0.	0.	0.	0.			
KR 85M	4.11E-03	2.35E-01	5.35E-03	6.35E-08	3.92E-16	1.49E-32	5.64E-49	0.	0.	0.	0.			
KR 85	4.26E-06	1.12E-04	1.14E-04	1.14E-04	1.14E-04	1.14E-04	1.14E-04	1.13E-04	1.12E-04	1.10E-04	1.08E-04			
KR 87	6.66E+01	1.32E-04	2.60E-10	2.02E-27	0.	0.	0.	0.	0.	0.	0.			
KR 88	3.87E+01	1.02E-01	2.67E-04	4.85E-12	6.11E-25	0.	0.	0.	0.	0.	0.			
RB 88	9.84E+00	1.13E-01	2.99E-04	5.43E-12	6.81E-25	0.	0.	0.	0.	0.	0.			
SR 89	3.51E-06	1.05E-01	1.04E-01	9.97E-02	9.35E-02	8.17E-02	7.14E-02	5.50E-02	2.81E-02	7.40E-03	1.95E-03			
SR 90	3.90E-06	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.09E-04	7.03E-04	7.03E-04	6.97E-04			
Y 90	1.02E-11	1.63E-04	2.87E-04	5.17E-04	6.59E-04	7.03E-04	7.09E-04	7.09E-04	7.03E-04	7.03E-04	6.97E-04			
SR 91	9.20E-01	3.29E+00	5.90E-01	3.38E-03	6.19E-07	2.10E-14	7.12E-22	8.10E-37	0.	0.	0.			

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
Y 91M	6.19E-05	2.13E+00	3.81E-01	2.19E-03	4.01E-07	1.35E-14	4.58E-22	5.23E-37	0.	0.	0.
Y 91	2.53E-08	1.01E-01	1.20E-01	1.20E-01	1.13E-01	1.00E-01	8.91E-02	7.06E-02	3.90E-02	1.20E-02	3.70E-03
SR 92	1.17E+01	1.45E-01	3.13E-04	3.15E-12	1.48E-25	0.	0.	0.	0.	0.	0.
Y 92	5.37E-01	1.52E+00	1.69E-02	1.30E-08	7.59E-19	2.60E-39	8.89E-60	0.	0.	0.	0.
Y 93	5.57E-01	3.77E+00	7.35E-01	5.52E-03	1.59E-06	1.31E-13	1.08E-20	7.40E-35	0.	0.	0.
ZR 95	1.05E-03	1.31E-01	1.30E-01	1.26E-01	1.19E-01	1.07E-01	9.63E-02	7.79E-02	4.56E-02	1.57E-02	5.39E-03
NB 95M	2.24E-11	4.45E-04	8.11E-04	1.55E-03	2.09E-03	2.20E-03	2.03E-03	1.65E-03	9.68E-04	3.33E-04	1.15E-04
NB 95	1.17E-10	2.54E-03	5.02E-03	1.20E-02	2.24E-02	3.86E-02	4.98E-02	6.18E-02	5.95E-02	2.86E-02	1.10E-02
ZR 97	2.49E+00	4.23E+00	1.59E+00	8.43E-02	6.34E-04	3.57E-08	2.00E-12	6.34E-21	3.58E-42	0.	0.
NB 97M	1.28E-02	4.07E+00	1.53E+00	8.14E-02	6.08E-04	3.43E-08	1.93E-12	6.08E-21	3.44E-42	0.	0.
NB 97	1.25E+00	4.25E+00	1.60E+00	8.48E-02	6.38E-04	3.84E-08	2.16E-12	6.85E-21	3.85E-42	0.	0.
MO 99	7.20E-03	2.34E+00	1.83E+00	8.67E-01	2.51E-01	2.10E-02	1.75E-03	1.22E-05	4.95E-11	8.16E-22	1.34E-32
TC 99M	6.70E-08	2.06E+00	1.73E+00	8.30E-01	2.39E-01	2.00E-02	1.67E-03	1.17E-05	4.72E-11	7.80E-22	1.28E-32
RU103	5.09E-05	1.16E-01	1.14E-01	1.08E-01	9.92E-02	8.32E-02	6.98E-02	4.93E-02	2.05E-02	3.56E-03	6.20E-04
RH103M	3.39E-09	1.16E-01	1.14E-01	1.08E-01	9.92E-02	8.32E-02	6.98E-02	4.93E-02	2.05E-02	3.56E-03	6.20E-04
RU105	2.86E-01	2.74E-01	6.43E-03	8.46E-08	6.18E-16	3.30E-32	1.77E-48	0.	0.	0.	0.
RH105M	1.88E-03	2.74E-01	6.45E-03	8.48E-08	5.20E-16	3.32E-32	1.77E-48	0.	0.	0.	0.
RH105	3.09E-09	9.88E-01	6.45E-01	1.61E-01	1.59E-02	1.54E-04	1.50E-06	1.41E-10	1.23E-20	9.21E-41	6.91E-61
RU106	2.29E-04	4.34E-03	4.32E-03	4.31E-03	4.27E-03	4.19E-03	4.10E-03	3.95E-03	3.59E-03	2.97E-03	2.46E-03
RH106	2.48E-06	4.34E-03	4.32E-03	4.31E-03	4.27E-03	4.19E-03	4.10E-03	3.95E-03	3.59E-03	2.97E-03	2.46E-03
PD109	6.68E-03	1.70E-01	4.96E-02	1.23E-03	2.59E-06	1.16E-11	5.14E-17	1.02E-27	0.	0.	0.
AG109M	3.85E-05	1.70E-01	4.97E-02	1.23E-03	2.60E-06	1.16E-11	5.14E-17	1.02E-27	0.	0.	0.
PD111M	1.03E+00	5.01E-02	2.43E-03	2.79E-07	7.55E-14	5.51E-27	4.04E-40	0.	0.	0.	0.
PD111	3.67E-01	4.04E-02	1.96E-03	2.24E-07	6.08E-14	4.43E-27	3.25E-40	0.	0.	0.	0.
AG111M	2.92E-03	5.27E-02	2.57E-03	2.95E-07	7.97E-14	5.85E-27	4.27E-40	0.	0.	0.	0.
AG111	1.04E-09	2.87E-02	2.76E-02	2.10E-02	1.32E-02	5.24E-03	2.08E-03	3.28E-04	3.22E-06	3.12E-10	3.03E-14
PD112	3.05E-01	1.38E-01	6.26E-02	5.81E-03	1.11E-04	4.01E-08	1.46E-11	1.91E-18	1.21E-35	0.	0.
AG112	9.18E-06	1.61E-01	7.38E-02	6.86E-03	1.31E-04	4.74E-08	1.72E-11	2.27E-18	1.42E-35	0.	0.
AG113	3.99E-03	4.22E-02	1.82E-03	1.48E-07	2.27E-14	5.31E-28	1.24E-41	0.	0.	0.	0.
CD115M	1.34E-08	3.88E-04	3.81E-04	3.63E-04	3.36E-04	2.85E-04	2.43E-04	1.76E-04	7.86E-05	1.56E-05	3.12E-06
CD115	5.18E-06	7.80E-02	5.71E-02	2.25E-02	4.75E-03	2.12E-04	9.46E-06	1.89E-08	3.33E-15	1.04E-28	3.27E-42
IN115M	6.46E-11	8.23E-02	6.24E-02	2.46E-02	5.18E-03	2.32E-04	1.03E-05	2.06E-08	3.64E-15	1.14E-28	3.57E-42
CD117	1.15E-01	2.52E-03	2.45E-06	2.29E-15	2.03E-30	0.	0.	0.	0.	0.	0.
IN117M	5.55E-06	1.04E-02	1.21E-03	1.17E-14	1.04E-29	0.	0.	0.	0.	0.	0.
IN117	2.23E-10	6.89E-03	8.16E-06	7.90E-15	7.01E-30	0.	0.	0.	0.	0.	0.
SN121	2.39E-03	1.36E-01	7.36E-02	1.16E-02	5.32E-04	1.12E-06	2.36E-09	1.05E-14	4.41E-28	0.	0.
SN123	1.11E-05	1.16E-03	1.15E-03	1.13E-03	1.10E-03	1.04E-03	9.85E-04	8.81E-04	6.67E-04	3.84E-04	2.21E-04
SN125	2.52E-02	2.34E-02	2.18E-02	1.75E-02	1.21E-02	5.78E-03	2.76E-03	6.32E-04	1.58E-05	9.95E-09	6.23E-12
SB125	1.51E-04	1.68E-04	1.84E-04	2.25E-04	2.75E-04	3.33E-04	3.59E-04	3.74E-04	3.67E-04	3.43E-04	3.19E-04
SB126	3.38E-03	3.20E-03	3.03E-03	2.56E-03	1.94E-03	1.11E-03	6.42E-04	2.11E-04	1.32E-05	6.42E-08	1.29E-08

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 1.000
 RELAXATION LENGTH = 0.16 GM/SQCM.
 BOMB FRACTION PER SQ. METER = 1.024E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO	TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	3.57E-04	3.08E-06	2.86E-07	2.66E-08	2.14E-11	1.71E-14	1.28E-18	8.22E-25	0.	0.	0.	0.
MN 54	1.16E-04	4.98E-05	3.28E-05	2.16E-05	6.16E-06	1.76E-06	3.31E-07	2.71E-08	6.36E-12	2.30E-17	8.32E-23	0.
FE 59	5.12E-04	1.85E-06	1.11E-07	6.67E-09	1.45E-12	3.13E-16	4.07E-21	1.91E-28	0.	0.	0.	0.
CO 57	1.46E-06	5.75E-07	3.60E-07	2.26E-07	5.57E-08	1.37E-08	2.12E-10	1.29E-10	1.12E-14	9.23E-21	0.	0.
CO 58	1.06E-05	3.04E-07	5.16E-08	8.74E-09	4.26E-11	2.07E-13	1.71E-16	4.05E-21	1.55E-36	0.	0.	0.
CO 60	5.69E-05	4.99E-05	4.65E-05	4.35E-05	3.57E-05	2.93E-05	2.25E-05	1.52E-05	4.08E-06	5.66E-07	7.82E-08	0.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	2.53E-05	8.70E-07	1.61E-07	2.98E-08	1.90E-10	1.21E-12	1.43E-15	5.79E-20	0.	0.	0.	0.
W188	1.73E-07	4.50E-09	7.30E-10	1.17E-10	4.95E-13	2.07E-15	1.40E-18	2.48E-23	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	2.74E-01	6.84E-10	6.66E-10	6.48E-10	6.06E-10	5.63E-10	5.12E-10	4.44E-10	2.76E-10	1.36E-10	6.66E-11	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	1.48E-05	3.13E-06	1.44E-06	6.62E-07	6.45E-08	6.29E-09	2.82E-10	2.66E-12	7.66E-17	7.14E-17	6.66E-17	0.
KR 85	4.26E-06	1.06E-04	1.02E-04	9.91E-05	9.04E-05	8.16E-05	7.17E-05	5.91E-05	3.13E-05	1.19E-05	4.56E-06	0.
SR 89	3.51E-06	8.22E-04	7.19E-05	6.32E-06	4.25E-09	2.87E-12	1.70E-16	7.71E-23	5.60E-44	0.	0.	0.
SR 90	6.90E-06	6.90E-04	6.84E-04	6.78E-04	6.53E-04	6.28E-04	5.98E-04	5.55E-04	4.34E-04	2.99E-04	2.07E-04	0.
Y 90	1.02E-11	6.90E-04	6.84E-04	6.78E-04	6.53E-04	6.28E-04	5.98E-04	5.55E-04	4.34E-04	2.99E-04	2.07E-04	0.
Y 91	2.53E-08	1.71E-03	1.99E-04	2.31E-05	3.63E-08	5.69E-11	1.04E-14	2.56E-20	5.17E-39	0.	0.	0.
ZR 95	1.05E-03	2.70E-03	3.85E-04	5.49E-05	1.60E-07	4.66E-10	1.93E-13	1.63E-18	1.99E-35	0.	0.	0.
NB 95M	2.24E-11	5.72E-05	8.16E-06	1.17E-06	3.39E-09	9.86E-12	4.08E-15	3.45E-20	4.23E-37	0.	0.	0.
NB 95	1.17E-10	5.81E-03	8.34E-04	1.19E-04	3.45E-07	1.00E-09	4.18E-13	3.53E-18	4.32E-35	0.	0.	0.
RU103	5.09E-05	1.98E-04	8.09E-06	3.33E-07	2.27E-11	1.56E-15	4.37E-21	2.06E-29	0.	0.	0.	0.
RH103M	3.39E-09	1.98E-04	8.09E-06	3.33E-07	2.27E-11	1.56E-15	4.37E-21	2.06E-29	0.	0.	0.	0.
RU106	2.29E-04	2.18E-03	1.54E-03	1.09E-03	3.89E-04	1.38E-04	3.48E-05	4.40E-06	4.44E-09	1.43E-13	4.59E-18	0.
RH106	2.48E-06	2.18E-03	1.54E-03	1.09E-03	3.99E-04	1.38E-04	3.48E-05	4.40E-06	4.44E-09	1.43E-13	4.59E-18	0.
SN123	1.11E-05	1.54E-04	5.58E-05	2.02E-05	9.72E-07	4.66E-08	8.12E-10	1.87E-12	3.00E-21	1.93E-34	1.24E-47	0.
SB125	1.51E-04	3.05E-04	2.68E-04	2.36E-04	1.61E-04	1.09E-04	6.53E-05	3.02E-05	2.33E-06	4.95E-08	1.05E-09	0.
TE125M	4.08E-12	1.24E-04	1.11E-04	9.75E-05	6.65E-05	4.53E-05	2.71E-05	1.25E-05	9.62E-07	2.05E-08	4.36E-10	0.
TE127M	3.49E-10	1.67E-04	5.23E-05	1.64E-05	5.04E-07	1.55E-08	1.49E-10	1.40E-13	1.15E-23	8.60E-39	6.41E-54	0.
TE127	2.44E-02	1.65E-04	5.17E-05	1.62E-05	4.98E-07	1.53E-08	1.47E-10	1.39E-13	1.14E-23	8.48E-39	6.35E-54	0.
CS137	7.09E-05	7.47E-04	7.38E-04	7.30E-04	7.04E-04	6.79E-04	6.49E-04	6.07E-04	4.79E-04	3.41E-04	2.41E-04	0.
BA137M	1.49E-07	7.00E-04	6.92E-04	6.83E-04	6.58E-04	6.36E-04	6.07E-04	5.69E-04	4.50E-04	3.18E-04	2.25E-04	0.
CE141	2.24E-07	9.65E-05	1.94E-06	3.90E-08	3.18E-13	2.58E-18	4.24E-25	2.81E-35	0.	0.	0.	0.
CE144	3.21E-03	9.42E-03	6.06E-03	3.86E-03	1.01E-03	2.67E-04	4.48E-05	3.10E-06	4.17E-10	6.54E-16	1.02E-21	0.
PR144	8.80E-07	9.42E-03	6.06E-03	3.86E-03	1.01E-03	2.67E-04	4.48E-05	3.10E-06	4.17E-10	6.54E-16	1.02E-21	0.
PM147	4.16E-14	2.42E-03	2.12E-03	1.85E-03	1.25E-03	8.38E-04	4.92E-04	2.24E-04	1.59E-05	3.00E-07	5.68E-09	0.
EU155	1.10E-05	3.22E-04	2.99E-04	2.78E-04	2.24E-04	1.80E-04	1.34E-04	8.67E-05	2.03E-05	2.28E-06	2.57E-07	0.
TOTAL	3.04E-01	4.15E-02	2.27E-02	1.56E-02	7.31E-03	4.67E-03	3.42E-03	2.73E-03	1.87E-03	1.27E-03	8.85E-04	0.

1

SMOKY
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.02E+02	9.96E+03
1.00E+00	3.37E+01	2.22E+03
2.00E+00	1.35E+01	8.85E+02
3.00E+00	7.21E+00	5.40E+02
4.00E+00	4.49E+00	3.93E+02
6.00E+00	2.35E+00	2.61E+02
9.00E+00	1.38E+00	1.76E+02
1.20E+01	1.00E+00	1.33E+02
1.50E+01	7.79E-01	1.06E+02
1.80E+01	6.32E-01	8.67E+01
2.10E+01	5.27E-01	7.32E+01
1.00E+00 DAYS	4.41E-01	6.21E+01
2.00E+00	1.91E-01	2.73E+01
5.00E+00	7.38E-02	9.99E+00
1.00E+01	3.55E-02	4.59E+00
2.00E+01	1.45E-02	1.93E+00
3.00E+01	8.25E-03	1.18E+00
5.00E+01	3.69E-03	6.48E-01
1.00E+02	1.22E-03	2.78E-01
2.00E+02	4.18E-04	9.71E-02
3.00E+02	1.63E-04	4.64E-02
1.00E+00 YEARS	9.52E-05	3.32E-02
1.50E+00	3.15E-05	1.87E-02
2.00E+00	1.98E-05	1.34E-02
3.50E+00	1.29E-05	7.03E-03
5.00E+00	1.05E-05	4.92E-03
7.00E+00	9.01E-06	3.88E-03
1.00E+01	7.84E-06	3.25E-03
2.00E+01	5.78E-06	2.35E-03
3.50E+01	4.03E-06	1.61E-03
5.00E+01	2.84E-06	1.12E-03

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BE 7	2.26E-04	2.26E-04	2.26E-04	2.26E-04	2.26E-04	2.26E-04	2.26E-04	2.25E-04	2.25E-04	2.24E-04	2.24E-04	2.24E-04
NA 24	1.61E-01	1.53E-01	1.47E-01	1.40E-01	1.33E-01	1.22E-01	1.06E-01	9.24E-02	8.04E-02	7.01E-02	6.07E-02	6.07E-02
MN 54	7.33E-05	7.33E-05	7.33E-05	7.33E-05	7.33E-05	7.33E-05	7.33E-05	7.27E-05	7.27E-05	7.27E-05	7.27E-05	7.27E-05
FE 55	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04	1.90E-04
FE 59	3.25E-04	3.25E-04	3.25E-04	3.25E-04	3.25E-04	3.24E-04	3.24E-04	3.23E-04	3.22E-04	3.22E-04	3.21E-04	3.21E-04
CO 57	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07	9.26E-07
CO 58	6.72E-06	6.72E-06	6.72E-06	6.72E-06	6.70E-06	6.70E-06	6.69E-06	6.68E-06	6.68E-06	6.68E-06	6.66E-06	6.66E-06
CO 60	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.61E-05
CU 64	1.06E+00	1.00E+00	9.51E-01	9.02E-01	8.53E-01	7.66E-01	6.50E-01	5.53E-01	4.70E-01	4.00E-01	3.40E-01	3.40E-01
CU 67	3.34E-05	3.32E-05	3.26E-05	3.23E-05	3.20E-05	3.12E-05	3.00E-05	2.92E-05	2.82E-05	2.72E-05	2.64E-05	2.64E-05
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	3.21E-05	3.21E-05	3.21E-05	3.21E-05	3.20E-05	3.20E-05	3.20E-05	3.20E-05	3.20E-05	3.19E-05	3.19E-05	3.19E-05
W187	2.90E-03	2.81E-03	2.73E-03	2.65E-03	2.58E-03	2.43E-03	2.23E-03	2.05E-03	1.87E-03	1.73E-03	1.57E-03	1.57E-03
W188	2.20E-07	2.20E-07	2.20E-07	2.19E-07	2.19E-07	2.19E-07	2.19E-07	2.19E-07	2.18E-07	2.18E-07	2.18E-07	2.18E-07
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	4.40E-04	4.34E-04	4.28E-04	4.21E-04	4.15E-04	4.06E-04	3.91E-04	3.75E-04	3.60E-04	3.45E-04	3.32E-04	3.32E-04
U237	1.74E-01	1.73E-01	1.72E-01	1.72E-01	1.71E-01	1.69E-01	1.67E-01	1.65E-01	1.63E-01	1.61E-01	1.59E-01	1.59E-01
U239	8.85E+02	1.51E+02	2.58E+01	4.39E+00	7.46E-01	2.17E-02	1.08E-04	5.31E-07	2.63E-09	1.30E-11	6.43E-14	6.43E-14
U240	1.45E+00	1.38E+00	1.32E+00	1.25E+00	1.19E+00	1.08E+00	9.33E-01	8.04E-01	6.94E-01	5.98E-01	5.16E-01	5.16E-01
NP239	3.03E-03	5.08E+00	5.87E+00	5.96E+00	5.92E+00	5.78E+00	5.55E+00	5.36E+00	5.17E+00	4.99E+00	4.80E+00	4.80E+00
NP240M	2.30E-03	1.39E+00	1.33E+00	1.27E+00	1.20E+00	1.09E+00	9.41E-01	8.12E-01	7.00E-01	6.04E-01	5.21E-01	5.21E-01
NP240	5.82E-11	2.99E-11	1.55E-11	8.01E-12	4.14E-12	1.11E-12	1.53E-13	2.11E-14	2.91E-15	4.01E-16	5.54E-17	5.54E-17
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	9.38E-06	9.38E-06	9.38E-06	9.38E-06	9.38E-06	9.38E-06	9.33E-06	9.33E-06	9.33E-06	9.33E-06	9.33E-06	9.33E-06
GE 75	1.51E-05	7.32E-02	4.41E-02	2.65E-02	1.60E-02	5.79E-03	1.27E-03	2.77E-04	6.05E-05	1.32E-05	2.89E-06	2.89E-06
GE 77	6.33E-03	1.63E-02	1.53E-02	1.44E-02	1.36E-02	1.20E-02	9.99E-03	8.30E-03	6.92E-03	5.75E-03	4.79E-03	4.79E-03
AS 77	6.54E-05	1.03E-02	1.05E-02	1.05E-02	1.06E-02	1.07E-02	1.07E-02	1.06E-02	1.04E-02	1.02E-02	9.97E-03	9.97E-03
SE 77M	2.58E-09	3.10E-05	3.14E-05	3.17E-05	3.17E-05	3.19E-05	3.21E-05	3.19E-05	3.14E-05	3.07E-05	2.98E-05	2.98E-05
GE 78	8.30E-01	5.19E-01	3.23E-01	2.02E-01	1.26E-01	4.90E-02	1.19E-02	2.88E-03	7.03E-04	1.71E-04	4.15E-05	4.15E-05
AS 78	1.49E-02	2.48E-01	3.06E-01	2.86E-01	2.39E-01	1.41E-01	5.25E-02	1.74E-02	5.39E-03	1.61E-03	4.67E-04	4.67E-04
AS 79	1.59E+01	1.56E-01	1.54E-03	1.52E-05	1.49E-07	1.45E-11	1.38E-17	1.32E-23	1.26E-29	1.20E-35	1.14E-41	1.14E-41
SE 79M	2.35E-02	2.76E-01	2.72E-03	2.68E-05	2.64E-07	2.55E-11	2.43E-17	2.32E-23	2.22E-29	2.12E-35	2.02E-41	2.02E-41
BR 80	9.96E-02	9.40E-03	8.83E-04	8.31E-05	7.82E-06	6.94E-08	5.81E-11	4.84E-14	4.03E-17	3.37E-20	2.81E-23	2.81E-23
SE 81M	8.18E-02	3.82E+00	1.84E+00	8.85E-01	4.26E-01	9.95E-02	1.11E-02	1.25E-03	1.40E-04	1.57E-05	1.76E-06	1.76E-06
SE 81	9.99E-01	4.51E+00	2.61E+00	1.30E+00	6.32E-01	1.48E-01	1.65E-02	1.85E-03	2.07E-04	2.33E-05	2.61E-06	2.61E-06
BR 82	5.02E-04	4.92E-04	4.83E-04	4.74E-04	4.64E-04	4.46E-04	4.21E-04	3.96E-04	3.74E-04	3.52E-04	3.33E-04	3.33E-04
SE 83	4.80E+01	9.10E+00	1.72E+00	3.27E-01	6.18E-02	2.22E-03	1.51E-05	1.03E-07	7.02E-10	4.76E-12	3.02E-14	3.02E-14
BR 83	3.99E-01	5.95E+00	5.51E+00	4.33E+00	3.29E+00	1.86E+00	7.86E-01	3.31E-01	1.40E-01	5.90E-02	2.49E-02	2.49E-02
KR 83M	2.06E-05	1.35E+00	2.75E+00	3.42E+00	3.53E+00	2.94E+00	1.73E+00	8.93E-01	4.30E-01	1.99E-01	8.93E-02	8.93E-02

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1:299E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BR 84	1.03E-01	1.78E+01	4.82E+00	1.31E+00	3.52E-01	2.58E-02	5.10E-04	1.01E-05	1.99E-07	3.94E-09	7.78E-11
KR 85M	5.22E-03	1.12E+01	9.52E+00	8.13E+00	6.95E+00	5.08E+00	3.16E+00	1.97E+00	1.23E+00	7.65E-01	4.78E-01
KR 87	8.46E+01	4.88E+01	2.83E+01	1.63E+01	9.42E+00	3.16E+00	6.13E-01	1.19E-01	2.30E-02	4.45E-03	8.61E-04
KR 88	4.91E+01	3.83E+01	2.99E+01	2.33E+01	1.83E+01	1.11E+01	5.29E+00	2.52E+00	1.20E+00	5.70E-01	2.71E-01
RB 88	1.25E+01	3.88E+01	3.31E+01	2.61E+01	2.04E+01	1.24E+01	5.93E+00	2.82E+00	1.34E+00	6.39E-01	3.04E-01
RB 89	5.82E+01	5.47E+01	3.68E+00	2.47E-01	1.66E-02	7.50E-05	2.27E-08	6.85E-12	2.09E-15	6.32E-19	1.92E-22
SR 89	4.46E-06	1.57E-01	1.67E-01	1.67E-01	1.67E-01	1.67E-01	1.67E-01	1.66E-01	1.66E-01	1.66E-01	1.66E-01
SR 90	8.77E-06	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04
SR 91	1.02E+00	1.90E+01	1.77E+01	1.65E+01	1.54E+01	1.33E+01	1.07E+01	8.67E+00	7.00E+00	5.62E+00	4.54E+00
Y 91M	6.88E-05	6.55E+00	8.93E+00	9.57E+00	9.45E+00	8.48E+00	6.94E+00	5.58E+00	4.50E+00	3.63E+00	2.93E+00
SR 92	2.81E-08	5.83E-03	1.34E-02	2.15E-02	2.93E-02	4.39E-02	6.23E-02	7.71E-02	8.93E-02	9.90E-02	1.07E-01
Y 92	7.40E+00	3.30E+01	2.56E+01	1.98E+01	1.54E+01	9.19E+00	4.27E+00	1.98E+00	9.19E-01	4.27E-01	1.99E-01
Y 93	3.41E-01	6.95E+00	1.09E+01	1.30E+01	1.38E+01	1.01E+01	1.01E+01	6.85E+00	4.41E+00	2.71E+00	1.64E+00
SR 93	2.90E+02	4.99E+00	2.76E-02	1.52E-04	8.40E-07	2.57E-11	4.33E-18	7.31E-25	1.23E-31	2.08E-38	3.51E-45
Y 93	3.54E-01	1.14E+01	1.07E+01	1.01E+01	9.39E+00	8.20E+00	6.68E+00	5.46E+00	4.43E+00	3.64E+00	2.96E+00
Y 94	4.18E+01	5.72E+01	7.36E+00	9.48E-01	1.22E-01	2.03E-03	4.36E-06	9.34E-09	2.00E-11	4.36E-14	2.42E-15
Y 95	1.78E+02	1.67E+01	3.69E-01	8.13E-03	1.79E-04	8.69E-08	9.30E-13	9.95E-18	1.06E-22	1.14E-27	1.21E-32
ZR 95	6.67E-04	8.72E-02	8.89E-02	8.89E-02	8.89E-02	8.89E-02	8.89E-02	8.87E-02	8.87E-02	8.84E-02	8.84E-02
NB 95	7.43E-11	5.38E-05	1.26E-04	1.97E-04	2.69E-04	4.13E-04	6.26E-04	8.43E-04	1.05E-03	1.27E-03	1.48E-03
ZR 97	1.58E+00	6.88E+00	6.58E+00	6.33E+00	6.06E+00	5.60E+00	4.95E+00	4.38E+00	3.89E+00	3.42E+00	3.04E+00
NB 97M	8.13E-03	6.60E+00	6.33E+00	6.09E+00	5.84E+00	5.38E+00	4.76E+00	4.21E+00	3.72E+00	3.29E+00	2.91E+00
NB 97	7.91E-01	3.45E+00	4.86E+00	5.54E+00	5.82E+00	5.79E+00	5.27E+00	4.70E+00	4.16E+00	3.67E+00	3.26E+00
NB 98	8.81E+00	3.90E+00	1.73E+00	7.63E-01	3.38E-01	6.62E-02	5.72E-03	4.94E-04	4.31E-05	3.73E-06	3.21E-07
MO 99	4.57E-03	1.89E+00	1.87E+00	1.85E+00	1.83E+00	1.79E+00	1.74E+00	1.68E+00	1.63E+00	1.58E+00	1.53E+00
TC 99M	4.25E-08	1.80E-01	3.38E-01	4.77E-01	6.00E-01	8.01E-01	1.02E+00	1.15E+00	1.24E+00	1.28E+00	1.30E+00
MO101	1.24E+02	5.61E+01	3.26E+00	1.89E-01	1.10E-02	3.67E-05	7.13E-09	1.39E-12	2.70E-16	5.24E-20	1.02E-23
TC101	5.24E+00	1.57E+02	1.72E+01	1.41E+00	1.03E-01	4.64E-04	1.16E-07	2.60E-11	5.51E-15	1.13E-18	2.29E-22
MO102	9.83E+02	2.24E+01	5.10E-01	1.17E-02	2.66E-04	1.38E-07	1.64E-12	1.95E-17	2.31E-22	2.74E-27	3.25E-32
TC102M	6.32E-01	1.90E+01	4.34E-01	9.92E-03	2.26E-04	1.17E-07	1.39E-12	1.65E-17	1.95E-22	2.32E-27	2.75E-32
TC102	2.96E+03	1.13E+01	2.57E-01	5.85E-03	1.34E-04	6.97E-08	8.28E-13	9.83E-18	1.17E-22	1.38E-27	1.64E-32
RU103	6.46E-05	1.50E-01	1.50E-01	1.50E-01	1.50E-01	1.49E-01	1.49E-01	1.49E-01	1.48E-01	1.48E-01	1.47E-01
RH103M	4.31E-09	7.75E-02	1.15E-01	1.33E-01	1.42E-01	1.47E-01	1.49E-01	1.49E-01	1.48E-01	1.48E-01	1.48E-01
TC104	5.10E+01	3.67E+01	3.67E+00	3.63E-01	3.59E-02	3.54E-04	3.45E-07	3.38E-10	3.30E-13	3.22E-16	3.15E-19
RU105	3.63E-01	1.26E+01	1.07E+01	9.20E+00	7.87E+00	5.75E+00	3.61E+00	2.25E+00	1.41E+00	8.83E-01	5.54E-01
RH105M	2.39E-03	1.26E+01	1.08E+01	9.23E+00	7.87E+00	5.78E+00	3.61E+00	2.26E+00	1.42E+00	8.86E-01	5.54E-01
RH105	3.92E-09	2.56E-01	4.75E-01	6.55E-01	8.06E-01	1.03E+00	1.23E+00	1.33E+00	1.35E+00	1.34E+00	1.30E+00
RU106	2.91E-04	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03
RH106	3.15E-06	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03	5.51E-03
RH107	6.37E-02	8.65E+00	1.31E+00	1.97E-01	2.98E-02	6.79E-04	2.34E-06	8.07E-09	2.78E-11	9.50E-147	9.45E-18
PD107M	1.32E-04	1.76E+00	2.66E-01	4.02E-02	6.06E-03	1.38E-04	4.76E-07	1.64E-09	5.65E-12	1.95E-14	6.65E-17

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
ND147	9.52E-06	1.79E-01	1.84E-01	1.84E-01	1.83E-01	1.82E-01	1.81E-01	1.80E-01	1.78E-01	1.77E-01	1.75E-01	
ND149	1.23E+01	8.40E+00	5.72E+00	3.90E+00	2.64E+00	1.22E+00	3.85E-01	1.22E-01	3.83E-02	1.20E-02	3.80E-03	
PM149	1.72E-03	1.34E-01	2.23E-01	2.82E-01	3.20E-01	3.59E-01	3.73E-01	3.66E-01	3.57E-01	3.43E-01	3.31E-01	
PM150	1.41E-01	1.09E-01	8.42E-02	6.50E-02	5.02E-02	3.01E-02	1.40E-02	6.45E-03	2.99E-03	1.38E-03	6.41E-04	
ND151	4.35E+01	1.36E+00	4.26E-02	1.33E-03	4.16E-05	4.06E-08	1.24E-12	3.79E-17	1.15E-21	3.52E-26	1.08E-30	
PM151	2.76E-02	3.23E-01	3.25E-01	3.17E-01	3.09E-01	2.94E-01	2.72E-01	2.53E-01	2.35E-01	2.18E-01	2.02E-01	
PM152	6.83E+01	6.68E-02	6.51E-05	6.36E-08	6.22E-11	5.94E-17	5.53E-26	5.15E-35	4.80E-44	4.48E-53	4.17E-62	
SM153	9.10E-02	8.97E-02	8.85E-02	8.71E-02	8.59E-02	8.34E-02	7.98E-02	7.62E-02	7.30E-02	6.99E-02	6.69E-02	
SM155	9.50E+00	1.56E+00	2.56E-01	4.18E-02	6.86E-03	1.85E-04	8.15E-07	3.59E-09	1.58E-11	7.05E-14	1.73E-16	
EU155	6.98E-06	1.99E-04	2.31E-04	2.36E-04	2.37E-04	2.37E-04	2.37E-04	2.37E-04	2.37E-04	2.37E-04	2.37E-04	
SM156	5.81E-02	5.39E-02	5.01E-02	4.65E-02	4.32E-02	3.73E-02	2.99E-02	2.40E-02	1.92E-02	1.54E-02	1.23E-02	
EU156	1.70E-04	2.77E-04	3.76E-04	4.68E-04	5.54E-04	7.06E-04	8.99E-04	1.04E-03	1.16E-03	1.26E-03	1.32E-03	
EU157	9.09E-03	3.01E-02	2.88E-02	2.75E-02	2.62E-02	2.40E-02	2.09E-02	1.83E-02	1.59E-02	1.38E-02	1.21E-02	
EU158	2.15E-01	8.71E-02	3.52E-02	1.43E-02	5.77E-03	9.45E-04	6.30E-05	4.17E-06	2.77E-07	1.84E-08	1.22E-09	
EU159	2.85E-01	2.83E-02	2.80E-03	2.79E-04	2.76E-05	2.72E-07	2.66E-10	2.60E-13	2.53E-16	2.48E-19	2.42E-22	
GD159	1.22E-03	5.34E-03	5.56E-03	5.39E-03	5.19E-03	4.80E-03	4.28E-03	3.82E-03	3.40E-03	3.02E-03	2.70E-03	
TB161	2.05E-05	1.48E-04	1.47E-04	1.46E-04	1.46E-04	1.44E-04	1.43E-04	1.41E-04	1.39E-04	1.37E-04	1.36E-04	
TOTAL	9.96E+03	2.22E+03	8.85E+02	5.40E+02	3.93E+02	2.61E+02	1.76E+02	1.33E+02	1.06E+02	8.67E+01	7.32E+01	

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	2.26E-04	2.24E-04	2.21E-04	2.12E-04	1.99E-04	1.75E-04	1.53E-04	1.18E-04	6.18E-05	1.68E-05	4.56E-06
NA 24	1.61E-01	5.30E-02	1.75E-02	6.27E-04	2.45E-06	3.75E-11	5.72E-16	1.33E-25	0.	0.	0.
MN 54	7.33E-05	7.27E-05	7.27E-05	7.14E-05	7.07E-05	6.94E-05	6.81E-05	6.49E-05	5.80E-05	4.61E-05	3.67E-05
FE 55	1.90E-04	1.90E-04	1.90E-04	1.89E-04	1.88E-04	1.87E-04	1.86E-04	1.83E-04	1.76E-04	1.64E-04	1.52E-04
FE 59	3.25E-04	3.20E-04	3.15E-04	3.01E-04	2.79E-04	2.39E-04	2.05E-04	1.51E-04	6.99E-05	1.49E-05	3.20E-06
CO 57	9.26E-07	9.26E-07	9.19E-07	9.19E-07	9.06E-07	8.78E-07	8.58E-07	8.16E-07	7.20E-07	5.56E-07	4.31E-07
CO 58	6.72E-06	6.66E-06	6.59E-06	6.39E-06	6.10E-06	5.53E-06	5.02E-06	4.13E-06	2.54E-06	9.62E-07	3.63E-07
CO 60	3.61E-05	3.61E-05	3.61E-05	3.61E-05	3.59E-05	3.59E-05	3.57E-05	3.55E-05	3.46E-05	3.36E-05	3.23E-05
CU 64	1.06E+00	2.89E-01	7.88E-02	1.60E-03	2.40E-06	5.46E-12	1.24E-17	6.36E-29	0.	0.	0.
CU 67	3.34E-05	2.55E-05	1.95E-05	8.66E-06	2.26E-06	1.52E-07	1.03E-08	4.66E-11	6.52E-17	0.	0.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	3.21E-05	3.18E-05	3.13E-05	3.06E-05	2.93E-05	2.67E-05	2.43E-05	2.02E-05	1.28E-05	5.07E-06	2.01E-06
W187	2.90E-03	1.45E-03	7.17E-04	8.95E-05	2.75E-06	2.62E-09	2.48E-12	2.23E-20	0.	0.	0.
W188	2.20E-07	2.17E-07	2.15E-07	2.09E-07	1.99E-07	1.80E-07	1.63E-07	1.33E-07	8.08E-08	2.98E-08	1.10E-08
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	3.20E-04	2.32E-04	8.89E-05	1.80E-05	7.41E-07	3.04E-08	5.11E-11	5.97E-18	0.	0.	0.
U237	1.74E-01	1.57E-01	1.42E-01	1.04E-01	6.23E-02	2.23E-02	8.00E-03	1.02E-03	6.04E-06	6.49E-10	4.38E-10
U240	1.45E+00	4.47E-01	1.37E-01	3.98E-03	1.09E-05	8.21E-11	6.18E-16	3.49E-26	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	3.03E-03	4.62E+00	3.44E+00	1.42E+00	3.25E-01	1.70E-02	8.90E-04	2.44E-06	9.60E-13	2.29E-22	2.29E-22
NP240M	2.30E-03	4.50E-01	1.38E-01	4.01E-03	1.10E-05	8.29E-11	6.23E-16	3.51E-26	0.	0.	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	9.38E-06	9.33E-06	9.28E-06	9.19E-06	8.99E-06	8.60E-06	8.26E-06	7.58E-06	6.17E-06	4.01E-06	2.62E-06
GE 77	6.33E-03	3.99E-03	9.13E-04	1.10E-05	7.01E-09	2.84E-15	1.14E-21	1.87E-34	0.	0.	0.
AS 77	6.54E-05	9.66E-03	6.99E-03	2.02E-03	2.37E-04	3.21E-06	4.36E-08	8.05E-12	3.73E-21	8.00E-40	1.72E-58
SE 77M	2.58E-09	2.91E-05	2.09E-05	6.08E-06	7.08E-07	9.64E-09	1.31E-10	2.42E-14	1.12E-23	2.39E-42	5.16E-61
AS 78	1.49E-02	1.33E-04	3.89E-09	3.29E-23	0.	0.	0.	0.	0.	0.	0.
BR 82	5.02E-04	3.13E-04	1.96E-04	4.76E-05	4.51E-06	4.05E-08	3.64E-10	2.94E-14	1.71E-24	5.88E-45	2.00E-65
BR 83	3.99E-01	1.05E-02	1.06E-05	1.07E-14	1.09E-29	0.	0.	0.	0.	0.	0.
KR 83M	2.06E-05	4.59E-02	5.22E-05	4.69E-14	4.81E-29	0.	0.	0.	0.	0.	0.
KR 85M	5.22E-03	2.98E-01	6.79E-03	8.06E-08	4.97E-16	1.89E-32	7.16E-49	0.	0.	0.	0.
KR 85	5.40E-06	1.42E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.45E-04	1.44E-04	1.43E-04	1.40E-04	1.38E-04
KR 87	8.46E+01	1.67E-04	3.30E-10	2.56E-27	0.	0.	0.	0.	0.	0.	0.
KR 88	4.91E+01	1.29E-01	3.39E-04	6.16E-12	7.76E-25	0.	0.	0.	0.	0.	0.
RB 88	1.25E+01	1.44E-01	3.80E-04	6.89E-12	8.64E-25	0.	0.	0.	0.	0.	0.
SR 89	4.46E-06	1.34E-01	1.32E-01	1.27E-01	1.19E-01	1.04E-01	9.06E-02	6.98E-02	3.57E-02	9.39E-03	2.48E-03
SR 90	8.77E-06	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	9.00E-04	8.92E-04	8.92E-04	8.84E-04
Y 90	1.30E-11	2.06E-04	3.65E-04	6.56E-04	8.37E-04	8.92E-04	9.00E-04	9.00E-04	8.92E-04	8.92E-04	8.84E-04
SR 91	1.02E+00	3.66E+00	6.55E-01	3.76E-03	6.88E-07	2.33E-14	7.90E-22	9.00E-37	0.	0.	0.

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
PM151	2.76E-02	1.88E-01	1.04E-01	1.75E-02	8.96E-04	2.35E-06	6.20E-09	4.28E-14	5.37E-27	0.	0.
SM153	9.10E-02	6.40E-02	4.49E-02	1.55E-02	2.64E-03	7.67E-05	2.23E-06	1.87E-09	3.86E-17	1.65E-32	6.99E-48
SM156	5.81E-02	9.90E-03	1.69E-03	8.32E-06	1.20E-09	2.46E-17	5.08E-25	2.16E-40	0.	0.	0.
EU155	6.98E-06	2.37E-04	2.36E-04	2.36E-04	2.36E-04	2.35E-04	2.34E-04	2.32E-04	2.27E-04	2.18E-04	2.10E-04
EU156	1.70E-04	1.38E-03	1.53E-03	1.37E-03	1.09E-03	6.85E-04	4.32E-04	1.71E-04	1.70E-05	1.67E-07	1.65E-09
EU157	9.09E-03	1.05E-02	3.54E-03	1.33E-04	5.57E-07	9.82E-12	1.74E-16	5.41E-26	0.	0.	0.
GD159	1.22E-03	2.40E-03	9.56E-04	5.96E-05	5.87E-07	5.68E-11	5.51E-15	5.17E-23	4.41E-43	0.	0.
TB161	2.05E-05	1.34E-04	1.21E-04	8.96E-05	5.42E-05	1.98E-05	7.26E-06	9.73E-07	6.44E-09	2.78E-13	1.21E-17
TOTAL	3.29E+02	6.21E+01	2.73E+01	9.99E+00	4.59E+00	1.93E+00	1.18E+00	6.48E-01	2.78E-01	9.71E-02	4.64E-02

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.500
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.299E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	2.26E-04	1.96E-06	1.82E-07	1.69E-08	1.36E-11	1.09E-14	8.13E-19	5.21E-25	0.	0.	0.
MN 54	7.33E-05	3.16E-05	2.08E-05	1.37E-05	3.91E-06	1.12E-06	2.10E-07	1.72E-08	4.04E-12	1.46E-17	5.28E-23
FE 59	3.25E-04	1.17E-06	7.04E-08	4.23E-09	9.19E-13	1.98E-16	2.59E-21	1.21E-28	0.	0.	0.
CO 57	9.26E-07	3.65E-07	2.28E-07	1.43E-07	3.53E-08	8.71E-09	1.34E-10	8.16E-11	7.14E-15	5.86E-21	0.
CO 58	6.72E-06	1.93E-07	3.27E-08	5.55E-09	2.70E-11	1.32E-13	1.08E-16	2.57E-21	9.83E-37	0.	0.
CO 60	3.61E-05	3.16E-05	2.95E-05	2.76E-05	2.27E-05	1.86E-05	1.43E-05	9.64E-06	2.59E-06	3.59E-07	4.96E-08
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	3.21E-05	1.10E-06	2.05E-07	3.79E-08	2.41E-10	1.54E-12	1.81E-15	7.35E-20	0.	0.	0.
W188	2.20E-07	5.71E-09	9.26E-10	1.49E-10	6.28E-13	2.63E-15	1.78E-18	3.15E-23	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.74E-01	4.34E-10	4.23E-10	4.11E-10	3.85E-10	3.57E-10	3.25E-10	2.82E-10	1.75E-10	8.60E-11	4.23E-11
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	9.38E-06	1.99E-06	9.14E-07	4.20E-07	4.10E-08	3.99E-09	1.79E-10	1.69E-12	4.86E-17	4.53E-17	4.23E-17
KR 85	5.40E-06	1.34E-04	1.30E-04	1.26E-04	1.15E-04	1.04E-04	9.11E-05	7.51E-05	3.97E-05	1.52E-05	5.79E-06
SR 89	4.46E-06	1.04E-03	9.13E-05	8.02E-06	5.40E-09	3.65E-12	2.15E-16	9.78E-23	7.11E-44	0.	0.
SR 90	8.77E-06	8.77E-04	8.69E-04	8.61E-04	8.29E-04	7.97E-04	7.59E-04	7.04E-04	5.51E-04	3.80E-04	2.63E-04
Y 90	1.30E-11	8.77E-04	8.69E-04	8.61E-04	8.29E-04	7.97E-04	7.59E-04	7.04E-04	5.51E-04	3.80E-04	2.63E-04
Y 91	2.81E-08	1.90E-03	2.21E-04	2.57E-05	4.03E-08	6.32E-11	1.16E-14	2.84E-20	5.74E-39	0.	0.
ZR 95	6.67E-04	1.71E-03	2.45E-04	3.48E-05	1.02E-07	2.96E-10	1.22E-13	1.03E-18	1.26E-35	0.	0.
NB 95M	1.42E-11	3.63E-05	5.18E-06	7.40E-07	2.15E-09	6.26E-12	2.59E-15	2.19E-20	2.68E-37	0.	0.
NB 95	7.43E-11	3.69E-03	5.30E-04	7.55E-05	2.19E-07	6.35E-10	2.65E-13	2.24E-18	2.74E-35	0.	0.
RU103	6.46E-05	2.51E-04	1.03E-05	4.23E-07	2.88E-11	1.98E-15	5.55E-21	2.61E-29	0.	0.	0.
RH103M	4.31E-09	2.51E-04	1.03E-05	4.23E-07	2.89E-11	1.98E-15	5.55E-21	2.61E-29	0.	0.	0.
RU106	2.91E-04	2.77E-03	1.96E-03	1.39E-03	4.94E-04	1.75E-04	4.42E-05	5.58E-06	5.63E-09	1.81E-13	5.82E-18
RH106	3.15E-06	2.77E-03	1.96E-03	1.39E-03	4.94E-04	1.75E-04	4.42E-05	5.58E-06	5.63E-09	1.81E-13	5.82E-18
SN123	1.41E-05	1.95E-04	7.08E-05	2.57E-05	1.23E-06	5.92E-08	1.03E-09	2.38E-12	3.81E-21	2.45E-34	1.58E-47
SB125	1.92E-04	3.87E-04	3.40E-04	2.99E-04	2.04E-04	1.39E-04	8.30E-05	3.84E-05	2.95E-06	6.28E-08	1.34E-09
TE125M	5.18E-12	1.58E-04	1.40E-04	1.24E-04	8.45E-05	5.74E-05	3.44E-05	1.59E-05	1.22E-06	2.60E-08	5.54E-10
TE127M	4.43E-10	2.12E-04	6.64E-05	2.08E-05	6.39E-07	1.97E-08	1.89E-10	1.78E-13	1.46E-23	1.09E-38	8.13E-54
TE127	3.09E-02	2.10E-04	6.57E-05	2.06E-05	6.32E-07	1.94E-08	1.87E-10	1.76E-13	1.45E-23	1.08E-38	8.06E-54
CS137	9.00E-05	9.48E-04	9.37E-04	9.27E-04	8.94E-04	8.62E-04	8.24E-04	7.70E-04	6.09E-04	4.33E-04	3.05E-04
BA137M	1.90E-07	8.89E-04	8.78E-04	8.67E-04	8.35E-04	8.08E-04	7.70E-04	7.22E-04	5.71E-04	4.04E-04	2.86E-04
CE141	1.89E-07	8.15E-05	1.64E-06	3.29E-08	2.68E-13	2.18E-18	3.58E-25	2.37E-35	0.	0.	0.
CE144	2.03E-03	5.98E-03	3.84E-03	2.45E-03	6.44E-04	1.69E-04	2.85E-05	1.96E-06	2.64E-10	4.15E-16	6.47E-22
PR144	5.58E-07	5.98E-03	3.84E-03	2.45E-03	6.44E-04	1.69E-04	2.85E-05	1.96E-06	2.64E-10	4.15E-16	6.47E-22
PM147	2.64E-14	1.53E-03	1.34E-03	1.18E-03	7.91E-04	5.32E-04	3.13E-04	1.42E-04	1.01E-05	1.91E-07	3.60E-09
EU155	6.98E-06	2.04E-04	1.90E-04	1.77E-04	1.42E-04	1.14E-04	8.52E-05	5.50E-05	1.29E-05	1.45E-06	1.63E-07
TOTAL	2.09E-01	3.32E-02	1.87E-02	1.34E-02	7.03E-03	4.92E-03	3.88E-03	3.25E-03	2.35E-03	1.61E-03	1.12E-03

SMOKY
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.06E+02	1.03E+04
1.00E+00	3.74E+01	2.28E+03
2.00E+00	1.48E+01	9.24E+02
3.00E+00	7.61E+00	5.49E+02
4.00E+00	4.57E+00	3.86E+02
6.00E+00	2.31E+00	2.43E+02
9.00E+00	1.36E+00	1.59E+02
1.20E+01	1.00E+00	1.18E+02
1.50E+01	7.82E-01	9.25E+01
1.80E+01	6.34E-01	7.55E+01
2.10E+01	5.25E-01	6.32E+01
1.00E+00 DAYS	4.37E-01	5.31E+01
2.00E+00	1.89E-01	2.23E+01
5.00E+00	8.02E-02	8.67E+00
1.00E+01	3.91E-02	4.38E+00
2.00E+01	1.53E-02	1.90E+00
3.00E+01	8.21E-03	1.13E+00
5.00E+01	3.19E-03	5.99E-01
1.00E+02	6.70E-04	2.37E-01
2.00E+02	1.70E-04	7.09E-02
3.00E+02	7.08E-05	3.14E-02
1.00E+00 YEARS	4.76E-05	2.24E-02
1.50E+00	2.61E-05	1.35E-02
2.00E+00	2.07E-05	1.05E-02
3.50E+00	1.49E-05	6.67E-03
5.00E+00	1.24E-05	5.25E-03
7.00E+00	1.08E-05	4.46E-03
1.00E+01	9.58E-06	3.93E-03
2.00E+01	7.26E-06	2.97E-03
3.50E+01	5.12E-06	2.06E-03
5.00E+01	3.61E-06	1.43E-03

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 21 HOURS

	ZERO	TIME	1.00E+00	2.00E+00	3.00E+00	4.00E+00	6.00E+00	9.00E+00	1.20E+01	1.50E+01	1.80E+01	2.10E+01
BE 7	5.77E-05	5.76E-05	5.76E-05	5.76E-05	5.76E-05	5.76E-05	5.76E-05	5.75E-05	5.73E-05	5.72E-05	5.71E-05	5.70E-05
NA 24	4.09E-02	3.91E-02	3.74E-02	3.57E-02	3.40E-02	3.11E-02	2.70E-02	2.36E-02	2.05E-02	1.79E-02	1.55E-02	1.35E-02
MN 54	1.87E-05	1.87E-05	1.87E-05	1.87E-05	1.87E-05	1.87E-05	1.87E-05	1.85E-05	1.85E-05	1.85E-05	1.85E-05	1.85E-05
FE 55	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05	4.84E-05
FE 59	8.29E-05	8.28E-05	8.28E-05	8.28E-05	8.28E-05	8.28E-05	8.25E-05	8.24E-05	8.21E-05	8.20E-05	8.19E-05	8.19E-05
CO 57	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07	2.36E-07
CO 58	1.71E-06	1.71E-06	1.71E-06	1.71E-06	1.71E-06	1.71E-06	1.71E-06	1.71E-06	1.71E-06	1.70E-06	1.70E-06	1.70E-06
CO 60	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.21E-06
CU 64	2.70E-01	2.56E-01	2.42E-01	2.30E-01	2.18E-01	1.95E-01	1.66E-01	1.41E-01	1.20E-01	1.02E-01	8.67E-02	7.50E-02
CU 67	8.53E-06	8.46E-06	8.31E-06	8.24E-06	8.16E-06	7.95E-06	7.65E-06	7.43E-06	7.20E-06	6.92E-06	6.73E-06	6.55E-06
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	4.09E-05	4.09E-05	4.09E-05	4.09E-05	4.08E-05	4.08E-05	4.08E-05	4.07E-05	4.07E-05	4.06E-05	4.06E-05	4.06E-05
W187	3.70E-03	3.58E-03	3.48E-03	3.38E-03	3.29E-03	3.10E-03	2.85E-03	2.61E-03	2.39E-03	2.20E-03	2.01E-03	1.82E-03
W188	2.80E-07	2.80E-07	2.80E-07	2.79E-07	2.79E-07	2.79E-07	2.79E-07	2.79E-07	2.79E-07	2.78E-07	2.78E-07	2.77E-07
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	5.61E-04	5.53E-04	5.45E-04	5.37E-04	5.29E-04	5.18E-04	4.98E-04	4.78E-04	4.59E-04	4.39E-04	4.24E-04	4.05E-04
U237	4.44E-02	4.42E-02	4.40E-02	4.38E-02	4.36E-02	4.32E-02	4.26E-02	4.21E-02	4.16E-02	4.10E-02	4.05E-02	4.00E-02
U239	2.26E+02	3.85E+01	6.57E+00	1.12E+00	1.90E-01	5.54E-03	2.74E-05	1.35E-07	6.70E-10	3.31E-12	1.64E-14	8.10E-17
U240	3.70E-01	3.53E-01	3.36E-01	3.20E-01	3.04E-01	2.76E-01	2.38E-01	2.05E-01	1.77E-01	1.53E-01	1.32E-01	1.12E-01
NP239	7.72E-04	1.30E+00	1.50E+00	1.52E+00	1.51E+00	1.47E+00	1.41E+00	1.37E+00	1.32E+00	1.27E+00	1.22E+00	1.17E+00
NP240M	5.86E-04	3.54E-01	3.39E-01	3.23E-01	3.07E-01	2.78E-01	2.40E-01	2.07E-01	1.78E-01	1.54E-01	1.33E-01	1.13E-01
NP240	1.48E-11	7.63E-12	3.96E-12	2.04E-12	1.06E-12	2.83E-13	3.90E-14	5.38E-15	7.42E-16	1.02E-16	1.41E-17	1.90E-18
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	2.39E-06	2.39E-06	2.39E-06	2.39E-06	2.39E-06	2.39E-06	2.38E-06	2.38E-06	2.38E-06	2.38E-06	2.38E-06	2.38E-06
GE 75	1.92E-05	9.33E-02	5.62E-02	3.38E-02	2.04E-02	7.39E-03	1.61E-03	3.53E-04	7.71E-05	1.68E-05	3.68E-06	8.10E-07
GE 77	8.07E-03	2.08E-02	1.96E-02	1.84E-02	1.73E-02	1.53E-02	1.27E-02	1.06E-02	8.82E-03	7.33E-03	6.10E-03	5.10E-03
AS 77	8.34E-05	1.32E-02	1.33E-02	1.34E-02	1.35E-02	1.36E-02	1.36E-02	1.35E-02	1.33E-02	1.30E-02	1.27E-02	1.24E-02
SE 77M	3.29E-09	3.95E-05	4.01E-05	4.04E-05	4.04E-05	4.07E-05	4.10E-05	4.07E-05	4.01E-05	3.92E-05	3.80E-05	3.68E-05
GE 78	1.06E+00	6.61E-01	4.12E-01	2.57E-01	1.61E-01	6.25E-02	1.52E-02	3.67E-03	8.97E-04	2.18E-04	5.29E-05	1.30E-05
AS 78	1.90E-02	3.16E-01	3.89E-01	3.65E-01	3.05E-01	1.80E-01	6.69E-02	2.22E-02	6.87E-03	2.05E-03	5.95E-04	1.66E-04
AS 79	2.02E+01	1.99E-01	1.96E-03	1.93E-05	1.90E-07	1.84E-11	1.76E-17	1.68E-23	1.60E-29	1.53E-35	1.46E-41	1.40E-47
SE 79M	3.00E-02	3.52E-01	3.47E-03	3.42E-05	3.36E-07	3.25E-11	3.10E-17	2.96E-23	2.83E-29	2.70E-35	2.57E-41	2.45E-47
BR 80	1.27E-01	1.20E-02	1.13E-03	1.06E-04	9.97E-06	8.84E-08	7.40E-11	6.17E-14	5.14E-17	4.29E-20	3.58E-23	2.98E-26
SE 81M	1.04E-01	4.86E+00	2.35E+00	1.13E+00	5.43E-01	1.27E-01	1.42E-02	1.59E-03	1.78E-04	2.00E-05	2.24E-06	2.52E-07
SE 81	1.27E+00	5.75E+00	3.33E+00	1.66E+00	8.06E-01	1.88E-01	2.11E-02	2.36E-03	2.64E-04	2.97E-05	3.32E-06	3.70E-07
BR 82	6.40E-04	6.28E-04	6.15E-04	6.04E-04	5.91E-04	5.69E-04	5.36E-04	5.05E-04	4.77E-04	4.49E-04	4.24E-04	4.00E-04
SE 83	6.12E+01	1.16E+01	2.20E+00	4.17E-01	7.87E-02	2.83E-03	1.93E-05	1.31E-07	8.95E-10	6.06E-12	3.85E-14	2.40E-16
BR 83	5.08E-01	7.59E+00	7.02E+00	5.53E+00	4.19E+00	2.37E+00	1.00E+00	4.22E-01	1.78E-01	7.52E-02	3.17E-02	1.40E-02
KR 83M	2.63E-05	1.72E+00	3.51E+00	4.36E+00	4.49E+00	3.75E+00	2.21E+00	1.14E+00	5.48E-01	2.53E-01	1.14E-01	5.00E-02

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
BE 7	5.77E-05	5.70E-05	5.62E-05	5.41E-05	5.07E-05	4.45E-05	3.91E-05	3.01E-05	1.57E-05	4.28E-06	1.16E-06	
NA 24	4.09E-02	1.35E-02	4.46E-03	1.60E-04	6.25E-07	9.55E-12	1.46E-16	3.39E-26	0.	0.	0.	0.
MN 54	1.87E-05	1.85E-05	1.85E-05	1.82E-05	1.80E-05	1.77E-05	1.74E-05	1.65E-05	1.48E-05	1.17E-05	9.37E-06	
FE 55	4.84E-05	4.84E-05	4.84E-05	4.82E-05	4.80E-05	4.78E-05	4.73E-05	4.67E-05	4.49E-05	4.19E-05	3.88E-05	
FE 59	8.29E-05	8.16E-05	8.04E-05	7.68E-05	7.10E-05	6.10E-05	5.22E-05	3.84E-05	1.78E-05	3.80E-06	8.16E-07	
CO 57	2.36E-07	2.36E-07	2.34E-07	2.34E-07	2.31E-07	2.24E-07	2.19E-07	2.08E-07	1.84E-07	1.42E-07	1.10E-07	
CO 58	1.71E-06	1.70E-06	1.68E-06	1.63E-06	1.56E-06	1.41E-06	1.28E-06	1.05E-06	6.49E-07	2.45E-07	9.26E-08	
CO 60	9.21E-06	9.21E-06	9.21E-06	9.21E-06	9.16E-06	9.16E-06	9.11E-06	9.05E-06	8.83E-06	8.56E-06	8.23E-06	
CU 64	2.70E-01	7.36E-02	2.01E-02	4.08E-04	6.12E-07	1.39E-12	3.15E-18	1.62E-29	0.	0.	0.	0.
CU 67	8.53E-06	6.50E-06	4.96E-06	2.21E-06	5.75E-07	3.88E-08	2.62E-09	1.19E-11	1.66E-17	0.	0.	0.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	4.09E-05	4.05E-05	3.99E-05	3.91E-05	3.74E-05	3.40E-05	3.10E-05	2.58E-05	1.63E-05	6.46E-06	2.57E-06	
W187	3.70E-03	1.84E-03	9.14E-04	1.14E-04	3.50E-06	3.34E-09	3.16E-12	2.85E-20	0.	0.	0.	0.
W188	2.80E-07	2.77E-07	2.74E-07	2.66E-07	2.54E-07	2.29E-07	2.07E-07	1.70E-07	1.03E-07	3.80E-08	1.40E-08	
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	4.08E-04	2.96E-04	1.13E-04	2.30E-05	9.45E-07	3.87E-08	6.51E-11	7.61E-18	0.	0.	0.	0.
U237	4.44E-02	4.00E-02	3.61E-02	2.66E-02	1.59E-02	5.69E-03	2.04E-03	2.61E-04	1.54E-06	1.65E-10	1.12E-10	
U240	3.70E-01	1.14E-01	3.50E-02	1.01E-03	2.79E-06	2.09E-11	1.57E-16	8.89E-27	0.	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	7.72E-04	1.18E+00	8.78E-01	3.62E-01	8.29E-02	4.34E-03	2.27E-04	6.23E-07	2.45E-13	5.85E-23	5.85E-23	
NP240M	5.86E-04	1.15E-01	3.53E-02	1.02E-03	2.81E-06	2.11E-11	1.59E-16	8.96E-27	0.	0.	0.	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	2.39E-06	2.38E-06	2.37E-06	2.34E-06	2.29E-06	2.19E-06	2.11E-06	1.93E-06	1.57E-06	1.02E-06	6.69E-07	
GE 77	8.07E-03	5.08E-03	1.16E-03	1.41E-05	8.94E-09	3.62E-15	1.46E-21	2.38E-34	0.	0.	0.	0.
AS 77	8.34E-05	1.23E-02	8.91E-03	2.58E-03	3.02E-04	4.10E-06	5.56E-08	1.03E-11	4.76E-21	1.02E-39	2.19E-58	
SE 77M	3.29E-09	3.71E-05	2.67E-05	7.75E-06	9.03E-07	1.23E-08	1.67E-10	3.08E-14	1.43E-23	3.05E-42	6.58E-61	
AS 78	1.90E-02	1.69E-04	4.96E-09	4.19E-23	0.	0.	0.	0.	0.	0.	0.	0.
BR 82	6.40E-04	3.99E-04	2.49E-04	6.06E-05	5.75E-06	5.16E-08	4.63E-10	3.74E-14	2.18E-24	7.50E-45	2.55E-65	
BR 83	5.08E-01	1.34E-02	1.35E-05	1.37E-14	1.40E-29	0.	0.	0.	0.	0.	0.	0.
KR 83M	2.63E-05	5.85E-02	6.65E-05	5.98E-14	6.13E-29	0.	0.	0.	0.	0.	0.	0.
KR 85M	6.66E-03	3.80E-01	8.66E-03	1.03E-07	6.34E-16	2.41E-32	9.13E-49	0.	0.	0.	0.	0.
KR 85	6.89E-06	1.81E-04	1.84E-04	1.84E-04	1.84E-04	1.84E-04	1.84E-04	1.83E-04	1.82E-04	1.78E-04	1.75E-04	
KR 87	1.08E+02	2.13E-04	4.21E-10	3.26E-27	0.	0.	0.	0.	0.	0.	0.	0.
KR 88	6.26E+01	1.65E-01	4.32E-04	7.86E-12	9.89E-25	0.	0.	0.	0.	0.	0.	0.
RB 88	1.59E+01	1.84E-01	4.84E-04	8.79E-12	1.10E-24	0.	0.	0.	0.	0.	0.	0.
SR 89	5.69E-06	1.70E-01	1.68E-01	1.61E-01	1.51E-01	1.32E-01	1.16E-01	8.90E-02	4.55E-02	1.20E-02	3.16E-03	
SR 90	1.12E-05	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.15E-03	1.14E-03	1.14E-03	1.13E-03	
Y 90	1.66E-11	2.63E-04	4.65E-04	8.36E-04	1.07E-03	1.14E-03	1.15E-03	1.15E-03	1.14E-03	1.14E-03	1.13E-03	
SR 91	1.15E+00	4.13E+00	7.40E-01	4.24E-03	7.76E-07	2.63E-14	8.92E-22	1.02E-36	0.	0.	0.	0.

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 300 DAYS

	ZERO	TIME	1.00E+00	2.00E+00	5.00E+00	1.00E+01	2.00E+01	3.00E+01	5.00E+01	1.00E+02	2.00E+02	3.00E+02
Y 91M	7.76E-05	2.67E+00	4.77E-01	2.74E-03	5.04E-07	1.70E-14	5.75E-22	6.56E-37	0.	0.	0.	0.
Y 91	3.18E-08	1.27E-01	1.50E-01	1.50E-01	1.41E-01	1.26E-01	1.12E-01	8.85E-02	4.90E-02	1.51E-02	4.64E-03	0.
SR 92	1.89E+00	2.35E-02	5.07E-05	5.10E-13	2.39E-26	0.	0.	0.	0.	0.	0.	0.
Y 92	8.70E-02	2.47E-01	2.74E-03	2.11E-09	1.23E-19	4.20E-40	1.44E-60	0.	0.	0.	0.	0.
Y 93	9.02E-02	6.10E-01	1.19E-01	8.94E-04	2.57E-07	2.12E-14	1.75E-21	1.20E-35	0.	0.	0.	0.
ZR 95	1.70E-04	2.13E-02	2.10E-02	2.04E-02	1.93E-02	1.73E-02	1.56E-02	1.26E-02	7.39E-03	2.54E-03	8.73E-04	0.
NB 95M	3.62E-12	7.20E-05	1.31E-04	2.51E-04	3.38E-04	3.57E-04	3.29E-04	2.67E-04	1.57E-04	5.39E-05	1.86E-05	0.
NB 95	1.89E-11	4.11E-04	8.13E-04	1.95E-03	3.62E-03	6.24E-03	8.06E-03	1.00E-02	9.62E-03	4.63E-03	1.78E-03	0.
ZR 97	4.03E-01	6.85E-01	2.58E-01	1.37E-02	1.03E-04	5.77E-09	3.24E-13	1.03E-21	5.79E-43	0.	0.	0.
NB 97M	2.07E-03	6.58E-01	2.47E-01	1.32E-02	9.84E-05	5.54E-09	3.12E-13	9.84E-22	5.56E-43	0.	0.	0.
NB 97	2.02E-01	6.88E-01	2.58E-01	1.37E-02	1.03E-04	6.22E-09	3.49E-13	1.11E-21	6.24E-43	0.	0.	0.
MO 99	1.17E-03	3.79E-01	2.96E-01	1.40E-01	4.06E-02	3.39E-03	2.83E-04	1.97E-06	8.02E-12	1.32E-22	2.18E-33	0.
TC 99M	1.08E-08	3.33E-01	2.81E-01	1.34E-01	3.88E-02	3.24E-03	2.70E-04	1.89E-06	7.65E-12	1.26E-22	2.08E-33	0.
RU103	8.24E-05	1.88E-01	1.84E-01	1.75E-01	1.61E-01	1.35E-01	1.13E-01	7.98E-02	3.32E-02	5.76E-03	1.00E-03	0.
RH103M	5.49E-09	1.88E-01	1.85E-01	1.75E-01	1.61E-01	1.35E-01	1.13E-01	7.98E-02	3.32E-02	5.76E-03	1.00E-03	0.
RU105	4.63E-01	4.43E-01	1.04E-02	1.37E-07	1.00E-15	5.34E-32	2.86E-48	0.	0.	0.	0.	0.
RH105M	3.05E-03	4.43E-01	1.04E-02	1.37E-07	1.00E-15	5.37E-32	2.87E-48	0.	0.	0.	0.	0.
RH105	5.00E-09	1.60E+00	1.04E+00	2.60E-01	2.57E-02	2.49E-04	2.42E-06	2.29E-10	1.98E-20	1.49E-40	1.12E-60	0.
RU106	3.71E-04	7.03E-03	7.00E-03	6.97E-03	6.91E-03	6.79E-03	6.63E-03	6.39E-03	5.81E-03	4.81E-03	3.99E-03	0.
RH106	4.02E-06	7.03E-03	7.00E-03	6.97E-03	6.91E-03	6.79E-03	6.63E-03	6.39E-03	5.81E-03	4.81E-03	3.99E-03	0.
PD109	1.08E-02	2.75E-01	8.02E-02	1.99E-03	4.19E-06	1.87E-11	8.32E-17	1.65E-27	0.	0.	0.	0.
AG109M	6.24E-05	2.75E-01	8.04E-02	1.99E-03	4.21E-06	1.87E-11	8.32E-17	1.65E-27	0.	0.	0.	0.
PD111M	1.67E+00	8.10E-02	3.94E-03	4.52E-07	1.22E-13	8.91E-27	6.54E-40	0.	0.	0.	0.	0.
PD111	5.94E-01	6.54E-02	3.17E-03	3.63E-07	9.85E-14	7.17E-27	5.25E-40	0.	0.	0.	0.	0.
AG111M	4.72E-03	8.54E-02	4.16E-03	4.78E-07	1.29E-13	9.47E-27	6.92E-40	0.	0.	0.	0.	0.
AG111	1.68E-09	4.64E-02	4.46E-02	3.40E-02	2.14E-02	8.47E-03	3.36E-03	5.30E-04	5.22E-06	5.05E-10	4.90E-14	0.
PD112	4.93E-01	2.24E-01	1.01E-01	9.41E-03	1.79E-04	6.49E-08	2.36E-11	3.10E-18	1.95E-35	0.	0.	0.
AG112	1.49E-05	2.60E-01	1.20E-01	1.11E-02	2.12E-04	7.67E-08	2.78E-11	3.67E-18	2.30E-35	0.	0.	0.
AG113	6.46E-03	6.83E-02	2.95E-03	2.40E-07	3.67E-14	8.59E-28	2.01E-41	0.	0.	0.	0.	0.
CD115M	2.17E-08	6.28E-04	6.17E-04	5.88E-04	5.44E-04	4.61E-04	3.94E-04	2.84E-04	1.27E-04	2.53E-05	5.06E-06	0.
CD115	8.38E-06	1.26E-01	9.25E-02	3.64E-02	7.69E-03	3.43E-04	1.53E-05	3.05E-08	5.39E-15	1.69E-28	5.29E-42	0.
IN115M	1.04E-10	1.33E-01	1.01E-01	3.98E-02	8.38E-03	3.75E-04	1.67E-05	3.33E-08	5.90E-15	1.85E-28	5.77E-42	0.
CD117	1.87E-01	4.07E-03	3.96E-06	3.70E-15	3.29E-30	0.	0.	0.	0.	0.	0.	0.
IN117M	8.98E-06	1.69E-02	1.96E-05	1.89E-14	1.68E-29	0.	0.	0.	0.	0.	0.	0.
IN117	3.61E-10	1.11E-02	1.32E-05	1.28E-14	1.13E-29	0.	0.	0.	0.	0.	0.	0.
SN121	3.87E-03	2.21E-01	1.19E-01	1.88E-02	8.61E-04	1.82E-06	3.83E-09	1.71E-14	7.13E-28	0.	0.	0.
SN123	1.79E-05	1.88E-03	1.86E-03	1.83E-03	1.78E-03	1.68E-03	1.59E-03	1.43E-03	1.08E-03	6.21E-04	3.57E-04	0.
SN125	4.08E-02	3.80E-02	3.53E-02	2.82E-02	1.95E-02	9.35E-03	4.47E-03	1.02E-03	2.56E-05	1.61E-08	1.01E-11	0.
SB125	2.45E-04	2.72E-04	2.97E-04	3.64E-04	4.46E-04	5.39E-04	5.81E-04	6.06E-04	5.94E-04	5.54E-04	5.17E-04	0.
SB126	5.47E-03	5.18E-03	4.90E-03	4.15E-03	3.14E-03	1.80E-03	1.04E-03	3.42E-04	2.14E-05	1.04E-07	2.09E-08	0.

SMOKY MICROCURIES/SQ METER
 MR/HR AT H+12 HOURS = 1.000
 FRACTION OF REFRACTORIES PRESENT = 0.100
 RELAXATION LENGTH = 0.16 GM/SQCM
 BOMB FRACTION PER SQ. METER = 1.657E-13

DEBRIS DECAY FROM 1 TO 50 YEARS

	ZERO TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00	5.00E+00	7.00E+00	1.00E+01	2.00E+01	3.50E+01	5.00E+01
BE 7	5.77E-05	4.99E-07	4.64E-08	4.30E-09	3.46E-12	2.77E-15	2.07E-19	1.33E-25	0.	0.	0.
MN 54	1.87E-05	8.06E-06	5.31E-06	3.49E-06	9.98E-07	2.85E-07	5.36E-08	4.38E-09	1.03E-12	3.72E-18	1.35E-23
FE 59	8.29E-05	2.99E-07	1.79E-08	1.08E-09	2.34E-13	5.06E-17	6.59E-22	3.09E-29	0.	0.	0.
CO 57	2.36E-07	9.31E-08	5.83E-08	3.66E-08	9.01E-09	2.22E-09	3.43E-11	2.08E-11	1.82E-15	1.49E-21	0.
CO 58	1.71E-06	4.92E-08	8.35E-09	1.41E-09	6.89E-12	3.35E-14	2.77E-17	6.56E-22	2.51E-37	0.	0.
CO 60	9.21E-06	8.07E-06	7.52E-06	7.03E-06	5.78E-06	4.75E-06	3.65E-06	2.46E-06	6.60E-07	9.16E-08	1.26E-08
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	4.09E-05	1.41E-06	2.61E-07	4.83E-08	3.07E-10	1.96E-12	2.31E-15	9.37E-20	0.	0.	0.
W188	2.80E-07	7.28E-09	1.18E-09	1.90E-10	8.00E-13	3.35E-15	2.27E-18	4.01E-23	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	4.44E-02	1.11E-10	1.08E-10	1.05E-10	9.81E-11	9.11E-11	8.28E-11	7.19E-11	4.47E-11	2.19E-11	1.08E-11
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	2.39E-06	5.07E-07	2.33E-07	1.07E-07	1.04E-08	1.02E-09	4.56E-11	4.31E-13	1.24E-17	1.15E-17	1.08E-17
KR 85	6.89E-06	1.71E-04	1.66E-04	1.60E-04	1.46E-04	1.32E-04	1.16E-04	9.57E-05	5.06E-05	1.93E-05	7.38E-06
SR 89	5.69E-06	1.33E-03	1.16E-04	1.02E-05	6.88E-09	4.65E-12	2.74E-16	1.25E-22	9.06E-44	0.	0.
SR 90	1.12E-05	1.12E-03	1.11E-03	1.10E-03	1.06E-03	1.02E-03	9.67E-04	8.98E-04	7.02E-04	4.85E-04	3.35E-04
Y 90	1.66E-11	1.12E-03	1.11E-03	1.10E-03	1.06E-03	1.02E-03	9.67E-04	8.98E-04	7.02E-04	4.85E-04	3.35E-04
Y 91	3.18E-08	2.15E-03	2.50E-04	2.90E-05	4.55E-08	7.14E-11	1.31E-14	3.21E-20	6.48E-39	0.	0.
ZR 95	1.70E-04	4.37E-04	6.24E-05	8.88E-06	2.59E-08	7.53E-11	3.12E-14	2.63E-19	3.22E-36	0.	0.
NB 95M	3.62E-12	9.25E-06	1.32E-06	1.89E-07	5.48E-10	1.60E-12	6.61E-16	5.58E-21	6.84E-38	0.	0.
NB 95	1.89E-11	9.40E-04	1.35E-04	1.92E-05	5.58E-08	1.62E-10	6.76E-14	5.71E-19	6.99E-36	0.	0.
RU103	8.24E-05	3.20E-04	1.31E-05	5.39E-07	3.68E-11	2.52E-15	7.08E-21	3.33E-29	0.	0.	0.
RH103M	5.49E-09	3.21E-04	1.31E-05	5.39E-07	3.68E-11	2.52E-15	7.08E-21	3.33E-29	0.	0.	0.
RU106	3.71E-04	3.53E-03	2.50E-03	1.77E-03	6.30E-04	2.24E-04	5.63E-05	7.12E-06	7.18E-09	2.31E-13	7.42E-18
RH106	4.02E-06	3.53E-03	2.50E-03	1.77E-03	6.30E-04	2.24E-04	5.63E-05	7.12E-06	7.18E-09	2.31E-13	7.42E-18
SN123	1.79E-05	2.49E-04	9.02E-05	3.28E-05	1.57E-06	7.54E-08	1.31E-09	3.03E-12	4.86E-21	3.13E-34	2.01E-47
SB125	2.45E-04	4.94E-04	4.34E-04	3.82E-04	2.60E-04	1.77E-04	1.06E-04	4.89E-05	3.76E-06	8.01E-08	1.71E-09
TE125M	6.60E-12	2.01E-04	1.79E-04	1.58E-04	1.08E-04	7.32E-05	4.38E-05	2.03E-05	1.56E-06	3.32E-08	7.06E-10
TE127M	5.65E-10	2.71E-04	8.47E-05	2.65E-05	8.15E-07	2.51E-08	2.41E-10	2.27E-13	1.86E-23	1.39E-38	1.04E-53
TE127	3.94E-02	2.68E-04	8.37E-05	2.62E-05	8.05E-07	2.48E-08	2.38E-10	2.25E-13	1.84E-23	1.37E-38	1.03E-53
CS137	1.15E-04	1.21E-03	1.19E-03	1.18E-03	1.14E-03	1.10E-03	1.05E-03	9.82E-04	7.76E-04	5.51E-04	3.89E-04
BA137M	2.42E-07	1.13E-03	1.12E-03	1.11E-03	1.06E-03	1.03E-03	9.82E-04	9.20E-04	7.28E-04	5.15E-04	3.65E-04
CE141	1.44E-07	6.20E-05	1.25E-06	2.50E-08	2.04E-13	1.66E-18	2.72E-25	1.81E-35	0.	0.	0.
CE144	5.19E-04	1.52E-03	9.80E-04	6.25E-04	1.64E-04	4.32E-05	7.26E-06	5.01E-07	6.74E-11	1.06E-16	1.65E-22
PR144	1.42E-07	1.52E-03	9.80E-04	6.25E-04	1.64E-04	4.32E-05	7.26E-06	5.01E-07	6.74E-11	1.06E-16	1.65E-22
PM147	6.73E-15	3.91E-04	3.42E-04	3.00E-04	2.02E-04	1.36E-04	7.97E-05	3.62E-05	2.57E-06	4.86E-08	9.19E-10
EU155	1.78E-06	5.21E-05	4.84E-05	4.51E-05	3.62E-05	2.91E-05	2.17E-05	1.40E-05	3.28E-06	3.69E-07	4.15E-08
TOTAL	8.56E-02	2.24E-02	1.35E-02	1.05E-02	6.67E-03	5.25E-03	4.46E-03	3.93E-03	2.97E-03	2.06E-03	1.43E-03

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