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# **Results of Calculations of External Gamma Radiation Exposure Rates from Fallout and the Related Radionuclide Compositions**

## **Operation Tumbler-Snapper, 1952**

**Harry G. Hicks**

**Manuscript date: July 1981**

**LAWRENCE LIVERMORE LABORATORY**  
University of California • Livermore, California • 94550 

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# Lawrence Livermore National Laboratory

## ERRATA

TO: Recipients of UCRL-53152, Parts 1-8, and UCRL-53505

FROM: Harry G. Hicks

DATE: July 1984

SUBJECT: Errata

<sup>203</sup>Pb data, page 8 of each appendix citing <sup>203</sup>Pb

The zero time value was omitted but appears correctly on page 3 of these appendices. The <sup>203</sup>Pb values pertain to the decay time of the column immediately to the right; thus, the "zero time" value is the value after 1.00 day's decay.

<sup>181</sup>W data on page 12 of each appendix citing <sup>181</sup>W

The value for a decay time of 3.50 years is a factor of 10 too high.



# Lawrence Livermore National Laboratory

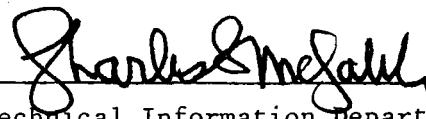
TO: All holders of UCRL-53152, "Results of Calculations of External Gamma Radiation Exposure Rates from Fallout and the Related Radionuclide Compositions," Part 3, "Operation Tumbler-Snapper, 1952"  
FROM: Technical Information Department

## ADDENDUM

For purposes of clarification, the following information (underlined below) is being added to your copy of UCRL-53152 Part 3:

Each Appendix contains 11 pages of calculated results relating to one Event in Table 1. Each set of 11 pages is marked Page 2 through Page 12 at the top and A2 through A12 (or B2 through B12, etc.) at the bottom. Page 2 of each set gives the external gamma-ray exposure rates and associated values of total microcuries per square meter at 30 decay intervals and at zero time. Note that the totals at zero time include only the nuclides listed in pages 3 through 12, not all the nuclides present at zero time. Calculated values for each radionuclide at various decay intervals are given in the remaining pages--from 1 to 21 hr in Pages 3-7, from 1 to 300 d in Pages 8-11, and from 1 to 50 y in Page 12. Unless otherwise indicated, the value for each nuclide at zero time is the result of a radiochemical measurement. The measurements were performed on debris samples taken by aircraft approximately 1 to 4 hr after detonation. The production of nuclides designated by (\*) has been estimated. When no estimate could be made, the value appears as zero.

To incorporate this addendum, please staple or affix the attached page so as to cover the existing Page 2 in your document.



Charles S. Megill  
Technical Information Department



## **FOREWORD**

This document is one of eight parts of Report UCRL-53152. Each part contains results for Events (shots) from a specific Operation or Operations, as listed here.

- Part 1. Operation Ranger, Events Able, Baker, Easy, Baker-2 and Fox.
- Part 2. Operation Buster-Jangle, Events Buster Baker, Buster Charlie, Buster Dog, Buster Easy, Jangle Sugar and Jangle Uncle.
- Part 3. Operation Tumbler-Snapper, Events Able, Baker, Charlie, Dog, Easy, Fox, George and How.
- Part 4. Operation Upshot-Knothole, Events Annie, Nancy, Ruth, Dixie, Ray, Badger, Simon, Encore, Harry, Grable and Climax.
- Part 5. Operation Teapot, Events Wasp, Moth, Tesla, Turk, Hornet, Bee, Ess, Apple I, Wasp Prime, HA, Post, Met, Apple II and Zucchini.
- Part 6. Operation Plumbbob, Events Boltzmann, Franklin, Wilson, Priscilla, Hood, Diablo, John, Kepler, Owens, Pascal A, Stokes, Shasta, Doppler, Franklin Prime, Smoky, Galileo, Wheeler, Coulomb B, Laplace, Fizeau, Newton, Whitney, Charleston, Morgan and Coulomb C.
- Part 7. Operation Hardtack II, Events Otero, Eddy, Mora, Hidalgo, Quay, Lea, Hamilton, Dona Ana, Vesta, Rio Arriba, Socorro, Wrangell, Rushmore, Catron, Sanford, Debaca, Chavez, Humboldt, Titania and Santa Fe.
- Part 8. Operations Nougat through Bowline, Events Danny Boy, Sedan, Johnny Boy, Small Boy, Little Feller I, Sulky, Palanquin, Cabriolet, Buggy and Schooner.

Each part of the report contains 11 pages of data relating to each Event covered by that part of the report.



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# Results of Calculations of External Gamma Radiation Exposure Rates from Fallout and the Related Radionuclide Compositions

## Operation Tumbler-Snapper, 1952

### ABSTRACT

This report presents data on calculated gamma radiation exposure rates and ground deposition of related radionuclides resulting from Events that deposited detectable radioactivity outside the Nevada Test Site complex.

### INTRODUCTION

The Events which deposited detectable radioactivity outside the Nevada Test Site complex<sup>1</sup> are listed in Table 1.

### RESULTS

Results of the calculations of relative external gamma radiation exposure rate and related radionuclide ground deposition are given in the Appendices. These calculations are described in detail in Ref. 2. The output of the calculation has 30 decay times, 10 from 1 to 21 h, 10 from 1 to 300 d, and 10 from 1 to 50 y. For each of these times and for zero time there are values of the external gamma radiation exposure rate normalized to 1 mR/h, 1 m above the surface, 12 h after the event, the associated values of  $\mu\text{Ci}/\text{m}^2$  for each radionuclide, and the total  $\mu\text{Ci}/\text{m}^2$ .

The  $^{233}\text{U}$ ,  $^{235}\text{U}$ ,  $^{238}\text{U}$  and  $^{239,240}\text{Pu}$  data were 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.<sup>3</sup>

Surface roughness effects are simulated by using Beck's values<sup>4</sup> of  $(\text{mR}/\text{h})/(\mu\text{Ci}/\text{m}^2)$  for a relaxation length of  $0.16 \text{ g/cm}^2$ . According to Beck, the concentration of fallout varies exponentially with soil depth, Z, according to the relation  $C = C_0 e^{-\alpha Z}$ . He defines relaxation length as  $1/\alpha$ .

TABLE 1. Yield, date and placement of Events of Operation Tumbler-Snapper, 1952.

Event	Yield (kt)	Date	Placement
Able	1	April 1	Air drop 793 ft
Baker	1	April 15	Air drop 1109 ft
Charlie	31	April 22	Air drop 3447 ft
Dog	19	May 1	Air drop 1040 ft
Easy	12	May 7	300 ft Tower
Fox	11	May 25	300 ft Tower
George	15	June 1	300 ft Tower
How	14	June 5	300 ft Tower

Fractionation effects were simulated by the removal of a fraction of the refractory nuclides from the calculation. In general, air drops were assumed to be unfractionated, surface and cratering Events were assumed to have 0.4 of the refractory elements present, and all other Events were assumed to have 0.5 of the refractory elements present.

Each Appendix contains 11 pages of calculated results relating to one Event in Table 1. Each set of 11 pages is marked Page 2 through Page 12 at the top and A2 through A12 (or B2 through B12, etc.) at the bottom. Page 2 of each set gives the external gamma-ray exposure rates and associated values of total microcuries per square meter at 30 decay intervals and at zero time. Note that the totals at zero time include only the nuclides listed in Pages 3 through 12, not all the nuclides present at zero time. Calculated values for each radionuclide at various decay intervals are given in the remaining pages—from 1 to 21 h in Pages 3-7, from 1 to 300 d in Page 8-11, and from 1 to 50 y in Page 12. Unless otherwise indicated, the value for each nuclide at zero time is the result of a radiochemical measurement. The measurements were performed on debris samples taken by aircraft approximately 1 to 4 h after detonation. The production of nuclides designated by (\*) has been estimated. When no estimate could be made, the value appears as zero.

## REFERENCES

1. *Announced United States Nuclear Tests, July, 1945, through December, 1980*, Office of Public Affairs, Nevada Operations Office, Department of Energy, Las Vegas, NV, NVO-209, Rev. 1, January 1981.
2. H. G. Hicks, *Calculation of the Concentration of Any Radionuclide Deposited on the Ground by Fallout from a Nuclear Detonation*, Lawrence Livermore National Laboratory, Livermore, CA, Preprint UCRL-86177 (1981). Accepted for publication in *Health Physics*.
3. E. Hardy, *Plutonium in Soil Northeast of the Nevada Test Site*, Environmental Measurements Laboratory, Department of Energy, New York, NY, HASL-306, pg. 1-51, July 1, 1976.
4. H. L. Beck, *Exposure Rate Conversion Factors for Radionuclides Deposited on the Ground*, Environmental Measurements Laboratory, Department of Energy, New York, NY, EML-387, July, 1980.

**APPENDIX A**  
**DETAILED RESULTS FOR EVENT ABLE**

TSABLE  
 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 = 4.068E-12

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	9.57E+01	1.59E+04
1.00E+00	2.91E+01	3.21E+03
2.00E+00	1.16E+01	1.02E+03
3.00E+00	6.41E+00	5.60E+02
4.00E+00	4.13E+00	4.09E+02
6.00E+00	2.26E+00	2.90E+02
9.00E+00	1.36E+00	2.13E+02
1.20E+01	1.00E+00	1.71E+02
1.50E+01	7.99E-01	1.44E+02
1.80E+01	6.66E-01	1.25E+02
2.10E+01	5.71E-01	1.11E+02
1.00E+00 DAYS	4.92E-01	9.86E+01
2.00E+00	2.44E-01	5.55E+01
5.00E+00	1.19E-02	2.13E+01
1.00E+01	6.66E-02	6.89E+00
2.00E+01	3.32E-02	1.92E+00
3.00E+01	1.68E-03	1.13E+00
5.00E+01	3.78E-03	6.31E-01
1.00E+02	1.52E-03	2.85E-01
2.00E+02	5.62E-04	1.08E-01
3.00E+02	2.14E-04	5.30E-02
1.00E+00 YEARS	1.19E-04	3.79E-02
1.50E+00	2.98E-05	2.05E-02
2.00E+00	1.48E-05	1.40E-02
3.50E+00	8.44E-06	6.44E-03
5.00E+00	5.84E-06	4.08E-03
7.00E+00	3.99E-06	3.00E-03
1.00E+01	2.38E-06	2.43E-03
2.00E+01	4.12E-06	1.71E-03
3.50E+01	2.90E-06	1.17E-03
5.00E+01	2.04E-06	8.16E-04

TSABLE  
 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 = 4.068E-12

## 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	2.68E-07	2.68E-07	2.68E-07	2.68E-07	2.68E-07	2.67E-07	2.66E-07	2.66E-07	2.66E-07	2.65E-07	
* NA 24	6.07E-03	5.80E-03	5.54E-03	5.28E-03	5.04E-03	4.60E-03	4.00E-03	3.49E-03	3.04E-03	2.65E-03	
* MN 54	4.60E-06	4.60E-06	4.60E-06	4.60E-06	4.60E-06	4.60E-06	4.56E-06	4.56E-06	4.56E-06	4.56E-06	
* FE 55	8.14E-06										
* FE 59	6.76E-06	6.75E-06	6.75E-06	6.75E-06	6.74E-06	6.73E-06	6.72E-06	6.70E-06	6.69E-06	6.68E-06	
* CO 57	5.49E-05										
* CO 58	5.74E-04	5.74E-04	5.74E-04	5.74E-04	5.72E-04	5.72E-04	5.71E-04	5.71E-04	5.70E-04	5.70E-04	
* CO 60	1.37E-05										
* CU 64	2.72E+00	2.57E+00	2.43E+00	2.31E+00	2.19E+00	1.96E+00	1.67E+00	1.42E+00	1.20E+00	1.03E+00	
* CU 67	2.86E-04	2.83E-04	2.78E-04	2.76E-04	2.73E-04	2.66E-04	2.56E-04	2.49E-04	2.41E-04	2.32E-04	
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W185	4.70E-07	4.70E-07	4.70E-07	4.70E-07	4.69E-07	4.69E-07	4.69E-07	4.68E-07	4.67E-07	4.67E-07	
W187	9.30E-03	9.01E-03	8.75E-03	8.50E-03	8.28E-03	7.79E-03	7.16E-03	6.57E-03	6.00E-03	5.53E-03	5.04E-03
W188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
U237	1.40E-01	1.39E-01	1.39E-01	1.38E-01	1.37E-01	1.36E-01	1.34E-01	1.33E-01	1.31E-01	1.29E-01	1.28E-01
U239	8.35E+03	8.42E+03	8.43E+02	8.44E+01	7.03E+00	2.05E-01	1.01E-03	5.01E-06	2.48E-08	1.23E-10	6.06E-13
U240	1.61E-01	1.54E-01	1.46E-01	1.39E-01	1.33E-01	1.20E-01	1.04E-01	8.93E-02	7.71E-02	6.64E-02	5.73E-02
NP239	2.86E-02	4.79E+01	5.54E+01	5.62E+01	5.58E+01	5.45E+01	5.23E+01	5.05E+01	4.88E+01	4.70E+01	4.53E+01
NP240M	2.55E-04	1.54E-01	1.47E-01	1.40E-01	1.34E-01	1.21E-01	1.05E-01	9.02E-02	7.77E-02	6.70E-02	5.79E-02
NP240	6.46E-12	3.32E-12	1.72E-12	8.90E-13	4.60E-13	1.23E-13	1.70E-14	2.34E-15	3.23E-16	4.45E-17	6.15E-18
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 75	5.32E-06	2.58E-02	1.55E-02	9.35E-03	5.63E-03	2.04E-03	4.46E-04	9.76E-05	2.13E-05	4.64E-06	1.02E-06
GE 77	3.18E-03	8.20E-03	7.71E-03	7.25E-03	6.83E-03	6.04E-03	5.02E-03	4.18E-03	3.48E-03	2.89E-03	2.41E-03
AS 77	3.29E-05	5.20E-03	5.26E-03	5.30E-03	5.33E-03	5.37E-03	5.37E-03	5.33E-03	5.25E-03	5.14E-03	5.01E-03
SE 77M	1.30E-09	1.56E-05	1.58E-05	1.59E-05	1.59E-05	1.60E-05	1.62E-05	1.60E-05	1.58E-05	1.55E-05	1.50E-05
GE 78	4.75E-01	2.97E-01	1.85E-01	1.16E-01	7.21E-02	2.81E-02	6.82E-03	1.65E-03	4.03E-04	9.79E-05	2.38E-05
AS 78	8.55E-03	1.42E-01	1.75E-01	1.64E-01	1.37E-01	8.09E-02	3.00E-02	9.97E-03	3.09E-03	9.23E-04	2.67E-04
AS 79	9.92E+00	9.78E-02	9.63E-04	9.48E-06	9.34E-08	9.05E-12	8.63E-18	8.23E-24	7.85E-30	7.50E-36	7.16E-42
SE 79M	1.47E-02	1.73E-01	1.70E-03	1.68E-05	1.65E-07	1.60E-11	1.52E-17	1.45E-23	1.39E-29	1.32E-35	1.26E-41
BR 80	6.55E-02	6.18E-03	5.81E-04	5.47E-05	5.15E-06	4.56E-08	3.82E-11	3.18E-14	2.65E-17	2.22E-20	1.85E-23
SE 81M	5.55E-02	2.59E+00	1.25E+00	6.01E-01	2.89E-01	6.75E-02	7.55E-03	8.47E-04	9.50E-05	1.06E-05	1.19E-06
SE 81	6.78E-01	3.06E+00	1.77E+00	8.84E-01	4.29E-01	1.00E-01	1.12E-02	1.26E-03	1.41E-04	1.58E-05	1.77E-06
BR 82	3.55E-04	3.48E-04	3.42E-04	3.35E-04	3.28E-04	3.16E-04	2.98E-04	2.81E-04	2.65E-04	2.49E-04	2.35E-04
SE 83	3.33E+01	6.30E+00	1.19E+00	2.26E-01	4.28E-02	1.54E-03	1.05E-05	7.12E-08	4.86E-10	3.29E-12	2.09E-14
BR 83	2.76E-01	4.12E+00	3.82E+00	3.00E+00	2.28E+00	1.29E+00	5.44E-01	2.29E-01	9.68E-02	4.08E-02	1.72E-02
KR 83M	1.43E-05	9.33E-01	1.91E+00	2.37E+00	2.44E+00	2.04E+00	1.20E+00	6.18E-01	2.98E-01	1.38E-01	6.18E-02

TABLE TSABLE 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 = 4.068E-12

## 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
7.14E-02	1.23E+01	3.33E+00	9.02E-01	2.44E-01	1.78E-02	3.52E-04	6.96E-06	1.38E-07	2.72E-09	5.38E-11
3.58E-03	7.67E+00	6.53E+00	5.57E+00	4.76E+00	3.48E+00	2.17E+00	1.35E+00	8.43E-01	3.27E-01	6.12E-04
3.47E+01	3.271E+01	2.12E+01	1.65E+01	1.29E+01	7.84E+00	3.74E+00	1.78E+00	8.46E-01	1.92E-01	1.52E-01
8.83E+00	2.74E+01	2.34E+01	1.84E+01	1.44E+01	8.78E+00	4.19E+00	2.00E+00	9.51E-01	1.15E-01	2.37E-22
3.18E-06	1.189E-01	1.176E-01	1.163E+00	1.169E-01	1.18E-02	1.35E-05	1.62E-08	4.89E-12	1.19E-01	1.18E-01
6.43E-06	6.61E-04									
8.754E-05	5.48E+01	7.46E+00	1.738E+01	8.79E-02	1.23E+01	2.23E+00	5.80E+00	4.25E+00	3.03E+00	2.45E+00
2.355E-08	4.87E-03	1.12E-01	3.159E+01	2.89E+01	1.22E-01	3.23E+00	6.21E+00	3.27E+02	8.91E-02	8.91E-02
4.086E+01	4.81E+01									
4.423E+02	7.16E+01	8.36E+01	9.09E-01	1.028E+01	1.057E+01	1.08E+01	1.102E+01	1.128E+01	1.154E+01	1.184E+01
9.78E-04	2.60E+02	2.45E+01								
9.09E-10	7.10E-01	7.28E-01	7.41E-01	7.57E-01	7.70E-01	7.90E-01	8.10E-01	8.30E-01	8.50E-01	8.70E-01
1.09E+00	1.00E+00									
2.309E+02	9.61E+00									
1.158E+01	1.28E+01									
6.67E-03										
6.020E+01	4.020E+01									
3.81E+00										
7.06E+02	1.154E+01									
2.133E+03	8.13E+03									
4.66E-05	5.11E-09									
3.71E+01	8.53E-01	8.66E-03	8.73E-09	8.95E-04	9.11E-04	9.30E-05	9.69E-03	1.03E-03	1.13E-03	1.23E-03
2.111E-02	2.56E-05									

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BR 85M

KR 88M

RB 89M

SR 90M

SR 91M

SR 92M

SR 93M

SR 94M

SR 95M

SR 96M

NB 97M

ZB 98M

NB 99M

MC 100M

MC 102M

TC 102M

TC 103M

RH 104M

RH 105M

RH 106M

RH 107M

PD 107M

TSABLE 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 = 4.068E-12

## 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	1.61E-03	1.33E-01	1.27E-01	1.20E-01	1.14E-01	1.03E-01	8.85E-02	7.59E-02	6.50E-02	5.57E-02	4.79E-02
AG109M	9.27E-06	1.33E-01	1.27E-01	1.20E-01	1.14E-01	1.03E-01	8.85E-02	7.59E-02	6.50E-02	5.57E-02	4.79E-02
PD111M	2.23E-01	1.97E-01	1.73E-01	1.53E-01	1.35E-01	1.05E-01	7.18E-02	4.93E-02	3.38E-02	2.31E-02	1.58E-02
PD111	7.95E-02	1.43E-01	1.38E-01	1.23E-01	1.08E-01	8.42E-02	5.78E-02	3.96E-02	2.71E-02	1.86E-02	1.28E-02
AG111M	6.32E-04	1.93E-01	1.82E-01	1.63E-01	1.43E-01	1.11E-01	7.58E-02	5.19E-02	3.56E-02	2.44E-02	1.67E-02
AG111	2.25E-10	6.67E-04	1.40E-03	2.06E-03	2.64E-03	3.60E-03	4.63E-03	5.30E-03	5.74E-03	6.02E-03	6.18E-03
PD112	5.01E-02	4.86E-02	4.69E-02	4.54E-02	4.40E-02	4.11E-02	3.73E-02	3.38E-02	3.06E-02	2.76E-02	2.51E-02
AG112	1.51E-06	9.61E-03	1.70E-02	2.28E-02	2.70E-02	3.24E-02	3.56E-02	3.54E-02	3.38E-02	3.15E-02	2.90E-02
AG113	6.50E-04	1.39E-01	1.22E-01	1.07E-01	9.39E-02	7.22E-02	4.89E-02	3.30E-02	2.23E-02	1.50E-02	1.02E-02
AG115	2.85E-01	3.05E-01	3.79E-02	4.74E-03	5.94E-04	9.28E-06	1.81E-08	3.55E-11	6.87E-14	6.82E-163	6.32E-17
CD115M	2.33E-09	6.19E-05	6.96E-05	7.05E-05	7.05E-05	7.05E-05	7.02E-05	7.02E-05	7.00E-05	6.98E-05	6.98E-05
CD115	8.99E-07	1.69E-02	1.82E-02	1.82E-02	1.80E-02	1.75E-02	1.68E-02	1.62E-02	1.56E-02	1.50E-02	1.44E-02
IN115M	1.12E-11	1.87E-03	4.16E-03	6.17E-03	7.86E-03	1.05E-02	1.29E-02	1.43E-02	1.49E-02	1.50E-02	1.49E-02
CD117	2.02E-02	3.37E-01	2.54E-01	1.89E-01	1.42E-01	7.97E-02	3.34E-02	1.41E-02	5.93E-03	2.49E-03	1.05E-03
IN117M	9.72E-07	1.17E-01	1.70E-01	1.84E-01	1.78E-01	1.40E-01	8.01E-02	4.10E-02	1.97E-02	9.13E-03	4.13E-03
IN117	3.91E-11	2.14E-02	5.17E-02	7.18E-02	8.01E-02	7.37E-02	4.69E-02	2.51E-02	1.25E-02	5.88E-03	2.70E-03
CD118	1.35E+00	5.80E-01	2.49E-01	1.06E-01	4.54E-02	8.32E-03	6.53E-04	5.10E-05	4.01E-06	3.14E-07	2.47E-08
IN118	8.97E-02	5.80E-01	2.49E-01	1.06E-01	4.54E-02	8.34E-03	6.53E-04	5.12E-05	4.01E-06	3.14E-07	2.47E-08
CD119	3.36E+00	5.24E-02	8.17E-04	1.28E-05	2.00E-07	4.89E-11	1.86E-16	7.12E-22	2.71E-27	1.04E-32	3.96E-38
IN119M	5.06E-03	5.67E-01	6.17E-02	6.22E-03	6.19E-04	6.09E-06	5.94E-09	5.82E-12	5.67E-15	5.54E-18	5.42E-21
IN119	2.50E-01	2.98E-02	3.46E-03	3.51E-04	3.51E-05	3.43E-07	3.36E-10	3.28E-13	3.21E-16	3.13E-19	3.06E-22
SN121	4.08E-04	4.20E-02	4.08E-02	3.99E-02	3.89E-02	3.70E-02	3.41E-02	3.17E-02	2.93E-02	2.71E-02	2.52E-02
SN123M	2.24E-01	4.19E-01	1.48E-01	5.25E-02	1.85E-02	2.32E-03	1.02E-04	4.54E-06	2.01E-07	8.86E-09	3.92E-10
SN123	2.10E-06	2.20E-04	2.20E-04								
SN125	5.86E-03	5.85E-03	5.83E-03	5.82E-03	5.79E-03	5.75E-03	5.71E-03	5.65E-03	5.60E-03	5.54E-03	5.49E-03
SB125	3.52E-05	3.54E-05	3.55E-05	3.57E-05	3.58E-05	3.61E-05	3.67E-05	3.72E-05	3.77E-05	3.81E-05	3.86E-05
SB126	1.15E-03	1.14E-03	1.14E-03	1.14E-03	1.13E-03	1.13E-03	1.12E-03	1.11E-03	1.11E-03	1.10E-03	1.09E-03
SN127	2.05E+00	1.47E+00	1.06E+00	7.63E-01	5.49E-01	2.83E-01	1.05E-01	3.91E-02	1.45E-02	5.39E-03	2.00E-03
SB127	2.39E-02	8.25E-02	9.14E-02	9.73E-02	1.02E-01	1.06E-01	1.08E-01	1.07E-01	1.05E-01	1.03E-01	1.01E-01
TE127	1.35E-02	1.68E-02	2.04E-02	2.43E-02	2.80E-02	3.52E-02	4.50E-02	5.26E-02	5.85E-02	6.31E-02	6.61E-02
SN128	1.37E+01	6.75E+00	3.34E+00	1.65E+00	8.17E-01	1.99E-01	2.41E-02	2.90E-03	3.50E-04	4.25E-05	5.12E-06
SB128M	6.97E-03	7.70E+00	3.99E+00	1.97E+00	9.73E-01	2.38E-01	2.87E-02	3.46E-03	4.18E-04	5.05E-05	6.10E-06
SB128	5.77E-01	5.56E-01	5.23E-01	4.90E-01	4.58E-01	3.92E-01	3.13E-01	2.48E-01	1.97E-01	1.56E-01	1.24E-01
SN129M	9.07E+00	4.51E+00	2.26E+00	1.13E+00	5.66E-01	1.42E-01	1.77E-02	2.21E-03	2.77E-04	3.46E-05	4.32E-06
SN129	6.04E+01	5.93E-01	5.85E-03	5.78E-05	5.66E-07	5.51E-11	5.24E-17	5.01E-23	4.78E-29	4.55E-35	4.36E-41
SB129	3.40E+00	5.70E+00	5.36E+00	4.78E+00	4.21E+00	3.13E+00	1.95E+00	1.20E+00	7.42E-01	4.59E-01	2.82E-01
TE129M	6.43E-08	7.11E-04	1.47E-03	2.15E-03	2.77E-03	3.75E-03	4.74E-03	5.36E-03	5.74E-03	5.97E-03	6.12E-03
TE129	2.45E+00	3.37E+00	3.94E+00	4.09E+00	3.94E+00	3.26E+00	2.17E+00	1.37E+00	8.53E-01	5.28E-01	3.27E-01
SB130M	3.38E-01	6.38E-01	1.67E-03	4.40E-06	1.16E-08	7.99E-14	1.45E-21	2.65E-29	4.80E-37	8.72E-45	1.59E-52
SB130	5.79E+01	1.75E+01	4.98E+00	1.41E+00	3.99E-01	3.21E-02	7.33E-04	1.67E-05	3.81E-07	8.68E-09	1.98E-10

TSABLE 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 = 4.068E-12

## 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
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I130	1.61E-02	1.52E-02	1.44E-02	1.36E-02	1.29E-02	1.15E-02	9.75E-03	8.24E-03	6.96E-03	5.90E-03	4.98E-03
SB131	1.37E+02	3.59E+01	5.86E+00	9.62E-01	1.58E-01	4.25E-03	1.87E-05	8.26E-08	3.64E-10	1.60E-12	8.00E-15
TE131M	6.60E-05	3.45E-01	3.94E-01	3.94E-01	3.87E-01	3.70E-01	3.45E-01	3.22E-01	3.00E-01	2.80E-01	2.61E-01
TE131	6.08E+01	6.60E+01	2.15E+01	5.60E+00	1.36E+00	1.28E-01	6.34E-02	5.86E-02	5.47E-02	5.12E-02	4.77E-02
I131	8.83E-03	3.06E-01	4.50E-01	4.94E-01	5.03E-01	5.07E-01	5.07E-01	5.03E-01	5.03E-01	4.98E-01	4.98E-01
TE132	7.42E-01	1.80E+00	1.78E+00	1.77E+00	1.75E+00	1.72E+00	1.68E+00	1.63E+00	1.59E+00	1.55E+00	1.51E+00
I132	1.82E+00	1.82E+00	1.81E+00	1.80E+00	1.79E+00	1.77E+00	1.73E+00	1.68E+00	1.64E+00	1.60E+00	1.56E+00
TE133M	9.10E-02	3.16E+01	1.37E+01	5.98E+00	2.60E+00	4.94E-01	4.07E-02	3.35E-03	2.77E-04	2.28E-05	1.88E-06
TE133	5.11E+02	2.90E+01	3.22E+00	1.07E+00	4.51E-01	8.54E-02	7.06E-03	5.81E-04	4.81E-05	3.96E-06	3.26E-07
I133	7.93E-01	8.54E+00	9.23E+00	9.23E+00	9.06E+00	8.58E+00	7.80E+00	7.06E+00	6.37E+00	5.81E+00	5.24E+00
XE133M	3.38E-08	1.92E-03	4.64E-03	7.41E-03	1.01E-02	1.52E-02	2.20E-02	2.79E-02	3.29E-02	3.71E-02	4.07E-02
XE133	5.89E-07	3.35E-02	8.15E-02	1.30E-01	1.79E-01	2.70E-01	3.97E-01	5.07E-01	6.07E-01	6.93E-01	7.71E-01
TE134	1.59E+02	7.37E+01	2.74E+01	1.02E+01	3.79E+00	5.25E-01	2.68E-02	1.37E-03	7.04E-05	3.62E-06	1.85E-07
I134	7.29E+01	9.75E+01	6.83E+01	4.00E+01	2.15E+01	5.46E+00	6.00E-01	6.12E-02	6.00E-03	5.75E-04	5.46E-05
I135	1.34E+01	2.37E+01	2.14E+01	1.92E+01	1.74E+01	1.41E+01	1.04E+01	7.57E+00	5.56E+00	4.10E+00	2.99E+00
XE135M	1.49E-03	6.84E+00	6.64E+00	6.03E+00	5.41E+00	4.40E+00	3.23E+00	2.37E+00	1.74E+00	1.27E+00	9.35E-01
XE135	1.55E+00	3.06E+00	4.48E+00	5.64E+00	6.57E+00	7.88E+00	8.73E+00	8.77E+00	8.34E+00	7.61E+00	6.80E+00
CS136	1.17E-03	1.17E-03	1.16E-03	1.16E-03	1.16E-03	1.15E-03	1.14E-03	1.14E-03	1.13E-03	1.12E-03	1.12E-03
CS137	6.48E-05	6.99E-04									
BA137M	1.37E-07	6.52E-04									
XE138	5.36E+02	4.61E+01	4.01E+00	3.48E-01	3.01E-02	2.26E-04	1.47E-07	9.52E-11	6.19E-14	4.02E-17	2.61E-20
CS138	7.98E+01	1.34E+02	4.66E+01	1.37E+01	3.83E+00	2.92E-01	6.07E-03	1.26E-04	2.61E-06	5.45E-08	1.13E-09
CS139	4.69E+02	1.50E+01	1.88E-01	2.36E-03	2.96E-05	4.65E-09	9.25E-15	1.83E-20	3.62E-26	7.18E-32	1.42E-37
BA139	8.67E+00	9.66E+01	5.96E+01	3.62E+01	2.19E+01	8.03E+00	1.78E+00	3.96E-01	8.80E-02	1.95E-02	4.33E-03
BA140	9.59E-02	5.98E-01	5.98E-01	5.94E-01	5.94E-01	5.89E-01	5.89E-01	5.85E-01	5.80E-01	5.75E-01	5.71E-01
LA140	2.28E-07	1.02E-02	2.03E-02	3.01E-02	3.97E-02	5.85E-02	8.54E-02	1.11E-01	1.34E-01	1.57E-01	1.78E-01
BA141	1.83E+02	5.53E+01	5.48E+00	5.44E+01	5.40E-02	5.35E-04	5.22E-07	5.09E-10	4.96E-13	4.87E-16	4.74E-19
LA141	1.69E+00	3.58E+01	3.34E+01	2.83E+01	2.37E+01	1.66E+01	9.75E+00	5.70E+00	3.36E+00	1.97E+00	1.15E+00
CE141	2.09E-07	2.32E-02	5.44E-02	8.18E-02	1.05E-01	1.41E-01	1.75E-01	1.94E-01	2.05E-01	2.12E-01	2.15E-01
BA142	4.82E+02	1.92E+01	4.38E-01	9.98E-03	2.27E-04	1.18E-07	1.40E-12	1.66E-17	1.97E-22	2.34E-27	2.78E-32
LA142	1.11E+01	7.69E+01	5.07E+01	3.23E+01	2.05E+01	8.30E+00	2.14E+00	5.52E-01	1.42E-01	3.66E-02	9.45E-03
LA143	1.88E+02	3.67E+01	1.88E+00	9.67E-02	4.97E-03	1.30E-05	1.75E-09	2.36E-13	3.19E-17	4.30E-21	5.80E-25
CE143	7.52E-02	4.79E+00	4.97E+00	4.84E+00	4.75E+00	4.57E+00	4.28E+00	4.02E+00	3.78E+00	3.54E+00	3.33E+00
PR143	2.20E-08	7.34E-03	1.77E-02	2.80E-02	3.81E-02	5.76E-02	8.48E-02	1.11E-01	1.35E-01	1.57E-01	1.78E-01
CE144	3.05E-03	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	2.18E-02
PR144	8.38E-07	1.99E-02	2.17E-02	2.18E-02	2.19E-02	2.19E-02	2.19E-02	2.19E-02	2.18E-02	2.18E-02	2.18E-02
PR145	1.19E-01	1.75E+01	1.56E+01	1.30E+01	1.24E+01	9.79E+00	6.90E+00	4.87E+00	3.45E+00	2.44E+00	1.72E+00
CE146	3.37E+02	1.73E+01	8.85E-01	1.52E-02	2.33E-03	6.13E-06	8.26E-10	1.11E-13	1.50E-17	2.02E-21	2.72E-25
PR146	6.96E+00	6.06E+01	1.37E+01	2.58E+00	4.64E-01	1.46E-02	8.06E-05	4.44E-07	2.46E-09	1.36E-11	7.43E-14
PR147	3.93E+01	1.14E+01	3.55E-01	1.11E-02	3.47E-04	3.38E-07	1.03E-11	3.16E-16	9.62E-21	2.94E-25	8.96E-30

TSABLE 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 = 4.068E-12

## 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	1.40E-05	2.64E-01	2.71E-01	2.70E-01	2.69E-01	2.67E-01	2.65E-01	2.63E-01	2.60E-01	2.58E-01
ND149	1.86E+01	1.26E+01	8.61E+00	5.87E+00	3.97E+00	1.84E+00	5.80E-01	1.83E-01	5.76E-02	1.81E-02
PM149	2.59E-03	2.02E-01	3.36E-01	4.25E-01	4.81E-01	5.41E-01	5.62E-01	5.52E-01	5.38E-01	5.16E-01
PM150	2.06E-01	1.59E-01	1.23E-01	9.50E-02	7.34E-02	4.41E-02	2.04E-02	9.43E-03	4.37E-03	2.02E-03
ND151	6.32E+01	1.98E+00	6.18E-02	1.93E-03	6.04E-05	5.90E-08	1.80E-12	5.51E-17	1.68E-21	5.11E-26
PM151	4.01E-02	4.69E-01	4.72E-01	4.60E-01	4.49E-01	4.26E-01	3.95E-01	3.67E-01	3.42E-01	3.16E-01
PM152	9.86E+01	9.65E-02	9.41E-05	9.19E-08	8.98E-11	8.57E-17	7.98E-26	7.44E-35	6.93E-44	6.48E-53
SM153	1.26E-01	1.24E-01	1.23E-01	1.21E-01	1.19E-01	1.16E-01	1.11E-01	1.06E-01	1.01E-01	9.70E-02
SM155	5.36E+00	8.81E-01	1.44E-01	2.36E-02	3.87E-03	1.04E-04	4.60E-07	2.02E-09	8.93E-12	3.98E-14
EU155	3.94E-06	1.12E-04	1.30E-04	1.33E-04	1.34E-04	1.34E-04	1.34E-04	1.34E-04	1.34E-04	1.34E-04
SM156	6.68E-02	6.20E-02	5.76E-02	5.35E-02	4.96E-02	4.29E-02	3.43E-02	2.76E-02	2.21E-02	1.77E-02
EU156	1.95E-04	3.19E-04	4.32E-04	5.39E-04	6.37E-04	8.12E-04	1.03E-03	1.20E-03	1.34E-03	1.44E-03
EU157	1.16E-02	3.85E-02	3.68E-02	3.51E-02	3.35E-02	3.06E-02	2.67E-02	2.33E-02	2.03E-02	1.77E-02
EU158	2.20E-01	8.90E-02	3.60E-02	1.46E-02	5.90E-03	9.65E-04	6.44E-05	4.27E-06	2.83E-07	1.88E-08
EU159	2.83E-01	2.81E-02	2.79E-03	2.77E-04	2.74E-05	2.70E-07	2.64E-10	2.58E-13	2.52E-16	2.46E-19
GD159	1.21E-03	5.31E-03	5.52E-03	5.35E-03	5.15E-03	4.77E-03	4.25E-03	3.79E-03	3.37E-03	3.00E-03
TB161	8.43E-06	6.06E-05	6.02E-05	6.00E-05	5.98E-05	5.92E-05	5.86E-05	5.78E-05	5.70E-05	5.64E-05
TOTAL	1.59E+04	3.21E+03	1.02E+03	5.60E+02	4.09E+02	2.90E+02	2.13E+02	1.71E+02	1.44E+02	1.25E+02
										1.11E+02

TSABLE 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 = 4.068E-12

## 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	2.68E-07	2.65E-07	2.62E-07	2.52E-07	2.36E-07	2.07E-07	1.82E-07	1.40E-07	7.32E-08	1.99E-08	5.41E-09
* NA 24	6.07E-03	2.00E-03	6.60E-04	2.37E-05	9.26E-08	1.42E-12	2.16E-17	5.03E-27	0.	0.	0.
* MN 54	4.60E-06	4.56E-06	4.56E-06	4.47E-06	4.43E-06	4.35E-06	4.27E-06	4.07E-06	3.63E-06	2.89E-06	2.30E-06
* FE 55	8.14E-06	8.14E-06	8.14E-06	8.10E-06	8.07E-06	8.03E-06	7.95E-06	7.85E-06	7.55E-06	7.04E-06	6.53E-06
* FE 59	6.76E-06	6.66E-06	6.56E-06	6.26E-06	5.80E-06	4.97E-06	4.26E-06	3.13E-06	1.45E-06	3.10E-07	6.66E-08
* CG 57	5.49E-05	5.49E-05	5.45E-05	5.45E-05	5.37E-05	5.21E-05	5.08E-05	4.84E-05	4.27E-05	3.30E-05	2.55E-05
* CG 58	5.74E-04	5.69E-04	5.63E-04	5.46E-04	5.21E-04	4.72E-04	4.28E-04	3.53E-04	2.17E-04	8.21E-05	3.10E-05
* CG 60	1.37E-05	1.37E-05	1.37E-05	1.37E-05	1.37E-05	1.37E-05	1.36E-05	1.35E-05	1.32E-05	1.28E-05	1.23E-05
* CU 64	2.72E+00	7.40E-01	2.02E-01	4.10E-03	6.15E-06	1.40E-11	3.17E-17	1.63E-28	0.	0.	0.
* CU 67	2.86E-04	2.18E-04	1.66E-04	7.40E-05	1.93E-05	1.30E-06	8.76E-08	3.98E-10	5.56E-16	0.	0.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	4.70E-07	4.66E-07	4.58E-07	4.49E-07	4.29E-07	3.91E-07	3.57E-07	2.96E-07	1.87E-07	7.43E-08	2.95E-08
W187	9.30E-03	4.64E-03	2.30E-03	2.87E-04	8.81E-06	8.40E-09	7.93E-12	7.16E-20	0.	0.	0.
W188	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	1.40E-01	1.26E-01	1.14E-01	8.38E-02	5.01E-02	1.79E-02	6.43E-03	8.22E-04	4.86E-06	5.22E-10	3.52E-10
U240	1.61E-01	4.97E-02	1.52E-02	4.42E-04	1.21E-06	9.11E-12	6.86E-17	3.87E-27	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	2.86E-02	4.36E+01	3.25E+01	1.34E+01	3.07E+00	1.60E-01	8.39E-03	2.30E-05	9.05E-12	2.16E-21	2.16E-21
NP240M	2.55E-04	5.00E-02	1.54E-02	4.45E-04	1.22E-06	9.20E-12	6.92E-17	3.90E-27	0.	0.	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 77	3.18E-03	2.01E-03	4.59E-04	5.54E-06	3.53E-09	1.43E-15	5.76E-22	9.40E-35	0.	0.	0.
AS 77	3.29E-05	4.86E-03	3.51E-03	1.02E-03	1.19E-04	1.62E-06	2.19E-08	4.05E-12	1.88E-21	4.02E-40	8.63E-59
SE 77M	1.30E-09	1.46E-05	1.05E-05	3.05E-06	3.56E-07	4.85E-09	6.58E-11	1.21E-14	5.63E-24	1.20E-42	2.59E-61
AS 78	8.55E-03	7.61E-05	2.23E-09	1.88E-23	0.	0.	0.	0.	0.	0.	0.
BR 82	3.55E-04	2.22E-04	1.39E-04	3.37E-05	3.19E-06	2.87E-08	2.57E-10	2.08E-14	1.21E-24	4.16E-45	1.42E-65
BR 83	2.76E-01	7.27E-03	7.31E-06	7.43E-15	7.58E-30	0.	0.	0.	0.	0.	0.
KR 83M	1.43E-05	3.18E-02	3.61E-05	3.25E-14	3.33E-29	0.	0.	0.	0.	0.	0.
KR 85M	3.58E-03	2.04E-01	4.65E-03	5.53E-08	3.41E-16	1.30E-32	4.91E-49	0.	0.	0.	0.
KR 85	3.70E-06	9.72E-05	9.91E-05	9.91E-05	9.91E-05	9.91E-05	9.91E-05	9.86E-05	9.77E-05	9.58E-05	9.43E-05
KR 87	6.01E+01	1.19E-04	2.35E-10	1.82E-27	0.	0.	0.	0.	0.	0.	0.
KR 88	3.47E+01	9.14E-02	2.40E-04	4.36E-12	5.49E-25	0.	0.	0.	0.	0.	0.
RB 88	8.83E+00	1.02E-01	2.69E-04	4.87E-12	6.11E-25	0.	0.	0.	0.	0.	0.
SR 89	3.18E-06	9.55E-02	9.41E-02	9.03E-02	8.47E-02	7.40E-02	6.47E-02	4.98E-02	2.55E-02	6.71E-03	1.77E-03
SR 90	6.43E-06	6.61E-04	6.55E-04	6.55E-04	6.49E-04						
Y 90	9.53E-12	1.51E-04	2.68E-04	4.81E-04	6.14E-04	6.55E-04	6.61E-04	6.61E-04	6.55E-04	6.55E-04	6.49E-04
SR 91	8.54E-01	3.06E+00	5.48E-01	3.14E-03	5.75E-07	1.95E-14	6.61E-22	7.52E-37	0.	0.	0.

TSABLE 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 = 4.068E-12

## 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	5.75E-05	1.98E+00	3.53E-01	2.03E-03	3.73E-07	1.26E-14	4.25E-22	4.85E-37	0.	0.	0.
Y 91	2.35E-08	9.40E-02	1.11E-01	1.11E-01	1.05E-01	9.29E-02	8.27E-02	6.55E-02	3.63E-02	1.12E-02	3.43E-03
SR 92	1.08E+01	1.34E-01	2.90E-04	2.91E-12	1.36E-25	0.	0.	0.	0.	0.	0.
Y 92	4.96E-01	1.41E+00	1.56E-02	1.20E-08	7.01E-19	2.40E-39	8.22E-60	0.	0.	0.	0.
Y 93	5.16E-01	3.49E+00	6.80E-01	5.11E-03	1.47E-06	1.22E-13	1.00E-20	6.85E-35	0.	0.	0.
ZR 95	9.78E-04	1.22E-01	1.21E-01	1.17E-01	1.11E-01	9.96E-02	8.97E-02	7.25E-02	4.25E-02	1.46E-02	5.02E-03
NB 95M	2.08E-11	4.14E-04	7.55E-04	1.44E-03	1.94E-03	2.05E-03	1.89E-03	1.54E-03	9.01E-04	3.10E-04	1.07E-04
NB 95	1.09E-10	2.36E-03	4.68E-03	1.12E-02	2.08E-02	3.59E-02	4.63E-02	5.75E-02	5.54E-02	2.66E-02	1.02E-02
ZR 97	2.30E+00	3.91E+00	1.47E+00	7.79E-02	5.85E-04	3.29E-08	1.85E-12	5.85E-21	3.30E-42	0.	0.
NB 97M	1.18E-02	3.76E+00	1.41E+00	7.51E-02	5.62E-04	3.16E-08	1.78E-12	5.62E-21	3.18E-42	0.	0.
NB 97	1.15E+00	3.93E+00	1.47E+00	7.83E-02	5.89E-04	3.55E-08	1.99E-12	6.33E-21	3.56E-42	0.	0.
M0 99	6.67E-03	2.17E+00	1.70E+00	8.03E-01	2.32E-01	1.94E-02	1.62E-03	1.13E-05	4.59E-11	7.56E-22	1.24E-32
TC 99M	6.20E-08	1.91E+00	1.61E+00	7.69E-01	2.22E-01	1.85E-02	1.55E-03	1.08E-05	4.38E-11	7.22E-22	1.19E-32
RU103	4.66E-05	1.06E-01	1.04E-01	9.89E-02	9.08E-02	7.62E-02	6.39E-02	4.51E-02	1.88E-02	3.26E-03	5.68E-04
RH103M	3.11E-09	1.06E-01	1.05E-01	9.92E-02	9.08E-02	7.62E-02	6.39E-02	4.51E-02	1.88E-02	3.26E-03	5.68E-04
RU105	2.53E-01	2.42E-01	5.68E-03	7.47E-08	5.46E-16	2.91E-32	1.56E-48	0.	0.	0.	0.
RH105M	1.66E-03	2.42E-01	5.70E-03	7.49E-08	5.48E-16	2.93E-32	1.57E-48	0.	0.	0.	0.
RH105	2.73E-09	8.72E-01	5.70E-01	1.42E-01	1.40E-02	1.36E-04	1.32E-06	1.25E-10	1.08E-20	8.13E-41	6.10E-61
RU106	1.95E-04	3.69E-03	3.67E-03	3.66E-03	3.62E-03	3.56E-03	3.48E-03	3.35E-03	3.05E-03	2.52E-03	2.09E-03
RH106	2.11E-06	3.69E-03	3.67E-03	3.66E-03	3.62E-03	3.56E-03	3.48E-03	3.35E-03	3.05E-03	2.52E-03	2.09E-03
PD109	1.61E-03	4.10E-02	1.19E-02	2.96E-04	6.23E-07	2.78E-12	1.24E-17	2.45E-28	0.	0.	0.
AG109M	9.27E-06	4.10E-02	1.20E-02	2.96E-04	6.26E-07	2.78E-12	1.24E-17	2.45E-28	0.	0.	0.
PD111M	2.23E-01	1.08E-02	5.27E-04	6.04E-08	1.63E-14	1.19E-27	8.75E-41	0.	0.	0.	0.
PD111	7.95E-02	8.75E-03	4.23E-04	4.86E-08	1.32E-14	9.58E-28	7.03E-41	0.	0.	0.	0.
AG111M	6.32E-04	1.14E-02	5.56E-04	6.39E-08	1.73E-14	1.27E-27	9.25E-41	0.	0.	0.	0.
PD112	2.25E-10	6.21E-03	5.97E-03	4.54E-03	2.86E-03	1.13E-03	4.50E-04	7.09E-05	6.98E-07	6.76E-11	6.55E-15
AG112	5.01E-02	2.28E-02	1.03E-02	9.56E-04	1.82E-05	6.60E-09	2.40E-12	3.15E-19	1.99E-36	0.	0.
AG113	1.51E-06	2.64E-02	1.21E-02	1.13E-03	2.15E-05	7.79E-09	2.83E-12	3.73E-19	2.34E-36	0.	0.
CD115M	6.50E-04	6.87E-03	2.97E-04	2.41E-08	3.69E-15	8.64E-29	2.02E-42	0.	0.	0.	0.
CD115	2.33E-09	6.73E-05	6.62E-05	6.30E-05	5.83E-05	4.95E-05	4.22E-05	3.05E-05	1.36E-05	2.71E-06	5.42E-07
IN115M	8.99E-07	1.35E-02	9.91E-03	3.91E-03	8.24E-04	3.68E-05	1.64E-06	3.27E-09	5.78E-16	1.81E-29	5.67E-43
CD117	1.12E-11	1.43E-02	1.08E-02	4.27E-03	8.99E-04	4.02E-05	1.79E-06	3.57E-09	6.32E-16	1.98E-29	6.19E-43
IN117M	2.02E-02	4.41E-04	4.29E-07	4.01E-16	3.56E-31	0.	0.	0.	0.	0.	0.
IN117	9.72E-07	1.83E-03	2.12E-06	2.04E-15	1.82E-30	0.	0.	0.	0.	0.	0.
SN121	3.91E-11	1.21E-03	1.43E-06	1.38E-15	1.23E-30	0.	0.	0.	0.	0.	0.
SN123	4.08E-04	2.33E-02	1.26E-02	1.98E-03	9.08E-05	1.92E-07	4.04E-10	1.80E-15	7.52E-29	0.	0.
SN125	2.10E-06	2.20E-04	2.18E-04	2.14E-04	2.08E-04	1.97E-04	1.87E-04	1.67E-04	1.27E-04	7.28E-05	4.19E-05
SB125	5.86E-03	5.45E-03	5.07E-03	4.06E-03	2.80E-03	1.34E-03	6.41E-04	1.47E-04	3.67E-06	2.31E-09	1.45E-12
SB126	3.52E-05	3.90E-05	4.27E-05	5.22E-05	6.40E-05	7.74E-05	8.34E-05	8.69E-05	8.53E-05	7.96E-05	7.42E-05
	1.15E-03	1.08E-03	1.03E-03	8.68E-04	6.58E-04	3.77E-04	2.18E-04	7.16E-05	4.48E-06	2.18E-08	4.37E-09

TSABLE 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 = 4.068E-12

## 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
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SN127	2.05E+00	7.43E-04	2.70E-07	1.29E-17	8.09E-35	0.	0.	0.	0.	0.	0.
SB127	2.39E-02	9.83E-02	8.22E-02	4.80E-02	1.97E-02	3.28E-03	5.49E-04	1.54E-05	2.00E-09	3.42E-17	5.82E-25
TE127M	1.94E-10	1.50E-04	2.75E-04	5.33E-04	7.36E-04	8.12E-04	7.82E-04	6.94E-04	5.06E-04	2.67E-04	1.41E-04
TE127	1.35E-02	7.04E-02	6.90E-02	4.21E-02	1.78E-02	3.65E-03	1.25E-03	7.00E-04	5.00E-04	2.64E-04	1.40E-04
SB128	5.77E-01	9.84E-02	1.55E-02	6.06E-05	5.88E-09	5.52E-17	5.19E-25	4.58E-41	0.	0.	0.
SB129	3.40E+00	1.74E-01	3.63E-03	3.31E-08	1.32E-16	2.08E-33	3.28E-50	0.	0.	0.	0.
TE129M	6.43E-08	6.77E-03	6.77E-03	6.39E-03	5.78E-03	4.70E-03	3.83E-03	2.55E-03	9.18E-04	1.20E-04	1.56E-05
TE129	2.45E+00	2.04E-01	8.49E-03	4.09E-03	3.69E-03	3.01E-03	2.46E-03	1.63E-03	5.89E-04	7.69E-05	9.98E-06
I130	1.61E-02	4.21E-03	1.10E-03	1.97E-05	2.41E-08	3.59E-14	5.35E-20	1.19E-31	0.	0.	0.
TE131M	6.60E-05	2.31E-01	1.32E-01	2.51E-02	1.57E-03	6.12E-06	2.40E-08	3.66E-13	3.32E-25	0.	0.
TE131	6.08E+01	4.21E-02	2.42E-02	4.59E-03	2.86E-04	1.12E-06	4.37E-09	6.69E-14	6.08E-26	0.	0.
I131	8.83E-03	4.77E-01	4.50E-01	3.62E-01	2.38E-01	1.01E-01	4.26E-02	7.61E-03	1.03E-04	1.87E-08	3.41E-12
XE131M	2.40E-11	2.21E-04	4.19E-04	8.74E-04	1.25E-03	1.24E-03	9.18E-04	3.79E-04	2.53E-05	7.56E-08	2.13E-10
TE132	7.42E-01	1.47E+00	1.19E+00	6.25E-01	2.15E-01	2.55E-02	3.02E-03	4.25E-05	9.93E-10	5.44E-19	2.97E-28
I132	1.82E+00	1.51E+00	1.22E+00	6.43E-01	2.22E-01	2.63E-02	3.11E-03	4.38E-05	1.02E-09	5.57E-19	3.06E-28
I133	7.93E-01	4.42E+00	1.99E+00	1.85E-01	3.53E-03	1.28E-06	4.64E-10	6.11E-17	3.84E-34	0.	0.
XE133M	3.38E-08	4.17E-02	4.94E-02	2.90E-02	6.80E-03	3.19E-04	1.49E-05	3.22E-08	7.06E-15	3.38E-28	1.62E-41
XE133	5.89E-07	8.02E-01	1.07E+00	9.62E-01	5.24E-01	1.42E-01	3.81E-02	2.74E-03	3.82E-06	7.41E-12	1.44E-17
I135	1.34E+01	2.19E+00	1.83E-01	1.07E-04	4.33E-10	7.15E-21	1.17E-31	3.19E-53	0.	0.	0.
XE135M	1.49E-03	6.84E-01	5.72E-02	3.33E-05	1.35E-10	2.23E-21	3.67E-32	9.97E-54	0.	0.	0.
XE135	1.55E+00	5.91E+00	1.44E+00	8.27E-03	1.01E-06	1.42E-14	1.99E-22	3.94E-38	0.	0.	0.
CS136	1.17E-03	1.11E-03	1.05E-03	8.95E-04	6.86E-04	4.03E-04	4.37E-04	8.13E-05	5.65E-06	2.72E-08	1.32E-10
CS137	6.48E-05	6.99E-04	6.95E-04	6.91E-04	6.87E-04						
BA137M	1.37E-07	6.52E-04	6.48E-04	6.44E-04	6.40E-04						
BA139	8.67E+00	9.25E-04	5.46E-09	1.12E-24	0.	0.	0.	0.	0.	0.	0.
BA140	9.59E-02	5.66E-01	5.39E-01	4.57E-01	3.48E-01	2.03E-01	1.18E-01	4.00E-02	2.67E-03	1.19E-05	5.25E-08
LA140	2.28E-07	1.97E-01	3.17E-01	4.39E-01	3.90E-01	2.33E-01	1.36E-01	4.61E-02	3.06E-03	1.37E-05	6.07E-08
LA141	1.69E+00	6.70E-01	9.40E-03	2.60E-08	1.42E-17	4.25E-36	1.27E-54	0.	0.	0.	0.
CE141	2.09E-07	2.32E-01	2.30E-01	2.16E-01	1.94E-01	1.57E-01	1.26E-01	8.23E-02	2.82E-02	3.33E-03	3.92E-04
LA142	1.11E+01	2.43E-03	4.70E-08	3.46E-22	0.	0.	0.	0.	0.	0.	0.
CE143	7.52E-02	3.09E+00	1.87E+00	4.11E-01	3.31E-02	2.14E-04	1.38E-06	5.80E-11	6.55E-22	0.	0.
PR143	2.20E-08	1.98E-01	3.08E-01	3.97E-01	3.41E-01	2.07E-01	1.25E-01	4.53E-02	3.62E-03	2.30E-05	1.46E-07
CE144	3.05E-03	2.18E-02	2.17E-02	2.16E-02	2.13E-02	2.08E-02	2.03E-02	1.94E-02	1.71E-02	1.34E-02	1.05E-02
PR144	8.38E-07	2.18E-02	2.17E-02	2.16E-02	2.13E-02	2.08E-02	2.03E-02	1.94E-02	1.71E-02	1.34E-02	1.05E-02
PR145	1.19E-01	1.22E+00	7.53E-02	1.79E-05	1.63E-11	1.35E-23	1.12E-35	0.	0.	0.	0.
ND147	1.40E-05	2.36E-01	2.21E-01	1.84E-01	1.34E-01	7.22E-02	3.85E-02	1.11E-02	4.85E-04	9.46E-07	1.83E-09
PM147	3.89E-14	1.76E-04	3.41E-04	7.80E-04	1.35E-03	2.06E-03	2.43E-03	2.71E-03	2.73E-03	2.55E-03	2.37E-03
ND149	1.86E+01	1.80E-03	1.74E-07	1.59E-19	1.36E-39	0.	0.	0.	0.	0.	0.
PM149	2.59E-03	4.78E-01	3.50E-01	1.37E-01	2.85E-02	1.24E-03	5.41E-05	1.03E-07	1.62E-14	4.01E-28	9.98E-42
PM150	2.06E-01	4.34E-04	9.14E-07	8.59E-15	3.59E-28	0.	0.	0.	0.	0.	0.

TSABLE 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 = 4.068E-12

## 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	4.01E-02	2.73E-01	1.51E-01	2.54E-02	1.30E-03	3.42E-06	9.01E-09	6.21E-14	7.79E-27	0.	0.
SM153	1.26E-01	8.87E-02	6.23E-02	2.15E-02	3.66E-03	1.06E-04	3.09E-06	2.60E-09	5.36E-17	2.28E-32	9.70E-48
SM156	6.68E-02	1.14E-02	1.94E-03	9.57E-06	1.38E-09	2.83E-17	5.84E-25	2.49E-40	0.	0.	0.
EU155	3.94E-06	1.34E-04	1.33E-04	1.33E-04	1.33E-04	1.32E-04	1.32E-04	1.31E-04	1.28E-04	1.23E-04	1.18E-04
EU156	1.95E-04	1.59E-03	1.76E-03	1.58E-03	1.25E-03	7.87E-04	4.96E-04	1.97E-04	1.95E-05	1.92E-07	1.89E-09
EU157	1.16E-02	1.34E-02	4.52E-03	1.69E-04	7.11E-07	1.25E-11	2.22E-16	6.91E-26	0.	0.	0.
GD159	1.21E-03	2.39E-03	9.49E-04	5.92E-05	5.83E-07	5.65E-11	5.47E-15	5.13E-23	4.38E-43	0.	0.
TB161	8.43E-06	5.50E-05	4.97E-05	3.68E-05	2.23E-05	8.15E-06	2.98E-06	3.99E-07	2.64E-09	1.14E-13	4.97E-18
TOTAL	2.52E+02	9.86E+01	5.55E+01	2.13E+01	6.89E+00	1.92E+00	1.13E+00	6.31E-01	2.85E-01	1.08E-01	5.30E-02

TSABLE 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 = 4.068E-12

## 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	2.68E-07	2.32E-09	2.16E-10	2.00E-11	1.61E-14	1.29E-17	9.64E-22	6.18E-28	0.	0.	0.
* MN 54	4.60E-06	1.98E-06	1.31E-06	8.58E-07	2.45E-07	7.00E-08	1.32E-08	1.08E-09	2.53E-13	9.15E-19	3.31E-24
* FE 559	6.76E-06	2.44E-08	1.46E-09	8.81E-11	1.91E-14	4.13E-18	5.38E-23	2.52E-30	0.	0.	0.
* CO 57	5.49E-05	2.16E-05	1.35E-05	8.50E-06	2.09E-06	5.17E-07	7.97E-09	4.84E-09	4.23E-13	3.47E-19	0.
* CO 58	5.74E-04	1.65E-05	2.79E-06	4.74E-07	2.31E-09	1.12E-11	9.26E-15	2.20E-19	8.40E-35	0.	0.
* CO 60	1.37E-05	1.20E-05	1.12E-05	1.05E-05	8.62E-06	7.09E-06	5.44E-06	3.67E-06	9.84E-07	1.37E-07	1.89E-08
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	4.70E-07	1.62E-08	3.00E-09	5.55E-10	3.53E-12	2.26E-14	2.65E-17	1.08E-21	0.	0.	0.
W188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.40E-01	3.49E-10	3.40E-10	3.31E-10	3.10E-10	2.87E-10	2.61E-10	2.27E-10	1.41E-10	6.92E-11	3.40E-11
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	3.70E-06	9.19E-05	8.91E-05	8.62E-05	7.86E-05	7.10E-05	6.24E-05	5.15E-05	2.72E-05	1.04E-05	3.97E-06
SR 89	3.18E-06	7.45E-04	6.52E-05	5.73E-06	3.86E-09	2.60E-12	1.54E-16	6.98E-23	5.08E-44	0.	0.
SR 90	6.43E-06	6.43E-04	6.37E-04	6.32E-04	6.08E-04	5.85E-04	5.57E-04	5.17E-04	4.04E-04	2.79E-04	1.93E-04
Y 90	9.53E-12	6.43E-04	6.37E-04	6.32E-04	6.08E-04	5.85E-04	5.57E-04	5.17E-04	4.04E-04	2.79E-04	1.93E-04
Y 91	2.35E-08	1.59E-03	1.85E-04	2.15E-05	3.37E-08	5.28E-11	9.67E-15	2.37E-20	4.80E-39	0.	0.
ZR 95	9.78E-04	2.51E-03	3.59E-04	5.11E-05	1.49E-07	4.33E-10	1.79E-13	1.51E-18	1.85E-35	0.	0.
NB 95M	2.08E-11	5.32E-05	7.60E-06	1.09E-06	3.15E-09	9.18E-12	3.80E-15	3.21E-20	3.94E-37	0.	0.
NB 95	1.09E-10	5.41E-03	7.77E-04	1.11E-04	3.21E-07	9.31E-10	3.89E-13	3.28E-18	4.02E-35	0.	0.
RU103	4.66E-05	1.81E-04	7.41E-06	3.05E-07	2.08E-11	1.43E-15	4.00E-21	1.88E-29	0.	0.	0.
RH103M	3.11E-09	1.81E-04	7.41E-06	3.05E-07	2.08E-11	1.43E-15	4.00E-21	1.88E-29	0.	0.	0.
RU106	1.95E-04	1.85E-03	1.31E-03	9.29E-04	3.30E-04	1.17E-04	2.95E-05	3.74E-06	3.77E-09	1.21E-13	3.89E-18
RH106	2.11E-06	1.85E-03	1.31E-03	9.29E-04	3.30E-04	1.17E-04	2.95E-05	3.74E-06	3.77E-09	1.21E-13	3.89E-18
SN123	2.10E-06	2.91E-05	1.06E-05	3.84E-06	1.84E-07	8.84E-09	1.54E-10	3.55E-13	5.69E-22	3.67E-35	2.35E-48
SB123	3.52E-05	7.09E-05	6.23E-05	5.48E-05	3.73E-05	2.54E-05	1.52E-05	7.03E-06	5.40E-07	1.15E-08	2.45E-10
TE125M	9.47E-13	2.89E-05	2.57E-05	2.27E-05	1.55E-05	1.05E-05	6.29E-06	2.91E-06	2.23E-07	4.76E-09	1.01E-10
TE127M	1.94E-10	9.27E-05	2.90E-05	9.07E-06	2.79E-07	8.58E-09	8.25E-11	7.76E-14	6.38E-24	4.77E-39	3.55E-54
TE127	1.35E-02	9.17E-05	2.87E-05	8.98E-06	2.76E-07	8.48E-09	8.15E-11	7.69E-14	6.31E-24	4.70E-39	3.52E-54
CS137	6.48E-05	6.83E-04	6.75E-04	6.68E-04	6.44E-04	6.21E-04	5.94E-04	5.55E-04	4.39E-04	3.12E-04	2.20E-04
BA137M	1.37E-07	6.40E-04	6.33E-04	6.25E-04	6.02E-04	5.82E-04	5.55E-04	5.20E-04	4.11E-04	2.91E-04	2.06E-04
CE141	2.09E-07	9.01E-05	1.81E-06	3.64E-08	2.96E-13	2.41E-18	3.96E-25	2.62E-35	0.	0.	0.
CE144	3.05E-03	8.97E-03	5.77E-03	3.68E-03	9.66E-04	2.54E-04	4.27E-05	2.95E-06	3.97E-10	6.23E-16	9.70E-22
PR144	8.38E-07	8.97E-03	5.77E-03	3.68E-03	9.66E-04	2.54E-04	4.27E-05	2.95E-06	3.97E-10	6.23E-16	9.70E-22
PM147	3.89E-14	2.26E-03	1.98E-03	1.73E-03	1.17E-03	7.84E-04	4.60E-04	2.09E-04	1.48E-05	2.81E-07	5.31E-09
EU155	3.94E-06	1.15E-04	1.07E-04	9.98E-05	8.03E-05	6.45E-05	4.81E-05	3.11E-05	7.26E-06	8.17E-07	9.20E-08

TOTAL 1.58E-01 3.79E-02 2.05E-02 1.40E-02 6.44E-03 4.08E-03 3.00E-03 2.43E-03 1.71E-03 1.17E-03 8.16E-04

**APPENDIX B**  
**DETAILED RESULTS FOR EVENT BAKER**

TSBAKER  
 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 = 4.089E-12

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	9.57E+01	1.54E+04
1.00E+00	2.92E+01	3.11E+03
2.00E+00	1.17E+01	1.01E+03
3.00E+00	6.44E+00	5.57E+02
4.00E+00	4.14E+00	4.08E+02
6.00E+00	2.27E+00	2.89E+02
9.00E+00	1.36E+00	2.11E+02
1.20E+01	1.00E+00	1.70E+02
1.50E+01	7.97E-01	1.42E+02
1.80E+01	6.64E-01	1.23E+02
2.10E+01	5.68E-01	1.09E+02
1.00E+00 DAYS	4.89E-01	9.65E+01
2.00E+00	2.40E-01	5.36E+01
5.00E+00	8.99E-02	2.04E+01
1.00E+01	3.62E-02	6.71E+00
2.00E+01	1.32E-02	1.92E+00
3.00E+01	7.73E-03	1.13E+00
5.00E+01	3.80E-03	6.35E-01
1.00E+02	1.53E-03	2.87E-01
2.00E+02	5.65E-04	1.08E-01
3.00E+02	2.15E-04	5.33E-02
1.00E+00 YEARS	1.20E-04	3.81E-02
1.50E+00	2.99E-05	2.06E-02
2.00E+00	1.49E-05	1.41E-02
3.50E+00	8.48E-06	6.48E-03
5.00E+00	6.87E-06	4.10E-03
7.00E+00	6.02E-06	3.02E-03
1.00E+01	5.41E-06	2.44E-03
2.00E+01	4.14E-06	1.72E-03
3.50E+01	2.91E-06	1.18E-03
5.00E+01	2.05E-06	8.20E-04

TSBAKER 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 = 4.089E-12

## 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	2.70E-07	2.69E-07	2.69E-07	2.69E-07	2.69E-07	2.69E-07	2.68E-07	2.67E-07	2.67E-07	2.67E-07	
* NA 24	6.10E-02	5.83E-02	5.57E-02	5.31E-02	5.07E-02	4.62E-02	4.02E-02	3.51E-02	3.05E-02	2.66E-02	2.31E-02
* MN 54	4.62E-06	4.62E-06	4.62E-06	4.62E-06	4.62E-06	4.62E-06	4.58E-06	4.58E-06	4.58E-06	4.58E-06	4.58E-06
* FE 55	8.18E-06										
* FE 59	6.80E-06	6.79E-06	6.79E-06	6.79E-06	6.79E-06	6.78E-06	6.77E-06	6.76E-06	6.74E-06	6.73E-06	6.72E-06
* CO 57	5.52E-05										
* CO 58	5.77E-04	5.77E-04	5.77E-04	5.77E-04	5.75E-04	5.75E-04	5.74E-04	5.74E-04	5.73E-04	5.73E-04	5.72E-04
* CO 60	1.38E-05										
* CU 64	2.73E+00	2.58E+00	2.45E+00	2.32E+00	2.20E+00	1.97E+00	1.67E+00	1.42E+00	1.21E+00	1.03E+00	8.76E-01
* CU 67	2.87E-04	2.85E-04	2.80E-04	2.77E-04	2.75E-04	2.67E-04	2.58E-04	2.50E-04	2.42E-04	2.33E-04	2.26E-04
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	1.03E-06	1.02E-06	1.02E-06								
W187	4.67E-02	4.53E-02	4.40E-02	4.27E-02	4.16E-02	3.92E-02	3.60E-02	3.30E-02	3.02E-02	2.78E-02	2.54E-02
W188	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	1.68E-01	1.67E-01	1.66E-01	1.66E-01	1.65E-01	1.63E-01	1.61E-01	1.59E-01	1.57E-01	1.55E-01	1.53E-01
U239	7.77E+03	1.32E+03	2.26E+02	3.85E+01	6.54E+00	1.91E-01	9.45E-04	4.66E-06	2.31E-08	1.14E-10	5.64E-13
U240	9.95E-01	9.48E-01	9.03E-01	8.60E-01	8.18E-01	7.41E-01	6.40E-01	5.51E-01	4.76E-01	4.10E-01	3.54E-01
NP239	2.66E-02	4.46E+01	5.15E+01	5.23E+01	5.19E+01	5.07E+01	4.87E+01	4.70E+01	4.54E+01	4.38E+01	4.21E+01
NP240M	1.57E-03	9.52E-01	9.10E-01	8.67E-01	8.26E-01	7.47E-01	6.45E-01	5.57E-01	4.80E-01	4.14E-01	3.57E-01
NP240	3.99E-11	2.05E-11	1.06E-11	5.49E-12	2.84E-12	7.60E-13	1.05E-13	1.45E-14	1.99E-15	2.75E-16	3.80E-17
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 75	5.35E-06	2.59E-02	1.56E-02	9.40E-03	5.66E-03	2.05E-03	4.48E-04	9.81E-05	2.14E-05	4.67E-06	1.02E-06
GE 77	3.20E-03	8.24E-03	7.75E-03	7.29E-03	6.86E-03	6.07E-03	5.05E-03	4.20E-03	3.50E-03	2.90E-03	2.42E-03
AS 77	3.31E-05	5.23E-03	5.29E-03	5.32E-03	5.36E-03	5.39E-03	5.39E-03	5.36E-03	5.28E-03	5.17E-03	5.04E-03
SE 77M	1.30E-09	1.57E-05	1.59E-05	1.60E-05	1.60E-05	1.61E-05	1.62E-05	1.61E-05	1.59E-05	1.55E-05	1.51E-05
GE 78	4.78E-01	2.99E-01	1.86E-01	1.16E-01	7.25E-02	2.82E-02	6.85E-03	1.66E-03	4.05E-04	9.84E-05	2.39E-05
AS 78	8.59E-03	1.43E-01	1.76E-01	1.65E-01	1.38E-01	8.13E-02	3.02E-02	1.00E-02	3.10E-03	9.27E-04	2.69E-04
AS 79	9.98E+00	9.83E-02	9.68E-04	9.53E-06	9.39E-08	9.09E-12	8.67E-18	8.27E-24	7.89E-30	7.53E-36	7.20E-42
SE 79M	1.48E-02	1.73E-01	1.71E-03	1.69E-05	1.66E-07	1.60E-11	1.53E-17	1.46E-23	1.39E-29	1.33E-35	1.27E-41
BR 80	6.59E-02	6.22E-03	5.84E-04	5.49E-05	5.17E-06	4.59E-08	3.84E-11	3.20E-14	2.67E-17	2.23E-20	1.86E-23
SE 81M	5.58E-02	2.60E+00	1.26E+00	6.04E-01	2.91E-01	6.79E-02	7.59E-03	8.51E-04	9.55E-05	1.07E-05	1.20E-06
SE 81	6.82E-01	3.08E+00	1.78E+00	8.89E-01	4.31E-01	1.01E-01	1.13E-02	1.26E-03	1.42E-04	1.59E-05	1.78E-06
BR 82	3.57E-04	3.50E-04	3.43E-04	3.37E-04	3.30E-04	3.17E-04	2.99E-04	2.82E-04	2.66E-04	2.51E-04	2.37E-04
SE 83	3.34E+01	6.33E+00	1.20E+00	2.28E-01	4.30E-02	1.55E-03	1.05E-05	7.15E-08	4.89E-10	3.31E-12	2.10E-14
BR 83	2.78E-01	4.14E+00	3.84E+00	3.02E+00	2.29E+00	1.29E+00	5.47E-01	2.30E-01	9.73E-02	4.10E-02	1.73E-02
KR 83M	1.43E-05	9.38E-01	1.92E+00	2.38E+00	2.46E+00	2.05E+00	1.21E+00	6.22E-01	2.99E-01	1.38E-01	6.22E-02

TSBAKER                    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 = 4.089E-12

## 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	7.18E-02	1.24E+01	3.35E+00	9.07E-01	2.45E-01	1.79E-02	3.54E-04	6.99E-06	1.38E-07	2.74E-09	5.41E-11
KR 85M	3.60E-03	7.71E+00	6.56E+00	5.60E+00	4.79E+00	3.50E+00	2.18E+00	1.36E+00	6.48E-01	5.27E-01	3.29E-01
KR 87	6.05E+01	3.49E+01	2.02E+01	1.17E+01	6.74E+00	2.26E+00	4.38E-01	8.49E-02	1.64E-02	3.18E-03	6.15E-04
KR 88	3.49E+01	2.73E+01	2.13E+01	1.66E+01	1.30E+01	7.88E+00	3.76E+00	1.79E+00	8.51E-01	4.05E-01	1.93E-01
RB 88	8.88E+00	2.76E+01	2.35E+01	1.85E+01	1.45E+01	8.82E+00	4.21E+00	2.01E+00	9.56E-01	4.54E-01	2.16E-01
RB 89	4.18E+01	3.93E+01	2.64E+01	1.77E+01	1.19E+02	5.38E-05	1.63E-08	4.91E-12	1.50E-15	4.54E-19	1.38E-22
SR 89	3.20E-06	1.12E-01	1.20E-01	1.20E-01	1.20E-01	1.20E-01	1.20E-01	1.19E-01	1.19E-01	1.19E-01	1.19E-01
SR 90	6.47E-06	6.64E-04	6.64E-04								
SR 91	8.58E-01	1.60E+01	1.49E+01	1.39E+01	1.29E+01	1.12E+01	9.02E+00	7.29E+00	5.88E+00	4.72E+00	3.81E+00
Y 91M	5.78E-05	5.51E+00	7.50E+00	8.04E+00	7.94E+00	7.13E+00	5.83E+00	4.69E+00	3.78E+00	3.05E+00	2.46E+00
Y 91	2.36E-08	4.90E-03	1.13E-02	1.80E-02	2.46E-02	3.69E-02	5.24E-02	6.48E-02	7.50E-02	8.31E-02	8.96E-02
SR 92	1.08E+01	4.83E+01	3.75E+01	2.90E+01	2.25E+01	1.34E+01	6.25E+00	2.90E+00	1.34E+00	6.25E-01	2.91E-01
Y 92	4.99E-01	1.02E+01	1.60E+01	1.90E+01	2.01E+01	1.92E+01	1.47E+01	1.00E+01	6.45E+00	3.97E+00	2.39E+00
SR 93	4.25E+02	7.32E+00	4.04E-02	2.23E-04	1.23E-06	3.77E-11	6.35E-18	1.07E-24	1.81E-31	3.05E-38	5.14E-45
Y 93	5.19E-01	1.68E+01	1.58E+01	1.47E+01	1.38E+01	1.20E+01	9.79E+00	8.00E+00	6.50E+00	5.33E+00	4.33E+00
Y 94	6.15E+01	8.40E+01	1.08E+01	1.39E+00	1.80E-01	2.99E-03	6.41E-06	1.37E-08	2.94E-11	6.41E-14	3.55E-15
Y 95	2.62E+02	2.47E+01	5.44E-01	1.20E-02	2.64E-04	1.28E-07	1.37E-12	1.47E-17	1.57E-22	1.67E-27	1.79E-32
ZR 95	9.84E-04	1.29E-01	1.31E-01	1.30E-01	1.30E-01						
NB 95	1.10E-10	7.94E-05	1.85E-04	2.91E-04	3.97E-04	6.08E-04	9.23E-04	1.24E-03	1.55E-03	1.87E-03	2.18E-03
ZR 97	2.31E+00	1.01E+01	9.62E+00	9.26E+00	8.86E+00	8.19E+00	7.23E+00	6.40E+00	5.68E+00	5.01E+00	4.45E+00
NB 97M	1.19E-02	9.66E+00	9.26E+00	8.90E+00	8.55E+00	7.87E+00	6.96E+00	6.16E+00	5.45E+00	4.81E+00	4.25E+00
NB 97	1.16E+00	5.05E+00	7.12E+00	8.11E+00	8.51E+00	8.47E+00	7.71E+00	6.88E+00	6.08E+00	5.37E+00	4.77E+00
NB 98	1.29E+01	5.72E+00	2.53E+00	1.12E+00	4.95E-01	9.70E-02	8.38E-03	7.24E-04	6.31E-05	5.46E-06	4.70E-07
MØ 99	6.70E-03	2.77E+00	2.74E+00	2.71E+00	2.68E+00	2.63E+00	2.55E+00	2.47E+00	2.40E+00	2.32E+00	2.25E+00
TC 99M	6.24E-08	2.64E-01	4.95E-01	7.00E-01	8.80E-01	1.17E+00	1.49E+00	1.69E+00	1.82E+00	1.88E+00	1.91E+00
MØ101	9.07E+01	4.10E+01	2.38E+00	1.38E-01	8.00E-03	2.68E-05	5.21E-09	1.01E-12	1.97E-16	3.83E-20	7.46E-24
TC101	3.83E+00	1.15E+02	1.26E+01	1.03E+00	7.50E-02	3.38E-04	8.46E-08	1.89E-11	4.02E-15	8.27E-19	1.67E-22
MØ102	7.10E+02	1.62E+01	3.69E-01	8.42E-03	1.92E-04	9.97E-08	1.19E-12	1.41E-17	1.67E-22	1.98E-27	2.35E-32
TC102M	4.56E-01	1.37E+01	3.14E-01	7.17E-03	1.63E-04	8.45E-08	1.00E-12	1.19E-17	1.41E-22	1.67E-27	1.99E-32
TC102	2.14E+03	8.15E+00	1.86E-01	4.23E-03	9.67E-05	5.04E-08	5.98E-13	7.10E-18	8.42E-23	9.97E-28	1.18E-32
RU103	4.69E-05	1.09E-01	1.08E-01	1.07E-01	1.07E-01						
RH103M	3.12E-09	5.62E-02	8.32E-02	9.64E-02	1.03E-01	1.07E-01	1.08E-01	1.08E-01	1.08E-01	1.07E-01	1.07E-01
TC104	3.73E+01	2.68E+01	2.68E+00	2.66E-01	2.63E-02	2.59E-04	2.53E-07	2.47E-10	2.41E-13	2.36E-16	2.30E-19
RU105	2.54E-01	8.79E+00	7.51E+00	6.43E+00	5.51E+00	4.02E+00	2.52E+00	1.58E+00	9.86E-01	6.17E-01	3.87E-01
RH105M	1.67E-03	8.81E+00	7.53E+00	6.45E+00	5.51E+00	4.04E+00	2.52E+00	1.58E+00	9.90E-01	6.19E-01	3.87E-01
RH105	2.74E-09	1.79E-01	3.32E-01	4.58E-01	5.64E-01	7.21E-01	8.62E-01	9.27E-01	9.45E-01	9.36E-01	9.12E-01
RU106	1.96E-04	3.71E-03	3.71E-03								
RH106	2.12E-06	3.71E-03	3.71E-03								
RH107	2.58E-02	3.50E+00	5.31E-01	7.99E-02	1.21E-02	2.75E-04	9.47E-07	3.27E-09	1.12E-11	3.85E-147	3.83E-18
PD107M	5.36E-05	7.13E-01	1.08E-01	1.63E-02	2.45E-03	5.60E-05	1.93E-07	6.65E-10	2.29E-12	7.89E-15	2.69E-17

TSBAKER                    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 = 4.089E-12

## 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	1.62E-03	1.34E-01	1.27E-01	1.21E-01	1.15E-01	1.04E-01	8.90E-02	7.63E-02	6.54E-02	5.60E-02	4.81E-02
AG109M	9.32E-06	1.34E-01	1.27E-01	1.21E-01	1.15E-01	1.04E-01	8.90E-02	7.63E-02	6.54E-02	5.60E-02	4.81E-02
PD111M	2.25E-01	1.98E-01	1.74E-01	1.54E-01	1.36E-01	1.06E-01	7.22E-02	4.95E-02	3.39E-02	2.32E-02	1.59E-02
PD111	7.99E-02	1.44E-01	1.38E-01	1.23E-01	1.09E-01	8.46E-02	5.81E-02	3.98E-02	2.72E-02	1.87E-02	1.28E-02
AG111M	6.35E-04	1.94E-01	1.83E-01	1.63E-01	1.44E-01	1.11E-01	7.62E-02	5.22E-02	3.58E-02	2.45E-02	1.68E-02
AG111	2.26E-10	6.70E-04	4.41E-03	2.07E-03	2.66E-03	3.62E-03	4.65E-03	5.33E-03	5.77E-03	6.05E-03	6.22E-03
PD112	5.04E-02	4.88E-02	4.71E-02	4.56E-02	4.42E-02	4.13E-02	3.75E-02	3.39E-02	3.07E-02	2.78E-02	2.52E-02
AG112	1.52E-06	9.66E-03	1.70E-02	2.29E-02	2.72E-02	3.26E-02	3.58E-02	3.56E-02	3.39E-02	3.16E-02	2.92E-02
AG113	6.53E-04	1.40E-01	1.23E-01	1.08E-01	9.44E-02	7.26E-02	4.91E-02	3.32E-02	2.24E-02	1.51E-02	1.02E-02
AG115	2.86E-01	3.06E-01	3.81E-02	4.77E-03	5.97E-04	9.33E-06	1.82E-08	3.56E-11	6.90E-14	6.86E-163	6.36E-17
CD115M	2.34E-09	6.22E-05	6.99E-05	7.08E-05	7.08E-05	7.06E-05	7.06E-05	7.04E-05	7.02E-05	7.02E-05	7.02E-05
CD115	9.04E-07	1.70E-02	1.83E-02	1.83E-02	1.80E-02	1.76E-02	1.69E-02	1.63E-02	1.57E-02	1.51E-02	1.45E-02
IN115M	1.13E-11	1.88E-03	4.18E-03	6.20E-03	7.90E-03	1.05E-02	1.30E-02	1.43E-02	1.49E-02	1.51E-02	1.50E-02
CD117	2.03E-02	3.38E-01	2.55E-01	1.90E-01	1.43E-01	8.01E-02	3.36E-02	1.42E-02	5.96E-03	2.50E-03	1.05E-03
IN117M	9.77E-07	1.18E-01	1.70E-01	1.85E-01	1.79E-01	1.41E-01	8.06E-02	4.12E-02	1.98E-02	9.18E-03	4.15E-03
IN117	3.93E-11	2.15E-02	5.20E-02	7.22E-02	8.06E-02	7.41E-02	4.72E-02	2.53E-02	1.26E-02	5.91E-03	2.72E-03
CD118	1.36E+00	5.83E-01	2.50E-01	1.07E-01	4.57E-02	8.36E-03	6.56E-04	5.13E-05	4.03E-06	3.16E-07	2.48E-08
IN118	9.01E-02	5.83E-01	2.50E-01	1.07E-01	4.57E-02	8.38E-03	6.56E-04	5.15E-05	4.03E-06	3.16E-07	2.48E-08
CD119	3.38E+00	5.27E-02	8.22E-04	1.29E-05	2.01E-07	4.91E-11	1.87E-16	7.16E-22	2.72E-27	1.04E-32	3.98E-38
IN119M	5.09E-03	5.70E-01	6.20E-02	6.25E-03	6.23E-04	6.12E-06	5.97E-09	5.85E-12	5.70E-15	5.57E-18	5.44E-21
IN119	2.51E-01	3.00E-02	3.48E-03	3.53E-04	3.53E-05	3.45E-07	3.38E-10	3.30E-13	3.23E-16	3.15E-19	3.07E-22
SN121	4.10E-04	4.23E-02	4.10E-02	4.01E-02	3.91E-02	3.72E-02	3.43E-02	3.19E-02	2.95E-02	2.73E-02	2.54E-02
SN123M	2.25E-01	4.21E-01	1.49E-01	5.28E-02	1.86E-02	2.33E-03	1.03E-04	4.56E-06	2.02E-07	8.91E-09	3.94E-10
SN123	2.11E-06	2.21E-04	2.21E-04								
SN125	5.89E-03	5.88E-03	5.86E-03	5.85E-03	5.79E-03	5.74E-03	5.68E-03	5.63E-03	5.57E-03	5.52E-03	5.52E-03
SB125	3.54E-05	3.55E-05	3.57E-05	3.58E-05	3.60E-05	3.63E-05	3.69E-05	3.74E-05	3.78E-05	3.83E-05	3.88E-05
SB126	1.15E-03	1.15E-03	1.15E-03	1.14E-03	1.14E-03	1.14E-03	1.13E-03	1.12E-03	1.11E-03	1.10E-03	1.10E-03
SN127	2.06E+00	1.48E+00	1.06E+00	7.67E-01	5.52E-01	2.85E-01	1.06E-01	3.93E-02	1.46E-02	5.42E-03	2.01E-03
SB127	2.41E-02	8.30E-02	9.19E-02	9.78E-02	1.02E-01	1.06E-01	1.08E-01	1.07E-01	1.05E-01	1.03E-01	1.01E-01
TE127	1.36E-02	1.69E-02	2.06E-02	2.44E-02	2.82E-02	3.54E-02	4.53E-02	5.29E-02	5.88E-02	6.35E-02	6.64E-02
SN128	1.38E+01	6.79E+00	3.36E+00	1.66E+00	8.21E-01	2.00E-01	2.42E-02	2.92E-03	3.52E-04	4.27E-05	5.15E-06
SB128M	7.01E-03	7.74E+00	4.02E+00	1.98E+00	9.78E-01	2.39E-01	2.88E-02	3.48E-03	4.20E-04	5.07E-05	6.13E-06
SB128	5.80E-01	5.58E-01	5.26E-01	4.93E-01	4.60E-01	3.94E-01	3.15E-01	2.50E-01	1.98E-01	1.57E-01	1.25E-01
SN129M	9.11E+00	4.54E+00	2.28E+00	1.14E+00	5.69E-01	1.42E-01	1.78E-02	2.23E-03	2.78E-04	3.48E-05	4.35E-06
SN129	6.08E+01	5.96E-01	5.88E-03	5.81E-05	5.69E-07	5.54E-11	5.27E-17	5.04E-23	4.81E-29	4.58E-35	4.38E-41
SB129	3.42E+00	5.73E+00	5.38E+00	4.81E+00	4.23E+00	3.14E+00	1.96E+00	1.21E+00	7.46E-01	4.61E-01	2.84E-01
TE129M	6.46E-08	7.15E-04	1.47E-03	2.16E-03	2.78E-03	3.77E-03	4.77E-03	5.38E-03	5.77E-03	6.00E-03	6.15E-03
TE129	2.46E+00	3.38E+00	3.96E+00	4.11E+00	3.96E+00	3.28E+00	2.18E+00	1.38E+00	8.57E-01	5.31E-01	3.29E-01
SB130M	3.40E-01	6.41E-01	1.68E-03	4.42E-06	1.16E-08	8.03E-14	1.46E-21	2.66E-29	4.82E-37	8.77E-45	1.59E-52
SB130	5.82E+01	1.76E+01	5.01E+00	1.42E+00	4.01E-01	3.23E-02	7.37E-04	1.68E-05	3.83E-07	8.73E-09	1.99E-10

TSBAKER                           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 = 4.089E-12

## 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	1.62E-02	1.53E-02	1.45E-02	1.37E-02	1.30E-02	1.16E-02	9.80E-03	8.29E-03	7.00E-03	5.93E-03	5.01E-03
SB131	1.38E+02	3.60E+01	5.89E+00	9.67E-01	1.59E-01	4.27E-03	1.88E-05	8.31E-08	3.66E-10	1.61E-12	8.04E-15
TE131M	6.64E-05	3.47E-01	3.96E-01	3.96E-01	3.89E-01	3.72E-01	3.47E-01	3.23E-01	3.02E-01	2.82E-01	2.63E-01
TE131	6.11E+01	6.64E+01	2.16E+01	5.63E+00	1.37E+00	1.28E-01	6.37E-02	5.89E-02	5.49E-02	5.14E-02	4.79E-02
I131	8.88E-03	3.08E-01	4.53E-01	4.97E-01	5.05E-01	5.10E-01	5.10E-01	5.05E-01	5.05E-01	5.01E-01	5.01E-01
TE132	7.46E-01	1.81E+00	1.79E+00	1.78E+00	1.76E+00	1.73E+00	1.69E+00	1.64E+00	1.60E+00	1.55E+00	1.51E+00
I132	1.83E+00	1.83E+00	1.82E+00	1.81E+00	1.80E+00	1.78E+00	1.74E+00	1.69E+00	1.64E+00	1.60E+00	1.56E+00
TE133M	9.15E-02	3.17E+01	1.38E+01	6.01E+00	2.61E+00	4.97E-01	4.09E-02	3.37E-03	2.78E-04	2.29E-05	1.89E-06
TE133	5.14E+02	2.91E+01	3.24E+00	1.07E+00	4.53E-01	8.58E-02	7.10E-03	5.84E-04	4.84E-05	3.98E-06	3.28E-07
I133	7.97E-01	8.58E+00	9.28E+00	9.28E+00	9.11E+00	8.63E+00	7.84E+00	7.10E+00	6.40E+00	5.84E+00	5.27E+00
XE133M	3.39E-08	1.93E-03	4.66E-03	7.45E-03	1.02E-02	1.52E-02	2.21E-02	2.80E-02	3.30E-02	3.73E-02	4.09E-02
XE133	5.93E-07	3.37E-02	8.19E-02	1.31E-01	1.79E-01	2.72E-01	3.99E-01	5.10E-01	6.10E-01	6.97E-01	7.76E-01
TE134	1.60E+02	7.41E+01	2.76E+01	1.03E+01	3.81E+00	5.28E-01	2.70E-02	1.38E-03	7.08E-05	3.63E-06	1.86E-07
I134	7.33E+01	9.80E+01	6.87E+01	4.02E+01	2.16E+01	5.49E+00	6.03E-01	6.16E-02	6.03E-03	5.78E-04	5.49E-05
I135	1.35E+01	2.38E+01	2.15E+01	1.93E+01	1.75E+01	1.42E+01	1.04E+01	7.61E+00	5.59E+00	4.12E+00	3.01E+00
XE135M	1.50E-03	6.87E+00	6.68E+00	6.06E+00	5.44E+00	4.43E+00	3.25E+00	2.38E+00	1.75E+00	1.28E+00	9.40E-01
XE135	1.56E+00	3.08E+00	4.50E+00	5.67E+00	6.60E+00	7.92E+00	8.78E+00	8.82E+00	8.39E+00	7.65E+00	6.83E+00
CS136	1.18E-03	1.17E-03	1.17E-03	1.17E-03	1.16E-03	1.16E-03	1.15E-03	1.14E-03	1.14E-03	1.13E-03	1.12E-03
CS137	6.52E-05	7.02E-04									
BA137M	1.37E-07	6.55E-04									
XE138	5.39E+02	4.64E+01	4.03E+00	3.49E-01	3.03E-02	2.27E-04	1.48E-07	9.57E-11	6.23E-14	4.04E-17	2.63E-20
CS138	8.02E+01	1.35E+02	4.68E+01	1.37E+01	3.85E+00	2.93E-01	6.10E-03	1.27E-04	2.63E-06	5.47E-08	1.13E-09
CS139	4.72E+02	1.51E+01	1.89E-01	2.37E-03	2.98E-05	4.67E-09	9.30E-15	1.84E-20	3.64E-26	7.21E-32	1.42E-37
BA139	8.71E+00	9.71E+01	5.99E+01	3.64E+01	2.20E+01	8.08E+00	1.79E+00	3.98E-01	8.85E-02	1.96E-02	4.36E-03
BA140	9.64E-02	6.01E-01	6.01E-01	5.97E-01	5.97E-01	5.92E-01	5.92E-01	5.88E-01	5.83E-01	5.78E-01	5.74E-01
LA140	2.29E-07	1.03E-02	2.04E-02	3.03E-02	3.99E-02	5.88E-02	8.58E-02	1.11E-01	1.35E-01	1.57E-01	1.79E-01
BA141	1.84E+02	5.56E+01	5.51E+00	5.47E-01	5.43E-02	5.38E-04	5.25E-07	5.12E-10	4.99E-13	4.90E-16	4.77E-19
LA141	1.70E+00	3.60E+01	3.36E+01	2.84E+01	2.38E+01	1.67E+01	9.80E+00	5.73E+00	3.37E+00	1.98E+00	1.16E+00
CE141	2.10E-07	2.34E-02	5.47E-02	8.23E-02	1.05E-01	1.41E-01	1.75E-01	1.95E-01	2.07E-01	2.13E-01	2.17E-01
BA142	4.85E+02	1.93E+01	4.40E+01	1.00E-02	2.29E-04	1.19E-07	1.41E-12	1.67E-17	1.99E-22	2.36E-27	2.80E-32
LA142	1.11E+01	7.73E+01	5.10E+01	3.24E+01	2.06E+01	8.34E+00	2.15E+00	5.55E-01	1.43E-01	3.68E-02	9.49E-03
LA143	1.89E+02	3.69E+01	1.89E+00	9.72E-02	4.99E-03	1.31E-05	1.76E-09	2.38E-13	3.20E-17	4.32E-21	5.83E-25
CE143	7.56E-02	4.82E+00	4.99E+00	4.86E+00	4.77E+00	4.60E+00	4.30E+00	4.04E+00	3.80E+00	3.56E+00	3.34E+00
PR143	2.21E-08	7.38E-03	1.78E-02	2.81E-02	3.83E-02	5.79E-02	8.53E-02	1.11E-01	1.35E-01	1.58E-01	1.79E-01
CE144	3.07E-03	2.20E-02									
PR144	8.42E-07	2.00E-02	2.18E-02	2.20E-02							
PR145	1.20E-01	1.76E+01	1.56E+01	1.39E+01	1.24E+01	9.84E+00	6.94E+00	4.90E+00	3.47E+00	2.45E+00	1.73E+00
CE146	3.38E+02	1.74E+01	8.89E-01	4.55E-02	2.34E-03	6.17E-06	8.30E-10	1.12E-13	1.51E-17	2.03E-21	2.74E-25
PR146	7.00E+00	6.09E+01	1.38E+01	2.59E+00	4.66E-01	1.47E-02	8.10E-05	4.47E-07	2.47E-09	1.37E-11	7.47E-14
PR147	3.95E+01	1.14E+01	3.57E-01	1.11E-02	3.49E-04	3.40E-07	1.04E-11	3.17E-16	9.67E-21	2.96E-25	9.01E-30

TSBAKER                           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 = 4.089E-12

## 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	1.41E-05	2.65E-01	2.73E-01	2.72E-01	2.71E-01	2.70E-01	2.68E-01	2.66E-01	2.64E-01	2.62E-01	2.60E-01
ND149	1.87E+01	1.27E+01	8.65E+00	5.90E+00	3.99E+00	1.85E+00	5.83E-01	1.84E-01	5.79E-02	1.82E-02	5.76E-03
PM149	2.60E-03	2.03E-01	3.38E-01	4.27E-01	4.84E-01	5.44E-01	5.65E-01	5.54E-01	5.40E-01	5.19E-01	5.02E-01
PM150	2.07E-01	1.60E-01	1.24E-01	9.55E-02	7.38E-02	4.43E-02	2.05E-02	9.48E-03	4.40E-03	2.03E-03	9.42E-04
ND151	6.36E+01	1.99E+00	6.22E-02	1.94E-03	6.07E-05	5.93E-08	1.81E-12	5.53E-17	1.69E-21	5.14E-26	1.57E-30
PM151	4.03E-02	4.71E-01	4.74E-01	4.63E-01	4.51E-01	4.29E-01	3.97E-01	3.69E-01	3.43E-01	3.18E-01	2.95E-01
PM152	9.91E+01	9.70E-02	9.45E-05	9.24E-08	9.02E-11	8.62E-17	8.02E-26	7.48E-35	6.97E-44	6.51E-53	6.05E-62
SM153	1.27E-01	1.25E-01	1.23E-01	1.21E-01	1.20E-01	1.16E-01	1.11E-01	1.06E-01	1.02E-01	9.75E-02	9.32E-02
SM155	5.39E+00	8.85E-01	1.45E-01	2.37E-02	3.89E-03	1.05E-04	4.62E-07	2.03E-09	8.98E-12	4.00E-14	9.82E-17
EU155	3.96E-06	1.13E-04	1.31E-04	1.34E-04							
SM156	6.71E-02	6.23E-02	5.79E-02	5.38E-02	4.99E-02	4.31E-02	3.45E-02	2.77E-02	2.22E-02	1.78E-02	1.42E-02
EU156	1.96E-04	3.20E-04	4.35E-04	5.41E-04	6.40E-04	8.16E-04	1.04E-03	1.20E-03	1.35E-03	1.45E-03	1.53E-03
EU157	1.17E-02	3.87E-02	3.69E-02	3.53E-02	3.37E-02	3.08E-02	2.69E-02	2.35E-02	2.04E-02	1.78E-02	1.55E-02
EU158	2.21E-01	8.94E-02	3.62E-02	1.47E-02	5.93E-03	9.70E-04	6.47E-05	4.29E-06	2.85E-07	1.89E-08	1.26E-09
EU159	2.84E-01	2.83E-02	2.80E-03	2.78E-04	2.76E-05	2.72E-07	2.66E-10	2.59E-13	2.53E-16	2.47E-19	2.42E-22
GD159	1.22E-03	5.34E-03	5.55E-03	5.38E-03	5.18E-03	4.80E-03	4.28E-03	3.81E-03	3.39E-03	3.02E-03	2.69E-03
TB161	8.47E-06	6.09E-05	6.05E-05	6.03E-05	6.01E-05	5.95E-05	5.89E-05	5.81E-05	5.73E-05	5.67E-05	5.59E-05

	TOTAL	1.54E+04	3.11E+03	1.01E+03	5.57E+02	4.08E+02	2.89E+02	2.11E+02	1.70E+02	1.42E+02	1.23E+02	1.09E+02

TSBAKER 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 = 4.089E-12

## 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	2.70E-07	2.67E-07	2.63E-07	2.53E-07	2.37E-07	2.08E-07	1.83E-07	1.41E-07	7.36E-08	2.00E-08	5.44E-09
* NA 24	6.10E-02	2.01E-02	6.64E-03	2.38E-04	9.31E-07	1.42E-11	2.17E-16	5.05E-26	0.	0.	0.
* MN 54	4.62E-06	4.58E-06	4.58E-06	4.50E-06	4.46E-06	4.38E-06	4.29E-06	4.09E-06	3.65E-06	2.90E-06	2.31E-06
* FE 55	8.18E-06	8.18E-06	8.18E-06	8.14E-06	8.12E-06	8.08E-06	7.99E-06	7.89E-06	7.59E-06	7.07E-06	6.56E-06
* FE 59	6.80E-06	6.70E-06	6.59E-06	6.30E-06	5.83E-06	5.00E-06	4.28E-06	3.15E-06	1.46E-06	3.12E-07	6.70E-08
* CO 57	5.52E-05	5.52E-05	5.48E-05	5.48E-05	5.40E-05	5.23E-05	5.11E-05	4.87E-05	4.29E-05	3.32E-05	2.57E-05
* CO 58	5.77E-04	5.72E-04	5.66E-04	5.48E-04	5.24E-04	4.75E-04	4.31E-04	3.55E-04	2.18E-04	8.26E-05	3.12E-05
* CO 60	1.38E-05	1.38E-05	1.38E-05	1.38E-05	1.37E-05	1.37E-05	1.37E-05	1.36E-05	1.32E-05	1.28E-05	1.23E-05
* CU 64	2.73E+00	7.43E-01	2.03E-01	4.12E-03	6.18E-06	1.41E-11	3.18E-17	1.64E-28	0.	0.	0.
* CU 67	2.87E-04	2.19E-04	1.67E-04	7.43E-05	1.94E-05	1.31E-06	8.81E-08	4.00E-10	5.59E-16	0.	0.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	1.03E-06	1.02E-06	1.00E-06	9.83E-07	9.40E-07	8.56E-07	7.81E-07	6.49E-07	4.09E-07	1.63E-07	6.46E-08
W187	4.67E-02	2.33E-02	1.16E-02	1.44E-03	4.43E-05	4.22E-08	3.99E-11	3.60E-19	0.	0.	0.
W188	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	1.68E-01	1.51E-01	1.36E-01	1.00E-01	6.01E-02	2.15E-02	7.72E-03	9.86E-04	5.82E-06	6.26E-10	4.22E-10
U240	9.95E-01	3.07E-01	9.41E-02	2.73E-03	7.49E-06	5.62E-11	4.23E-16	2.39E-26	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	2.66E-02	4.06E+01	3.02E+01	1.25E+01	2.85E+00	1.49E-01	7.81E-03	2.14E-05	8.42E-12	2.01E-21	2.01E-21
NP240M	1.57E-03	3.08E-01	9.48E-02	2.75E-03	7.54E-06	5.68E-11	4.27E-16	2.41E-26	0.	0.	0.
AM241	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CM242	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
GE 77	3.20E-03	2.02E-03	4.61E-04	5.57E-06	3.55E-09	1.43E-15	5.79E-22	9.45E-35	0.	0.	0.
AS 77	3.31E-05	4.88E-03	3.53E-03	1.02E-03	1.20E-04	1.62E-06	2.21E-08	4.07E-12	1.89E-21	4.04E-40	8.68E-59
SE 77M	1.30E-09	1.47E-05	1.06E-05	3.07E-06	3.58E-07	4.87E-09	6.62E-11	1.22E-14	5.66E-24	1.21E-42	2.61E-61
AS 78	8.59E-03	7.65E-05	2.24E-09	1.89E-23	0.	0.	0.	0.	0.	0.	0.
BR 82	3.57E-04	2.23E-04	1.39E-04	3.38E-05	3.21E-06	2.88E-08	2.59E-10	2.09E-14	1.22E-24	4.18E-45	1.42E-65
BR 83	2.78E-01	7.31E-03	7.35E-06	7.47E-15	7.62E-30	0.	0.	0.	0.	0.	0.
KR 83M	1.43E-05	3.20E-02	3.63E-05	3.26E-14	3.35E-29	0.	0.	0.	0.	0.	0.
KR 85M	3.60E-03	2.05E-01	4.68E-03	5.56E-08	3.42E-16	1.30E-32	4.93E-49	0.	0.	0.	0.
KR 85	3.72E-06	9.77E-05	9.96E-05	9.96E-05	9.96E-05	9.96E-05	9.96E-05	9.91E-05	9.82E-05	9.63E-05	9.48E-05
KR 87	6.05E+01	1.19E-04	2.36E-10	1.83E-27	0.	0.	0.	0.	0.	0.	0.
KR 88	3.49E+01	9.19E-02	2.41E-04	4.38E-12	5.51E-25	0.	0.	0.	0.	0.	0.
RB 88	8.88E+00	1.02E-01	2.70E-04	4.90E-12	6.14E-25	0.	0.	0.	0.	0.	0.
SR 89	3.20E-06	9.60E-02	9.46E-02	9.08E-02	8.52E-02	7.44E-02	6.51E-02	5.01E-02	2.56E-02	6.74E-03	1.78E-03
SR 90	6.47E-06	6.64E-04	6.58E-04	6.58E-04	6.53E-04						
Y 90	9.58E-12	1.52E-04	2.69E-04	4.84E-04	6.17E-04	6.58E-04	6.64E-04	6.64E-04	6.58E-04	6.58E-04	6.53E-04
SR 91	8.58E-01	3.07E+00	5.51E-01	3.16E-03	5.78E-07	1.96E-14	6.64E-22	7.56E-37	0.	0.	0.

TSBAKER                    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 = 4.089E-12

## 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	5.78E-05	1.99E+00	3.55E-01	2.04E-03	3.75E-07	1.26E-14	4.28E-22	4.88E-37	0.	0.	0.
Y 91	2.36E-08	9.45E-02	1.12E-01	1.12E-01	1.05E-01	9.34E-02	8.31E-02	6.59E-02	3.64E-02	1.12E-02	3.45E-03
SR 92	1.08E+01	1.35E-01	2.91E-04	2.93E-12	1.37E-25	0.	0.	0.	0.	0.	0.
Y 92	4.99E-01	1.42E+00	1.57E-02	1.21E-08	7.05E-19	2.41E-39	8.26E-60	0.	0.	0.	0.
Y 93	5.19E-01	3.50E+00	6.84E-01	5.14E-03	1.48E-06	1.22E-13	1.01E-20	6.88E-35	0.	0.	0.
ZR 95	9.84E-04	1.23E-01	1.22E-01	1.18E-01	1.12E-01	1.00E-01	9.02E-02	7.29E-02	4.27E-02	1.47E-02	5.05E-03
NB 95M	2.09E-11	4.16E-04	7.59E-04	1.45E-03	1.95E-03	2.06E-03	1.90E-03	1.54E-03	9.06E-04	3.12E-04	1.07E-04
NB 95	1.10E-10	2.38E-03	4.70E-03	1.13E-02	2.09E-02	3.61E-02	4.66E-02	5.78E-02	5.56E-02	2.67E-02	1.03E-02
ZR 97	2.31E+00	3.93E+00	1.48E+00	7.83E-02	5.88E-04	3.31E-08	1.86E-12	5.88E-21	3.32E-42	0.	0.
NB 97M	1.19E-02	3.78E+00	1.42E+00	7.55E-02	5.64E-04	3.18E-08	1.79E-12	5.64E-21	3.19E-42	0.	0.
NB 97	1.16E+00	3.95E+00	1.48E+00	7.87E-02	5.92E-04	3.57E-08	2.00E-12	6.36E-21	3.58E-42	0.	0.
MO 99	6.70E-03	2.18E+00	1.70E+00	8.07E-01	2.34E-01	1.95E-02	1.63E-03	1.14E-05	4.61E-11	7.60E-22	1.25E-32
TC 99M	6.24E-08	1.92E+00	1.61E+00	7.73E-01	2.23E-01	1.86E-02	1.55E-03	1.08E-05	4.40E-11	7.26E-22	1.20E-32
RU103	4.69E-05	1.07E-01	1.05E-01	9.94E-02	9.13E-02	7.66E-02	6.43E-02	4.54E-02	1.89E-02	3.27E-03	5.71E-04
RH103M	3.12E-09	1.07E-01	1.05E-01	9.97E-02	9.13E-02	7.66E-02	6.43E-02	4.54E-02	1.89E-02	3.27E-03	5.71E-04
RU105	2.54E-01	2.43E-01	5.71E-03	7.51E-08	5.49E-16	2.93E-32	1.57E-48	0.	0.	0.	0.
RH105M	1.67E-03	2.43E-01	5.73E-03	7.53E-08	5.51E-16	2.95E-32	1.57E-48	0.	0.	0.	0.
RH105	2.74E-09	8.77E-01	5.73E-01	1.43E-01	1.41E-02	1.37E-04	1.33E-06	1.26E-10	1.09E-20	8.18E-41	6.14E-61
RU106	1.96E-04	3.71E-03	3.69E-03	3.67E-03	3.64E-03	3.58E-03	3.50E-03	3.37E-03	3.06E-03	2.54E-03	2.10E-03
RH106	2.12E-06	3.71E-03	3.69E-03	3.67E-03	3.64E-03	3.58E-03	3.50E-03	3.37E-03	3.06E-03	2.54E-03	2.10E-03
PD109	1.62E-03	4.12E-02	1.20E-02	2.98E-04	6.27E-07	2.79E-12	1.24E-17	2.46E-28	0.	0.	0.
AG109M	9.32E-06	4.12E-02	1.20E-02	2.98E-04	6.30E-07	2.80E-12	1.24E-17	2.46E-28	0.	0.	0.
PD111M	2.25E-01	1.09E-02	5.29E-04	6.07E-08	1.64E-14	1.20E-27	8.80E-41	0.	0.	0.	0.
PD111	7.99E-02	8.80E-03	4.26E-04	4.88E-08	1.32E-14	9.63E-28	7.06E-41	0.	0.	0.	0.
AG111M	6.35E-04	1.15E-02	5.59E-04	6.43E-08	1.73E-14	1.27E-27	9.30E-41	0.	0.	0.	0.
AG111	2.26E-10	6.24E-03	6.00E-03	4.57E-03	2.87E-03	1.14E-03	4.52E-04	7.13E-05	7.01E-07	6.79E-11	6.58E-15
PD112	5.04E-02	2.29E-02	1.03E-02	9.61E-04	1.83E-05	6.63E-09	2.41E-12	3.16E-19	2.00E-36	0.	0.
AG112	1.52E-06	2.66E-02	1.22E-02	1.13E-03	2.17E-05	7.83E-09	2.84E-12	3.75E-19	2.35E-36	0.	0.
AG113	6.53E-04	6.91E-03	2.99E-04	2.43E-08	3.71E-15	8.69E-29	2.03E-42	0.	0.	0.	0.
CD115M	2.34E-09	6.77E-05	6.65E-05	6.33E-05	5.86E-05	4.97E-05	4.25E-05	3.06E-05	1.37E-05	2.72E-06	5.45E-07
CD115	9.04E-07	1.36E-02	9.97E-03	3.93E-03	8.29E-04	3.70E-05	1.65E-06	3.29E-09	5.81E-16	1.82E-29	5.70E-43
IN115M	1.13E-11	1.43E-02	1.09E-02	4.29E-03	9.04E-04	4.04E-05	1.80E-06	3.59E-09	6.36E-16	1.99E-29	6.22E-43
CD117	2.03E-02	4.43E-04	4.31E-07	4.03E-16	3.57E-31	0.	0.	0.	0.	0.	0.
IN117M	9.77E-07	1.84E-03	2.13E-06	2.05E-15	1.83E-30	0.	0.	0.	0.	0.	0.
IN117	3.93E-11	1.21E-03	1.44E-06	1.39E-15	1.23E-30	0.	0.	0.	0.	0.	0.
SN121	4.10E-04	2.34E-02	1.26E-02	1.99E-03	9.13E-05	1.93E-07	4.06E-10	1.81E-15	7.56E-29	0.	0.
SN123	2.11E-06	2.21E-04	2.19E-04	2.15E-04	2.10E-04	1.98E-04	1.88E-04	1.68E-04	1.27E-04	7.32E-05	4.21E-05
SN125	5.89E-03	5.48E-03	5.09E-03	4.08E-03	2.82E-03	1.35E-03	6.45E-04	1.48E-04	3.69E-06	2.32E-09	1.46E-12
SB125	3.54E-05	3.92E-05	4.29E-05	5.25E-05	6.43E-05	7.79E-05	8.39E-05	8.74E-05	8.57E-05	8.00E-05	7.46E-05
SB126	1.15E-03	1.09E-03	1.03E-03	8.73E-04	6.61E-04	3.79E-04	2.19E-04	7.20E-05	4.50E-06	2.19E-08	4.39E-09

TSBAKER                    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 = 4.089E-12

## 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	2.06E+00	7.47E-04	2.71E-07	1.30E-17	8.13E-35	0.	0.	0.	0.	0.	0.
SB127	2.41E-02	9.88E-02	8.26E-02	4.83E-02	1.98E-02	3.30E-03	5.52E-04	1.54E-05	2.01E-09	3.44E-17	5.85E-25
TE127M	1.95E-10	1.51E-04	2.76E-04	5.35E-04	7.40E-04	8.16E-04	7.87E-04	6.97E-04	5.09E-04	2.69E-04	1.42E-04
TE127	1.36E-02	7.07E-02	6.94E-02	4.23E-02	1.79E-02	3.67E-03	1.26E-03	7.04E-04	5.02E-04	2.66E-04	1.40E-04
SB128	5.80E-01	9.89E-02	1.56E-02	6.10E-05	5.91E-09	5.55E-17	5.22E-25	4.60E-41	0.	0.	0.
SB129	3.42E+00	1.75E-01	3.65E-03	3.33E-08	1.32E-16	2.09E-33	3.30E-50	0.	0.	0.	0.
TE129M	6.46E-08	6.81E-03	6.81E-03	6.42E-03	5.81E-03	4.73E-03	3.85E-03	2.56E-03	9.23E-04	1.20E-04	1.56E-05
TE129	2.46E+00	2.05E-01	8.54E-03	4.11E-03	3.71E-03	3.03E-03	2.47E-03	1.64E-03	5.92E-04	7.73E-05	1.00E-05
I130	1.62E-02	4.24E-03	1.11E-03	1.98E-05	2.42E-08	3.61E-14	5.38E-20	1.20E-31	0.	0.	0.
TE131M	6.64E-05	2.32E-01	1.33E-01	2.52E-02	1.58E-03	6.15E-06	2.41E-08	3.67E-13	3.34E-25	0.	0.
TE131	6.11E+01	4.23E-02	2.43E-02	4.61E-03	2.88E-04	1.13E-06	4.39E-09	6.72E-14	6.11E-26	0.	0.
I131	8.88E-03	4.79E-01	4.53E-01	3.64E-01	2.40E-01	1.01E-01	4.28E-02	7.65E-03	1.03E-04	1.88E-08	3.43E-12
XE131M	2.41E-11	2.22E-04	4.21E-04	8.79E-04	1.26E-03	1.24E-03	9.23E-04	3.81E-04	2.54E-05	7.60E-08	2.14E-10
TE132	7.46E-01	1.48E+00	1.19E+00	6.28E-01	2.16E-01	2.57E-02	3.04E-03	4.27E-05	9.99E-10	5.47E-19	2.98E-28
I132	1.83E+00	1.52E+00	1.23E+00	6.46E-01	2.23E-01	2.64E-02	3.13E-03	4.40E-05	1.03E-09	5.60E-19	3.07E-28
I133	7.97E-01	4.44E+00	2.00E+00	1.86E-01	3.55E-03	1.29E-06	4.66E-10	6.14E-17	3.86E-34	0.	0.
XE133M	3.39E-08	4.20E-02	4.97E-02	2.91E-02	6.84E-03	3.21E-04	1.49E-05	3.24E-08	7.10E-15	3.39E-28	1.63E-41
XE133	5.93E-07	8.06E-01	1.08E+00	9.67E-01	5.27E-01	1.42E-01	3.83E-02	2.76E-03	3.84E-06	7.45E-12	1.45E-17
I135	1.35E+01	2.21E+00	1.84E-01	1.07E-04	4.35E-10	7.18E-21	1.18E-31	3.21E-53	0.	0.	0.
XE135M	1.50E-03	6.87E-01	5.75E-02	3.34E-05	1.36E-10	2.24E-21	3.69E-32	1.00E-53	0.	0.	0.
XE135	1.56E+00	5.94E+00	1.45E+00	8.31E-03	1.02E-06	1.43E-14	2.00E-22	3.96E-38	0.	0.	0.
CS136	1.18E-03	1.11E-03	1.06E-03	9.00E-04	6.90E-04	4.05E-04	2.38E-04	8.17E-05	5.68E-06	2.74E-08	1.33E-10
CS137	6.52E-05	7.02E-04	6.98E-04	6.94E-04	6.91E-04						
BA137M	1.37E-07	6.55E-04	6.52E-04	6.48E-04	6.44E-04						
BA139	8.71E+00	9.30E-04	5.49E-09	1.13E-24	0.	0.	0.	0.	0.	0.	0.
BA140	9.64E-02	5.69E-01	5.42E-01	4.59E-01	3.50E-01	2.04E-01	1.18E-01	4.02E-02	2.68E-03	1.19E-05	5.28E-08
LA140	2.29E-07	1.98E-01	3.19E-01	4.41E-01	3.92E-01	2.35E-01	1.36E-01	4.64E-02	3.08E-03	1.37E-05	6.11E-08
LA141	1.70E+00	6.74E-01	9.45E-03	2.62E-08	1.43E-17	4.27E-36	1.27E-54	0.	0.	0.	0.
CE141	2.10E-07	2.33E-01	2.31E-01	2.17E-01	1.95E-01	1.58E-01	1.27E-01	8.27E-02	2.84E-02	3.34E-03	3.94E-04
LA142	1.11E+01	2.44E-03	4.73E-08	3.48E-22	0.	0.	0.	0.	0.	0.	0.
CE143	7.56E-02	3.11E+00	1.88E+00	4.14E-01	3.33E-02	2.15E-04	1.39E-06	5.83E-11	6.58E-22	0.	0.
PR143	2.21E-08	1.99E-01	3.09E-01	3.99E-01	3.42E-01	2.09E-01	1.26E-01	4.55E-02	3.64E-03	2.31E-05	1.47E-07
CE144	3.07E-03	2.20E-02	2.19E-02	2.17E-02	2.14E-02	2.09E-02	2.04E-02	1.95E-02	1.72E-02	1.35E-02	1.06E-02
PR144	8.42E-07	2.20E-02	2.19E-02	2.17E-02	2.14E-02	2.09E-02	2.04E-02	1.95E-02	1.72E-02	1.35E-02	1.06E-02
PR145	1.20E-01	1.22E+00	7.57E-02	1.80E-05	1.64E-11	1.36E-23	1.12E-35	0.	0.	0.	0.
ND147	1.41E-05	2.37E-01	2.23E-01	1.85E-01	1.35E-01	7.26E-02	3.87E-02	1.11E-02	4.88E-04	9.51E-07	1.84E-09
PM147	3.91E-14	1.77E-04	3.43E-04	7.84E-04	1.36E-03	2.07E-03	2.44E-03	2.72E-03	2.75E-03	2.56E-03	2.38E-03
ND149	1.87E+01	1.81E-03	1.75E-07	1.60E-19	1.36E-39	0.	0.	0.	0.	0.	0.
PM149	2.60E-03	4.80E-01	3.52E-01	1.37E-01	2.87E-02	1.25E-03	5.44E-05	1.03E-07	1.63E-14	4.03E-28	1.00E-41
PM150	2.07E-01	4.36E-04	9.19E-07	8.63E-15	3.61E-28	0.	0.	0.	0.	0.	0.

TSBAKER 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 = 4.089E-12  
 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	4.03E-02	2.75E-01	1.52E-01	2.55E-02	1.16E-02	3.68E-03	3.43E-03	9.05E-06	6.24E-14	7.83E-27
SM153	1.27E-01	8.92E-02	6.26E-02	2.16E-02	3.38E-09	1.07E-04	3.11E-04	2.61E-06	2.11E-17	5.38E-17
SM156	6.71E-02	1.14E-02	1.95E-03	9.62E-06	1.38E-09	2.85E-17	5.88E-25	2.50E-40	0	2.29E-32
EU155	3.96E-06	1.34E-04	1.34E-04	1.34E-04	1.34E-04	1.33E-04	1.33E-04	1.32E-04	1.29E-04	1.19E-04
EU156	1.96E-04	1.34E-03	1.77E-03	1.59E-03	1.26E-03	7.91E-04	4.99E-04	1.98E-04	1.96E-05	1.93E-07
EU157	1.17E-02	1.35E-02	4.54E-03	1.70E-04	7.15E-07	1.26E-11	2.23E-16	6.95E-26	0	0
GD159	1.22E-03	2.40E-03	9.54E-04	5.95E-05	5.86E-07	5.68E-11	5.50E-15	4.16E-23	4	4.16E-43
TB161	8.47E-06	5.53E-05	4.99E-05	3.70E-05	2.24E-05	8.19E-05	3.00E-06	4.02E-07	2.66E-09	1.15E-13
<b>TOTAL</b>	<b>2.55E+02</b>	<b>9.65E+01</b>	<b>5.36E+01</b>	<b>2.04E+01</b>	<b>6.71E+00</b>	<b>1.92E+00</b>	<b>1.13E+00</b>	<b>6.35E-01</b>	<b>2.87E-01</b>	<b>1.08E-01</b>

TSBAKER  
MR/HR AT H+12 HOURS  $\frac{1}{1.000}$  MICROCURIES/SQ METER  
FRACTION OF REFRACTORIES PRESENT = 1.000  
RELAXATION LENGTH = 0.16 GM/SQCM  
BOMB FRACTION PER SQ. METER = 4.089E-12

TSBAKER  
MR/HR AT H+12 HOURS = 1.000 MICROCURIES/SQ METER  
FRACTION OF REFRACTORIES PRESENT = 1.000  
RELAXATION LENGTH = 0.16 GM/SQCM  
BOMB FRACTION PER SQ. METER = 4.089E-12  
DEBRIS DECAY FROM 1 TO 50 YEARS

DECAT	FRONT	1000	500	LAND
ZERO TIME	1.00E+00	1.50E+00	2.00E+00	3.50E+00
2.70E-07	2.33E-09	2.17E-10	2.01E-11	1.62E-14
4.62E-06	1.99E-06	1.31E-06	8.63E-07	2.47E-07
6.80E-05	2.45E-05	1.77E-05	8.85E-05	1.97E-05
5.52E-04	1.52E-04	1.36E-04	8.55E-05	1.11E-04
5.77E-05	1.66E-05	1.21E-05	8.76E-07	1.31E-06
1.03E-06	0.138E-05	0.121E-05	0.106E-05	0.131E-05
0.0	0.0	0.0	0.0	0.0
6.8E-01	4.19E-10	4.08E-10	3.97E-10	3.71E-10
0.0	0.0	0.0	0.0	0.0
7.2E-06	9.49E-05	8.67E-05	8.96E-05	8.67E-05
3.20E-06	6.47E-04	6.35E-04	6.11E-04	6.11E-04
6.958E-08	-0.136E-03	-0.103E-03	-0.353E-04	-0.103E-03
6.92E-02	8.49E-01	1.09E-01	1.69E-01	1.09E-01
4.3	-4.3	-2.423	-2.423	-2.423
0.0	0.0	0.0	0.0	0.0

1.86E-01 3.81E-02 2.06E-02 1.41E-02 6.48E-03 4.10E-03 3.02E-03 2.44E-03 1.72E-03 1.10E-03 8.20E-04

TOTAL

**APPENDIX C**  
**DETAILED RESULTS FOR EVENT CHARLIE**

TIME	MR/HR	TIME	HOURS	MICROCURIES/SQ METER								
				1	2	3	4	5	6	7	8	
ZERO				1.03E+02	2.67E+03	9.37E+02	5.49E+02	4.06E+02	4.2.83E+02	2.03E+02	1.59E+02	
1.00E+00		1.00E+00		3.07E+01	9.23E+01	6.00E+01	4.74E+00	4.31E+00	1.38E+00	1.00E+00	7.89E-01	5.31E+02
2.00E+00		2.00E+00		6.00E+01	1.23E+01	8.00E+01	6.00E+00	5.00E+00	1.50E+00	1.10E+00	8.50E-01	5.67E+01
3.00E+00		3.00E+00		9.00E+01	1.53E+01	1.20E+01	9.00E+00	7.00E+00	2.00E+00	1.40E+00	1.00E+00	8.46E+01
4.00E+00		4.00E+00		1.20E+01	1.83E+01	1.50E+01	1.20E+00	9.00E+00	2.50E+00	2.00E+00	1.40E+00	8.31E+01
6.00E+00		6.00E+00		1.80E+01	2.23E+01	2.50E+01	1.80E+00	1.20E+00	3.00E+00	2.50E+00	1.80E+00	8.16E+01
9.00E+00		9.00E+00		2.70E+01	3.63E+01	4.50E+01	2.70E+00	1.80E+00	4.50E+00	3.50E+00	2.70E+00	8.00E+01
1.20E+01		1.20E+01		4.00E+01	5.43E+01	7.20E+01	4.00E+00	2.40E+00	6.00E+00	4.50E+00	3.20E+00	7.96E+00
1.50E+01		1.50E+01		6.00E+01	8.13E+01	1.18E+02	6.00E+00	3.60E+00	9.00E+00	6.00E+00	4.20E+00	7.85E+00
1.80E+01		1.80E+01		8.00E+01	1.08E+02	1.62E+02	8.00E+00	5.00E+00	1.20E+01	8.00E+00	5.60E+00	7.74E+00
2.10E+01		2.10E+01		1.00E+02	1.35E+02	2.16E+02	1.00E+00	6.40E+00	1.40E+01	9.60E+00	6.40E+00	7.64E+00
2.40E+00		2.40E+00		1.20E+02	1.62E+02	2.43E+02	1.20E+00	8.00E+00	1.60E+01	1.12E+01	7.00E+00	7.53E+00
2.70E+00		2.70E+00		1.40E+02	1.89E+02	2.70E+02	1.40E+00	9.60E+00	1.80E+01	1.32E+01	8.60E+00	7.42E+00
3.00E+00		3.00E+00		1.60E+02	2.16E+02	3.00E+02	1.60E+00	1.12E+00	2.00E+01	1.52E+01	9.70E+00	7.31E+00
3.30E+00		3.30E+00		1.80E+02	2.43E+02	3.30E+02	1.80E+00	1.32E+00	2.20E+01	1.72E+01	1.07E+01	7.20E+00
3.60E+00		3.60E+00		2.00E+02	2.70E+02	3.60E+02	2.00E+00	1.52E+00	2.40E+01	1.92E+01	1.27E+01	7.09E+00
3.90E+00		3.90E+00		2.20E+02	2.97E+02	3.90E+02	2.20E+00	1.72E+00	2.60E+01	2.12E+01	1.47E+01	6.98E+00
4.20E+00		4.20E+00		2.40E+02	3.24E+02	4.20E+02	2.40E+00	1.92E+00	2.80E+01	2.42E+01	1.67E+01	6.87E+00
4.50E+00		4.50E+00		2.60E+02	3.51E+02	4.50E+02	2.60E+00	2.12E+00	3.00E+01	2.72E+01	1.87E+01	6.76E+00
4.80E+00		4.80E+00		2.80E+02	3.78E+02	4.80E+02	2.80E+00	2.32E+00	3.20E+01	3.02E+01	2.07E+01	6.65E+00
5.10E+00		5.10E+00		3.00E+02	4.05E+02	5.10E+02	3.00E+00	2.52E+00	3.40E+01	3.32E+01	2.27E+01	6.54E+00
5.40E+00		5.40E+00		3.20E+02	4.32E+02	5.40E+02	3.20E+00	2.72E+00	3.60E+01	3.62E+01	2.47E+01	6.43E+00
5.70E+00		5.70E+00		3.40E+02	4.59E+02	5.70E+02	3.40E+00	2.92E+00	3.80E+01	3.92E+01	2.67E+01	6.32E+00
6.00E+00		6.00E+00		3.60E+02	4.86E+02	6.00E+02	3.60E+00	3.12E+00	4.00E+01	4.22E+01	2.87E+01	6.21E+00
6.30E+00		6.30E+00		3.80E+02	5.13E+02	6.30E+02	3.80E+00	3.32E+00	4.20E+01	4.52E+01	3.07E+01	6.10E+00
6.60E+00		6.60E+00		4.00E+02	5.40E+02	6.60E+02	4.00E+00	3.52E+00	4.40E+01	4.82E+01	3.27E+01	5.99E+00
6.90E+00		6.90E+00		4.20E+02	5.67E+02	6.90E+02	4.20E+00	3.72E+00	4.60E+01	5.12E+01	3.47E+01	5.88E+00
7.20E+00		7.20E+00		4.40E+02	5.94E+02	7.20E+02	4.40E+00	3.92E+00	4.80E+01	5.32E+01	3.67E+01	5.77E+00
7.50E+00		7.50E+00		4.60E+02	6.21E+02	7.50E+02	4.60E+00	4.12E+00	5.00E+01	5.52E+01	3.87E+01	5.66E+00
7.80E+00		7.80E+00		4.80E+02	6.48E+02	7.80E+02	4.80E+00	4.32E+00	5.20E+01	5.72E+01	4.07E+01	5.55E+00
8.10E+00		8.10E+00		5.00E+02	6.75E+02	8.10E+02	5.00E+00	4.52E+00	5.40E+01	5.92E+01	4.27E+01	5.44E+00
8.40E+00		8.40E+00		5.20E+02	7.02E+02	8.40E+02	5.20E+00	4.72E+00	5.60E+01	6.12E+01	4.47E+01	5.33E+00
8.70E+00		8.70E+00		5.40E+02	7.29E+02	8.70E+02	5.40E+00	4.92E+00	5.80E+01	6.32E+01	4.67E+01	5.22E+00
9.00E+00		9.00E+00		5.60E+02	7.56E+02	9.00E+02	5.60E+00	5.12E+00	6.00E+01	6.52E+01	4.87E+01	5.11E+00
9.30E+00		9.30E+00		5.80E+02	7.83E+02	9.30E+02	5.80E+00	5.32E+00	6.20E+01	6.72E+01	5.07E+01	5.00E+00
9.60E+00		9.60E+00		6.00E+02	8.10E+02	9.60E+02	6.00E+00	5.52E+00	6.40E+01	6.92E+01	5.27E+01	4.89E+00
9.90E+00		9.90E+00		6.20E+02	8.37E+02	9.90E+02	6.20E+00	5.72E+00	6.60E+01	7.12E+01	5.47E+01	4.78E+00
1.02E+01		1.02E+01		6.40E+02	8.64E+02	1.02E+03	6.40E+00	5.92E+00	6.80E+01	7.32E+01	5.67E+01	4.67E+00
1.05E+01		1.05E+01		6.60E+02	8.91E+02	1.05E+03	6.60E+00	6.12E+00	7.00E+01	7.52E+01	5.87E+01	4.56E+00
1.08E+01		1.08E+01		6.80E+02	9.18E+02	1.08E+03	6.80E+00	6.32E+00	7.20E+01	7.72E+01	6.07E+01	4.45E+00
1.11E+01		1.11E+01		7.00E+02	9.45E+02	1.11E+03	7.00E+00	6.52E+00	7.40E+01	7.92E+01	6.27E+01	4.34E+00
1.14E+01		1.14E+01		7.20E+02	9.72E+02	1.14E+03	7.20E+00	6.72E+00	7.60E+01	8.12E+01	6.47E+01	4.23E+00
1.17E+01		1.17E+01		7.40E+02	1.0E+00	1.17E+03	7.40E+00	6.92E+00	7.80E+01	8.32E+01	6.67E+01	4.12E+00
1.20E+01		1.20E+01		7.60E+02	1.027E+00	1.20E+03	7.60E+00	7.12E+00	8.00E+01	8.52E+01	6.87E+01	4.01E+00
1.23E+01		1.23E+01		7.80E+02	1.054E+00	1.23E+03	7.80E+00	7.32E+00	8.20E+01	8.72E+01	7.07E+01	3.90E+00
1.26E+01		1.26E+01		8.00E+02	1.081E+00	1.26E+03	8.00E+00	7.52E+00	8.40E+01	8.92E+01	7.27E+01	3.79E+00
1.29E+01		1.29E+01		8.20E+02	1.108E+00	1.29E+03	8.20E+00	7.72E+00	8.60E+01	9.12E+01	7.47E+01	3.68E+00
1.32E+01		1.32E+01		8.40E+02	1.135E+00	1.32E+03	8.40E+00	7.92E+00	8.80E+01	9.32E+01	7.67E+01	3.57E+00
1.35E+01		1.35E+01		8.60E+02	1.162E+00	1.35E+03	8.60E+00	8.12E+00	9.00E+01	9.52E+01	7.87E+01	3.46E+00
1.38E+01		1.38E+01		8.80E+02	1.189E+00	1.38E+03	8.80E+00	8.32E+00	9.20E+01	9.72E+01	8.07E+01	3.35E+00
1.41E+01		1.41E+01		9.00E+02	1.216E+00	1.41E+03	9.00E+00	8.52E+00	9.40E+01	9.92E+01	8.27E+01	3.24E+00
1.44E+01		1.44E+01		9.20E+02	1.243E+00	1.44E+03	9.20E+00	8.72E+00	9.60E+01	1.012E+00	8.47E+01	3.13E+00
1.47E+01		1.47E+01		9.40E+02	1.270E+00	1.47E+03	9.40E+00	8.92E+00	9.80E+01	1.032E+00	8.67E+01	3.02E+00
1.50E+01		1.50E+01		9.60E+02	1.297E+00	1.50E+03	9.60E+00	9.12E+00	1.000E+00	1.052E+00	8.87E+01	2.91E+00

TSCHARLIE                    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 = 1.428E-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	2.92E-07	2.92E-07	2.92E-07	2.92E-07	2.92E-07	2.91E-07	2.91E-07	2.90E-07	2.90E-07	2.89E-07	2.89E-07
* NA 24	6.60E-02	6.31E-02	6.03E-02	5.75E-02	5.49E-02	5.01E-02	4.36E-02	3.80E-02	3.31E-02	2.88E-02	2.50E-02
* MN 54	5.00E-06	4.96E-06	4.96E-06	4.96E-06	4.96E-06						
* FE 55	8.85E-06										
* FE 59	7.36E-06	7.35E-06	7.35E-06	7.35E-06	7.34E-06	7.33E-06	7.32E-06	7.29E-06	7.28E-06	7.27E-06	
* CG 57	5.98E-05										
* CG 58	6.24E-04	6.24E-04	6.24E-04	6.24E-04	6.23E-04	6.22E-04	6.22E-04	6.20E-04	6.20E-04	6.19E-04	
* CG 60	1.50E-05										
* CU 64	2.96E+00	2.80E+00	2.65E+00	2.51E+00	2.38E+00	2.14E+00	1.81E+00	1.54E+00	1.31E+00	1.12E+00	9.48E-01
* CU 67	3.11E-04	3.08E-04	3.03E-04	3.00E-04	2.97E-04	2.90E-04	2.79E-04	2.71E-04	2.62E-04	2.52E-04	2.45E-04
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	7.50E-07	7.50E-07	7.50E-07	7.50E-07	7.48E-07	7.48E-07	7.48E-07	7.46E-07	7.46E-07	7.44E-07	7.44E-07
W187	9.51E-03	9.22E-03	8.95E-03	8.70E-03	8.47E-03	7.97E-03	7.32E-03	6.72E-03	6.14E-03	5.66E-03	5.16E-03
W188	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	1.14E-01	1.14E-01	1.13E-01	1.13E-01	1.12E-01	1.11E-01	1.10E-01	1.09E-01	1.07E-01	1.06E-01	1.04E-01
U239	4.46E+03	7.60E+02	1.30E+02	2.21E+01	3.75E+00	1.09E-01	5.42E-04	2.67E-06	1.32E-08	6.55E-11	3.24E-13
U240	4.22E+00	4.02E+00	3.82E+00	3.64E+00	3.47E+00	3.14E+00	2.71E+00	2.33E+00	2.02E+00	1.74E+00	1.50E+00
NP239	1.53E-02	2.56E+01	2.96E+01	3.00E+01	2.98E+01	2.91E+01	2.79E+01	2.70E+01	2.60E+01	2.51E+01	2.42E+01
NP240M	6.67E-03	4.03E+00	3.86E+00	3.67E+00	3.50E+00	3.16E+00	2.73E+00	2.36E+00	2.03E+00	1.75E+00	1.51E+00
NP240	1.69E-10	8.69E-11	4.51E-11	2.33E-11	1.20E-11	3.22E-12	4.44E-13	6.13E-14	8.45E-15	1.16E-15	1.61E-16
* AM241	6.76E-09										
* CM242	3.42E-07	3.40E-07	3.40E-07	3.40E-07	3.40E-07						
GE 75	5.87E-06	2.85E-02	1.72E-02	1.03E-02	6.22E-03	2.25E-03	4.92E-04	1.08E-04	2.35E-05	5.13E-06	1.12E-06
GE 77	3.96E-03	1.02E-02	9.59E-03	9.02E-03	8.49E-03	7.51E-03	6.25E-03	5.19E-03	4.33E-03	3.59E-03	2.99E-03
AS 77	4.09E-05	6.47E-03	6.54E-03	6.59E-03	6.63E-03	6.67E-03	6.67E-03	6.63E-03	6.53E-03	6.40E-03	6.23E-03
SE 77M	1.61E-09	1.94E-05	1.97E-05	1.98E-05	1.98E-05	2.00E-05	2.01E-05	2.00E-05	1.97E-05	1.92E-05	1.86E-05
GE 78	6.16E-01	3.85E-01	2.40E-01	1.50E-01	9.35E-02	3.64E-02	8.83E-03	2.14E-03	5.22E-04	1.27E-04	3.08E-05
AS 78	1.11E-02	1.84E-01	2.27E-01	2.12E-01	1.78E-01	1.05E-01	3.89E-02	1.29E-02	4.00E-03	1.20E-03	3.47E-04
AS 79	1.20E+01	1.19E-01	1.17E-03	1.15E-05	1.13E-07	1.10E-11	1.05E-17	9.98E-24	9.52E-30	9.09E-36	8.68E-42
SE 79M	1.78E-02	2.09E-01	2.06E-03	2.03E-05	2.00E-07	1.93E-11	1.85E-17	1.76E-23	1.68E-29	1.60E-35	1.53E-41
BR 80	7.44E-02	7.02E-03	6.59E-04	6.20E-05	5.84E-06	5.18E-08	4.34E-11	3.61E-14	3.01E-17	2.51E-20	2.10E-23
SE 81M	6.09E-02	2.84E+00	1.37E+00	6.59E-01	3.17E-01	7.41E-02	8.29E-03	9.29E-04	1.04E-04	1.17E-05	1.31E-06
SE 81	7.44E-01	3.36E+00	1.94E+00	9.70E-01	4.71E-01	1.10E-01	1.23E-02	1.38E-03	1.54E-04	1.73E-05	1.94E-06
BR 82	3.65E-04	3.58E-04	3.51E-04	3.45E-04	3.38E-04	3.25E-04	3.06E-04	2.89E-04	2.72E-04	2.57E-04	2.42E-04
SE 83	3.34E+01	6.33E+00	1.20E+00	2.28E-01	4.30E-02	1.55E-03	1.05E-05	7.16E-08	4.89E-10	3.31E-12	2.10E-14
BR 83	2.78E-01	4.14E+00	3.84E+00	3.02E+00	2.29E+00	1.29E+00	5.47E-01	2.30E-01	9.74E-02	4.11E-02	1.73E-02
KR 83M	1.43E-05	9.38E-01	1.92E+00	2.38E+00	2.46E+00	2.05E+00	1.21E+00	6.22E-01	2.99E-01	1.38E-01	6.22E-02

TSCHARLIE                    MICRORCURIOS/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 = 1.428E-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	6.99E-02	1.21E+01	3.26E+00	8.82E-01	2.38E-01	1.74E-02	3.45E-04	6.80E-06	1.35E-07	2.66E-09	5.26E-11	
KR 85M	3.29E-03	7.05E+00	5.99E+00	5.12E+00	4.38E+00	3.19E+00	1.99E+00	1.24E+00	7.75E-01	4.81E-01	3.01E-01	
KR 87	5.48E+01	3.16E+01	1.83E+01	1.06E+01	6.10E+00	2.05E+00	3.97E-01	7.69E-02	1.49E-02	2.88E-03	5.57E-04	
KR 88	3.11E+01	2.43E+01	1.89E+01	1.48E+01	1.16E+01	7.02E+00	3.35E+00	1.60E+00	7.58E-01	3.61E-01	1.72E-01	
RB 88	7.91E+00	2.46E+01	2.10E+01	1.65E+01	1.29E+01	7.86E+00	3.75E+00	1.79E+00	8.52E-01	4.05E-01	1.92E-01	
RB 89	3.80E+01	3.57E+01	2.40E+00	1.61E-01	1.08E-02	4.90E-05	1.48E-08	4.47E-12	1.36E-15	4.12E-19	1.25E-22	
SR 89	2.91E-06	1.02E-01	1.09E-01	1.08E-01								
SR 90	5.85E-06	6.01E-04	6.01E-04									
SR 91	7.90E-01	1.47E+01	1.37E+01	1.28E+01	1.19E+01	1.03E+01	8.30E+00	6.71E+00	5.42E+00	4.35E+00	3.51E+00	
Y 91M	5.32E-05	5.07E+00	6.91E+00	7.41E+00	7.31E+00	6.56E+00	5.37E+00	4.32E+00	3.48E+00	2.81E+00	2.27E+00	
Y 91	2.18E-08	4.51E-03	1.04E-02	1.66E-02	2.27E-02	3.39E-02	4.82E-02	5.96E-02	6.91E-02	7.65E-02	8.25E-02	
SR 92	1.01E+01	4.52E+01	3.51E+01	2.71E+01	2.10E+01	1.26E+01	5.84E+00	2.71E+00	1.26E+00	5.84E-01	2.72E-01	
Y 92	4.67E-01	9.52E+00	1.49E+01	1.78E+01	1.88E+01	1.80E+01	1.38E+01	9.38E+00	6.03E+00	3.71E+00	2.24E+00	
SR 93	4.12E+02	7.09E+00	3.91E-02	2.16E-04	1.19E-06	3.65E-11	6.15E-18	1.04E-24	1.75E-31	2.95E-38	4.97E-45	
Y 93	5.02E-01	1.62E+01	1.53E+01	1.43E+01	1.33E+01	1.16E+01	9.48E+00	7.74E+00	6.29E+00	5.16E+00	4.20E+00	
Y 94	6.00E+01	8.20E+01	1.06E+01	1.36E+00	1.76E-01	2.92E-03	6.25E-06	1.34E-08	2.87E-11	6.25E-14	3.47E-15	
Y 95	2.60E+02	2.45E+01	5.40E-01	1.19E-02	2.62E-04	1.27E-07	1.36E-12	1.46E-17	1.56E-22	1.66E-27	1.78E-32	
ZR 95	9.77E-04	1.28E-01	1.30E-01	1.29E-01								
NB 95	1.09E-10	7.89E-05	1.68E-04	2.89E-04	3.94E-04	6.04E-04	9.17E-04	1.23E-03	1.54E-03	1.86E-03	2.16E-03	
ZR 97	2.38E+00	1.03E+01	9.89E+00	9.53E+00	9.12E+00	8.42E+00	7.44E+00	6.58E+00	5.85E+00	5.15E+00	4.58E+00	
NB 97M	1.22E-02	9.93E+00	9.53E+00	9.16E+00	8.79E+00	8.09E+00	7.15E+00	6.34E+00	5.60E+00	4.95E+00	4.37E+00	
NB 97	1.19E+00	5.19E+00	7.32E+00	8.34E+00	8.75E+00	8.71E+00	7.93E+00	7.07E+00	6.25E+00	5.52E+00	4.91E+00	
NB 98	1.35E+01	5.99E+00	2.65E+00	1.17E+00	5.19E-01	1.02E-01	8.78E-03	7.58E-04	6.61E-05	5.72E-06	4.92E-07	
M0 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	2.49E+00	2.42E+00	
TC 99M	6.69E-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	
M0101	1.05E+02	4.74E+01	2.75E+00	1.59E-01	9.25E-03	3.10E-05	6.02E-09	1.17E-12	2.28E-16	4.43E-20	8.63E-24	
TC101	4.43E+00	1.33E+02	1.45E+01	1.19E+00	8.68E-02	3.91E-04	9.78E-08	2.19E-11	4.65E-15	9.56E-19	1.93E-22	
M0102	8.83E+02	2.01E+01	4.58E-01	1.05E-02	2.39E-04	1.24E-07	1.48E-12	1.75E-17	2.07E-22	2.46E-27	2.92E-32	
TC102M	5.67E-01	1.70E+01	3.90E-01	8.91E-03	2.03E-04	1.05E-07	1.25E-12	1.48E-17	1.75E-22	2.08E-27	2.47E-32	
TC102	2.66E+03	1.01E+01	2.31E-01	5.25E-03	1.20E-04	6.26E-08	7.44E-13	8.83E-18	1.05E-22	1.24E-27	1.47E-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	1.48E-01	
RH103M	4.31E-09	7.75E-02	1.15E-01	1.33E-01	1.42E-01	1.48E-01	1.49E-01	1.49E-01	1.48E-01	1.48E-01	1.48E-01	
TC104	5.66E+01	4.06E+01	4.06E+00	4.02E-01	3.98E-02	3.92E-04	3.83E-07	3.74E-10	3.65E-13	3.57E-16	3.49E-19	
RU105	4.67E-01	1.62E+01	1.38E+01	1.18E+01	1.01E+01	7.40E+00	4.64E+00	2.90E+00	1.82E+00	1.14E+00	7.13E-01	
RH105M	3.07E-03	1.62E+01	1.39E+01	1.19E+01	1.01E+01	7.44E+00	4.64E+00	2.91E+00	1.82E+00	1.14E+00	7.13E-01	
RH105	5.05E-09	3.29E-01	6.11E-01	8.43E-01	1.04E+00	1.33E+00	1.59E+00	1.71E+00	1.74E+00	1.72E+00	1.68E+00	
RU106	4.09E-04	7.75E-03	7.75E-03									
RH106	4.43E-06	7.75E-03	7.75E-03									
RH107	1.05E-01	1.42E+01	2.15E+00	3.24E-01	4.89E-02	1.12E-03	3.84E-06	1.33E-08	4.56E-11	1.56E-146	1.55E-17	
PD107M	2.17E-04	2.89E+00	4.37E-01	6.60E-02	9.95E-03	2.27E-04	7.82E-07	2.70E-09	9.28E-12	3.20E-14	1.09E-16	

TSCHARLIE                                   MICROCURIES/SQ METER  
 1MMR/HR AT H+12 HOURS = 1,000  
 FRACTION OF REFRACTORIES PRESENT = 1,000  
 RELAXATION LENGTH = 0.16 GM/SQCM  
 BOMB FRACTION PER SQ. METER = 1.428E-13

## DEBRIS DECAY FROM 1 TO 21 HOURS

ZERO	TIME	1. 00E+00	2. 00E+00	3. 00E+00	4. 00E+00	5. 00E+00	6. 00E+00	7. 00E+00	8. 00E+00	9. 00E+00	1. 20E+01	1. 50E+01	1. 80E+01	2. 10E+01
0.08E-03	4.79E-01	4.79E-01	4.79E-01	4.79E-01	4.79E-01	4.79E-01	4.79E-01	4.79E-01	4.79E-01	4.79E-01	4.79E-01	4.79E-01	4.79E-01	4.79E-01
5.04E-01	5.70E-01	5.52E-01	5.34E-01	5.17E-01	4.99E-01	4.81E-01	4.63E-01	4.45E-01	4.27E-01	4.09E-01	3.91E-01	3.73E-01	3.55E-01	3.37E-01
5.47E-01	6.19E-01	6.36E-01	6.53E-01	6.70E-01	6.87E-01	7.04E-01	7.21E-01	7.38E-01	7.55E-01	7.72E-01	7.89E-01	8.06E-01	8.23E-01	8.40E-01
6.16E-01	6.21E-01	6.24E-01	6.27E-01	6.30E-01	6.33E-01	6.36E-01	6.39E-01	6.42E-01	6.45E-01	6.48E-01	6.51E-01	6.54E-01	6.57E-01	6.60E-01
6.51E-01	6.52E-01	6.53E-01	6.54E-01	6.55E-01	6.56E-01	6.57E-01	6.58E-01	6.59E-01	6.60E-01	6.61E-01	6.62E-01	6.63E-01	6.64E-01	6.65E-01
6.80E-01	6.81E-01	6.82E-01	6.83E-01	6.84E-01	6.85E-01	6.86E-01	6.87E-01	6.88E-01	6.89E-01	6.90E-01	6.91E-01	6.92E-01	6.93E-01	6.94E-01
7.02E-01	7.03E-01	7.04E-01	7.05E-01	7.06E-01	7.07E-01	7.08E-01	7.09E-01	7.10E-01	7.11E-01	7.12E-01	7.13E-01	7.14E-01	7.15E-01	7.16E-01
7.14E-01	7.15E-01	7.16E-01	7.17E-01	7.18E-01	7.19E-01	7.20E-01	7.21E-01	7.22E-01	7.23E-01	7.24E-01	7.25E-01	7.26E-01	7.27E-01	7.28E-01
7.28E-01	7.29E-01	7.30E-01	7.31E-01	7.32E-01	7.33E-01	7.34E-01	7.35E-01	7.36E-01	7.37E-01	7.38E-01	7.39E-01	7.40E-01	7.41E-01	7.42E-01
7.42E-01	7.43E-01	7.44E-01	7.45E-01	7.46E-01	7.47E-01	7.48E-01	7.49E-01	7.50E-01	7.51E-01	7.52E-01	7.53E-01	7.54E-01	7.55E-01	7.56E-01
7.56E-01	7.57E-01	7.58E-01	7.59E-01	7.60E-01	7.61E-01	7.62E-01	7.63E-01	7.64E-01	7.65E-01	7.66E-01	7.67E-01	7.68E-01	7.69E-01	7.70E-01
7.70E-01	7.71E-01	7.72E-01	7.73E-01	7.74E-01	7.75E-01	7.76E-01	7.77E-01	7.78E-01	7.79E-01	7.80E-01	7.81E-01	7.82E-01	7.83E-01	7.84E-01
7.84E-01	7.85E-01	7.86E-01	7.87E-01	7.88E-01	7.89E-01	7.90E-01	7.91E-01	7.92E-01	7.93E-01	7.94E-01	7.95E-01	7.96E-01	7.97E-01	7.98E-01
7.98E-01	7.99E-01	8.00E-01	8.01E-01	8.02E-01	8.03E-01	8.04E-01	8.05E-01	8.06E-01	8.07E-01	8.08E-01	8.09E-01	8.10E-01	8.11E-01	8.12E-01
8.12E-01	8.13E-01	8.14E-01	8.15E-01	8.16E-01	8.17E-01	8.18E-01	8.19E-01	8.20E-01	8.21E-01	8.22E-01	8.23E-01	8.24E-01	8.25E-01	8.26E-01
8.26E-01	8.27E-01	8.28E-01	8.29E-01	8.30E-01	8.31E-01	8.32E-01	8.33E-01	8.34E-01	8.35E-01	8.36E-01	8.37E-01	8.38E-01	8.39E-01	8.40E-01
8.40E-01	8.41E-01	8.42E-01	8.43E-01	8.44E-01	8.45E-01	8.46E-01	8.47E-01	8.48E-01	8.49E-01	8.50E-01	8.51E-01	8.52E-01	8.53E-01	8.54E-01
8.54E-01	8.55E-01	8.56E-01	8.57E-01	8.58E-01	8.59E-01	8.60E-01	8.61E-01	8.62E-01	8.63E-01	8.64E-01	8.65E-01	8.66E-01	8.67E-01	8.68E-01
8.68E-01	8.69E-01	8.70E-01	8.71E-01	8.72E-01	8.73E-01	8.74E-01	8.75E-01	8.76E-01	8.77E-01	8.78E-01	8.79E-01	8.80E-01	8.81E-01	8.82E-01
8.82E-01	8.83E-01	8.84E-01	8.85E-01	8.86E-01	8.87E-01	8.88E-01	8.89E-01	8.90E-01	8.91E-01	8.92E-01	8.93E-01	8.94E-01	8.95E-01	8.96E-01
8.96E-01	8.97E-01	8.98E-01	8.99E-01	9.00E-01	9.01E-01	9.02E-01	9.03E-01	9.04E-01	9.05E-01	9.06E-01	9.07E-01	9.08E-01	9.09E-01	9.10E-01
9.10E-01	9.11E-01	9.12E-01	9.13E-01	9.14E-01	9.15E-01	9.16E-01	9.17E-01	9.18E-01	9.19E-01	9.20E-01	9.21E-01	9.22E-01	9.23E-01	9.24E-01
9.24E-01	9.25E-01	9.26E-01	9.27E-01	9.28E-01	9.29E-01	9.30E-01	9.31E-01	9.32E-01	9.33E-01	9.34E-01	9.35E-01	9.36E-01	9.37E-01	9.38E-01
9.38E-01	9.39E-01	9.40E-01	9.41E-01	9.42E-01	9.43E-01	9.44E-01	9.45E-01	9.46E-01	9.47E-01	9.48E-01	9.49E-01	9.50E-01	9.51E-01	9.52E-01
9.52E-01	9.53E-01	9.54E-01	9.55E-01	9.56E-01	9.57E-01	9.58E-01	9.59E-01	9.60E-01	9.61E-01	9.62E-01	9.63E-01	9.64E-01	9.65E-01	9.66E-01
9.66E-01	9.67E-01	9.68E-01	9.69E-01	9.70E-01	9.71E-01	9.72E-01	9.73E-01	9.74E-01	9.75E-01	9.76E-01	9.77E-01	9.78E-01	9.79E-01	9.80E-01
9.80E-01	9.81E-01	9.82E-01	9.83E-01	9.84E-01	9.85E-01	9.86E-01	9.87E-01	9.88E-01	9.89E-01	9.90E-01	9.91E-01	9.92E-01	9.93E-01	9.94E-01
9.94E-01	9.95E-01	9.96E-01	9.97E-01	9.98E-01	9.99E-01	1.00E+00	1.01E+00	1.02E+00	1.03E+00	1.04E+00	1.05E+00	1.06E+00	1.07E+00	1.08E+00

PD109M  
 AG109M  
 PD111M  
 PG111M  
 AG111M  
 AG112M  
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 AG126M  
 AG127M  
 AG128M  
 AG129M  
 AG130M

TSCHARLIE                   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 = 1.428E-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	1.92E-02	1.81E-02	1.72E-02	1.62E-02	1.53E-02	1.37E-02	1.16E-02	9.80E-03	8.27E-03	7.01E-03	5.92E-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	9.27E-15
TE131M	7.65E-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	3.25E-01	3.03E-01
TE131	7.04E+01	7.65E+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	8.07E-01	1.96E+00	1.94E+00	1.93E+00	1.91E+00	1.87E+00	1.82E+00	1.78E+00	1.73E+00	1.68E+00	1.64E+00
I132	1.98E+00	1.98E+00	1.97E+00	1.96E+00	1.95E+00	1.92E+00	1.88E+00	1.83E+00	1.78E+00	1.74E+00	1.69E+00
TE133M	9.76E-02	3.38E+01	1.47E+01	6.41E+00	2.79E+00	5.30E-01	4.36E-02	3.60E-03	2.97E-04	2.45E-05	2.02E-06
TE133	5.49E+02	3.11E+01	3.46E+00	1.14E+00	4.83E-01	9.16E-02	7.58E-03	6.23E-04	5.16E-05	4.24E-06	3.50E-07
I133	8.51E-01	9.16E+00	9.90E+00	9.90E+00	9.72E+00	9.20E+00	8.37E+00	7.58E+00	6.83E+00	6.23E+00	5.62E+00
XE133M	3.62E-08	2.06E-03	4.97E-03	7.95E-03	1.08E-02	1.63E-02	2.36E-02	2.99E-02	3.52E-02	3.98E-02	4.36E-02
XE133	6.32E-07	3.60E-02	8.74E-02	1.39E-01	1.92E-01	2.90E-01	4.25E-01	5.44E-01	6.51E-01	7.44E-01	8.27E-01
TE134	1.73E+02	8.03E+01	2.99E+01	1.11E+01	4.13E+00	5.72E-01	2.92E-02	1.50E-03	7.67E-05	3.94E-06	2.02E-07
I134	7.94E+01	1.06E+02	7.44E+01	4.36E+01	2.34E+01	5.95E+00	6.54E-01	6.67E-02	6.54E-03	6.26E-04	5.95E-05
I135	1.44E+01	2.54E+01	2.29E+01	2.06E+01	1.86E+01	1.51E+01	1.11E+01	8.12E+00	5.97E+00	4.39E+00	3.21E+00
XE135M	1.59E-03	7.33E+00	7.13E+00	6.46E+00	5.80E+00	4.72E+00	3.47E+00	2.54E+00	1.86E+00	1.37E+00	1.00E+00
XE135	1.66E+00	3.29E+00	4.81E+00	6.05E+00	7.04E+00	8.45E+00	9.36E+00	9.40E+00	8.95E+00	8.16E+00	7.29E+00
CS136	5.29E-03	5.27E-03	5.26E-03	5.26E-03	5.24E-03	5.21E-03	5.18E-03	5.15E-03	5.11E-03	5.08E-03	5.04E-03
CS137	7.09E-05	7.64E-04									
BA137M	1.49E-07	7.13E-04									
XE138	5.42E+02	4.67E+01	4.06E+00	3.52E-01	3.04E-02	2.28E-04	1.48E-07	9.63E-11	6.26E-14	4.07E-17	2.64E-20
CS138	8.07E+01	1.36E+02	4.71E+01	1.38E+01	3.88E+00	2.95E-01	6.14E-03	1.27E-04	2.64E-06	5.51E-08	1.14E-09
CS139	5.21E+02	1.66E+01	2.09E-01	2.62E-03	3.29E-05	5.16E-09	1.03E-14	2.03E-20	4.02E-26	7.97E-32	1.57E-37
BA139	9.62E+00	1.07E+02	6.62E+01	4.02E+01	2.43E+01	8.92E+00	1.98E+00	4.40E-01	9.77E-02	2.17E-02	4.81E-03
BA140	9.90E-02	6.18E-01	6.18E-01	6.13E-01	6.13E-01	6.08E-01	6.08E-01	6.04E-01	5.99E-01	5.94E-01	5.89E-01
LA140	2.35E-07	1.06E-02	2.09E-02	3.11E-02	4.10E-02	6.04E-02	8.82E-02	1.14E-01	1.39E-01	1.62E-01	1.83E-01
BA141	1.89E+02	5.73E+01	5.68E+00	5.64E-01	5.59E-02	5.55E-04	5.41E-07	5.27E-10	5.14E-13	5.05E-16	4.91E-19
LA141	1.75E+00	3.71E+01	3.46E+01	2.93E+01	2.46E+01	1.72E+01	1.01E+01	5.91E+00	3.48E+00	2.04E+00	1.19E+00
CE141	2.16E-07	2.41E-02	5.64E-02	8.48E-02	1.09E-01	1.46E-01	1.81E-01	2.01E-01	2.13E-01	2.20E-01	2.23E-01
BA142	5.05E+02	2.01E+01	4.58E-01	1.04E-02	2.38E-04	1.24E-07	1.47E-12	1.74E-17	2.07E-22	2.45E-27	2.91E-32
LA142	1.16E+01	8.04E+01	5.30E+01	3.37E+01	2.15E+01	8.68E+00	2.24E+00	5.77E-01	1.49E-01	3.83E-02	9.88E-03
LA143	1.90E+02	3.70E+01	1.90E+00	9.74E-02	5.01E-03	1.31E-05	1.77E-09	2.38E-13	3.21E-17	4.33E-21	5.85E-25
CE143	7.57E-02	4.83E+00	5.01E+00	4.87E+00	4.78E+00	4.61E+00	4.31E+00	4.05E+00	3.80E+00	3.57E+00	3.35E+00
PR143	2.21E-08	7.40E-03	1.79E-02	2.82E-02	3.84E-02	5.80E-02	8.55E-02	1.12E-01	1.36E-01	1.58E-01	1.79E-01
CE144	3.03E-03	2.17E-02	2.17E-02	2.17E-02	2.17E-02	2.17E-02	2.16E-02	2.16E-02	2.16E-02	2.16E-02	2.16E-02
PR144	8.30E-07	1.97E-02	2.15E-02	2.16E-02	2.17E-02	2.17E-02	2.17E-02	2.17E-02	2.16E-02	2.16E-02	2.16E-02
PR145	1.22E-01	1.79E+01	1.59E+01	1.42E+01	1.27E+01	1.00E+01	7.06E+00	4.99E+00	3.53E+00	2.49E+00	1.76E+00
CE146	3.59E+02	1.84E+01	9.43E-01	4.82E-02	2.48E-03	6.54E-06	8.80E-10	1.19E-13	1.60E-17	2.15E-21	2.90E-25
PR146	7.42E+00	6.45E+01	1.46E+01	2.75E+00	4.94E-01	1.55E-02	8.59E-05	4.73E-07	2.62E-09	1.45E-11	7.92E-14
PR147	4.16E+01	1.20E+01	3.76E-01	1.17E-02	3.67E-04	3.59E-07	1.09E-11	3.34E-16	1.02E-20	3.12E-25	9.49E-30

TSCHARLIE                   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 = 1.428E-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	1.49E-05	2.79E-01	2.87E-01	2.87E-01	2.86E-01	2.85E-01	2.83E-01	2.80E-01	2.78E-01	2.76E-01	2.74E-01
ND149	2.16E+01	1.47E+01	9.98E+00	6.81E+00	4.61E+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	3.90E-01	4.93E-01	5.58E-01	6.28E-01	6.52E-01	6.40E-01	6.24E-01	5.99E-01	5.79E-01
PM150	2.49E-01	1.92E-01	1.49E-01	1.15E-01	8.88E-02	5.33E-02	2.47E-02	1.14E-02	5.29E-03	2.45E-03	1.13E-03
ND151	8.53E+01	2.67E+00	8.34E-02	2.61E-03	8.15E-05	7.96E-08	2.43E-12	7.43E-17	2.26E-21	6.90E-26	2.11E-30
PM151	5.41E-02	6.32E-01	6.36E-01	6.21E-01	6.06E-01	5.75E-01	5.33E-01	4.95E-01	4.61E-01	4.27E-01	3.96E-01
PM152	1.38E+02	1.35E-01	1.31E-04	1.28E-07	1.25E-10	1.20E-16	1.11E-25	1.04E-34	9.68E-44	9.04E-53	8.40E-62
SM153	1.85E-01	1.82E-01	1.79E-01	1.77E-01	1.74E-01	1.69E-01	1.62E-01	1.55E-01	1.48E-01	1.42E-01	1.36E-01
SM155	1.03E+01	1.70E+00	2.78E-01	4.55E-02	7.45E-03	2.01E-04	8.85E-07	3.90E-09	1.72E-11	7.66E-14	1.88E-16
EU155	7.59E-06	2.16E-04	2.51E-04	2.56E-04	2.57E-04						
SM156	1.80E-01	1.67E-01	1.55E-01	1.44E-01	1.34E-01	1.16E-01	9.27E-02	7.44E-02	5.97E-02	4.78E-02	3.82E-02
EU156	5.27E-04	8.60E-04	1.17E-03	1.45E-03	1.72E-03	2.19E-03	2.79E-03	3.23E-03	3.62E-03	3.90E-03	4.11E-03
EU157	2.93E-02	9.72E-02	9.27E-02	8.86E-02	8.45E-02	7.72E-02	6.74E-02	5.89E-02	5.13E-02	4.46E-02	3.89E-02
EU158	1.08E+00	4.38E-01	1.77E-01	7.17E-02	2.90E-02	4.75E-03	3.17E-04	2.10E-05	1.39E-06	9.25E-08	6.15E-09
EU159	1.31E+00	1.30E-01	1.29E-02	1.28E-03	1.27E-04	1.25E-06	1.22E-09	1.19E-12	1.16E-15	1.14E-18	1.11E-21
GD159	5.60E-03	2.45E-02	2.55E-02	2.47E-02	2.38E-02	2.20E-02	1.97E-02	1.75E-02	1.56E-02	1.39E-02	1.24E-02
TB161	7.12E-05	5.12E-04	5.09E-04	5.07E-04	5.06E-04	5.01E-04	4.95E-04	4.89E-04	4.82E-04	4.77E-04	4.70E-04
TOTAL	1.31E+04	2.67E+03	9.37E+02	5.49E+02	4.06E+02	2.83E+02	2.03E+02	1.59E+02	1.31E+02	1.11E+02	9.67E+01

TSCHARLIE                    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 = 1.428E-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	2.92E-07	2.89E-07	2.85E-07	2.74E-07	2.57E-07	2.25E-07	1.98E-07	1.52E-07	7.97E-08	2.16E-08	5.89E-09
* NA 24	6.60E-02	2.18E-02	7.18E-03	2.58E-04	1.01E-06	1.54E-11	2.35E-16	5.47E-26	0.	0.	0.
* MN 54	5.00E-06	4.96E-06	4.96E-06	4.87E-06	4.83E-06	4.74E-06	4.65E-06	4.43E-06	3.95E-06	3.14E-06	2.51E-06
* FF 55	8.85E-06	8.85E-06	8.85E-06	8.81E-06	8.79E-06	8.74E-06	8.65E-06	8.54E-06	8.21E-06	7.66E-06	7.11E-06
* FF 59	7.36E-06	7.25E-06	7.14E-06	6.82E-06	6.31E-06	5.41E-06	4.64E-06	3.41E-06	1.58E-06	3.38E-07	7.25E-08
* CO 57	5.98E-05	5.98E-05	5.93E-05	5.93E-05	5.84E-05	5.67E-05	5.53E-05	5.27E-05	4.65E-05	3.59E-05	2.78E-05
* CO 58	6.24E-04	6.19E-04	6.12E-04	5.94E-04	5.67E-04	5.14E-04	4.66E-04	3.84E-04	2.36E-04	8.94E-05	3.37E-05
* CO 60	1.50E-05	1.50E-05	1.50E-05	1.50E-05	1.49E-05	1.49E-05	1.48E-05	1.47E-05	1.43E-05	1.39E-05	1.34E-05
* CU 64	2.96E+00	8.05E-01	2.20E-01	4.46E-03	6.69E-06	1.52E-11	3.45E-17	1.77E-28	0.	0.	0.
* CU 67	3.11E-04	2.37E-04	1.81E-04	8.05E-05	2.10E-05	1.41E-06	9.54E-08	4.33E-10	6.06E-16	0.	0.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	7.50E-07	7.42E-07	7.30E-07	7.15E-07	6.84E-07	6.23E-07	5.68E-07	4.72E-07	2.98E-07	1.18E-07	4.70E-08
W187	9.51E-03	4.74E-03	2.35E-03	2.93E-04	9.01E-06	8.59E-09	8.11E-12	7.32E-20	0.	0.	0.
W188	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	1.14E-01	1.03E-01	9.30E-02	6.84E-02	4.09E-02	1.47E-02	5.26E-03	6.72E-04	3.97E-06	4.26E-10	2.88E-10
U240	4.22E+00	1.30E+00	3.98E-01	1.16E-02	3.17E-05	2.38E-10	1.79E-15	1.01E-25	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	1.53E-02	2.33E+01	1.73E+01	7.16E+00	1.64E+00	8.56E-02	4.48E-03	1.23E-05	4.83E-12	1.15E-21	1.15E-21
NP240M	6.67E-03	1.31E+00	4.02E-01	1.16E-02	3.20E-05	2.41E-10	1.81E-15	1.02E-25	0.	0.	0.
* AM241	6.76E-09										
* CM242	3.42E-07	3.40E-07	3.38E-07	3.35E-07	3.28E-07	3.13E-07	3.01E-07	2.76E-07	2.25E-07	1.46E-07	9.56E-08
GE 77	3.96E-03	2.49E-03	5.71E-04	6.89E-06	4.39E-09	1.77E-15	7.16E-22	1.17E-34	0.	0.	0.
AS 77	4.09E-05	6.04E-03	4.37E-03	1.26E-03	1.48E-04	2.01E-06	2.73E-08	5.03E-12	2.33E-21	5.00E-40	1.07E-58
SE 77M	1.61E-09	1.82E-05	1.31E-05	3.80E-06	4.43E-07	6.03E-09	8.19E-11	1.51E-14	7.00E-24	1.50E-42	3.23E-61
AS 78	1.11E-02	9.86E-05	2.89E-09	2.44E-23	0.	0.	0.	0.	0.	0.	0.
BR 82	3.65E-04	2.28E-04	1.42E-04	3.46E-05	3.28E-06	2.95E-08	2.65E-10	2.14E-14	1.25E-24	4.28E-45	1.46E-65
BR 83	2.78E-01	7.31E-03	7.35E-06	7.47E-15	7.62E-30	0.	0.	0.	0.	0.	0.
KR 83M	1.43E-05	3.20E-02	3.63E-05	3.26E-14	3.35E-29	0.	0.	0.	0.	0.	0.
KR 85M	3.29E-03	1.88E-01	4.28E-03	5.08E-08	3.13E-16	1.19E-32	4.51E-49	0.	0.	0.	0.
KR 85	3.40E-06	8.93E-05	9.10E-05	9.10E-05	9.10E-05	9.10E-05	9.10E-05	9.06E-05	8.97E-05	8.80E-05	8.66E-05
KR 87	5.48E+01	1.08E-04	2.14E-10	1.66E-27	0.	0.	0.	0.	0.	0.	0.
KR 88	3.11E+01	8.19E-02	2.15E-04	3.90E-12	4.91E-25	0.	0.	0.	0.	0.	0.
RB 88	7.91E+00	9.12E-02	2.40E-04	4.37E-12	5.47E-25	0.	0.	0.	0.	0.	0.
SR 89	2.91E-06	8.73E-02	8.60E-02	8.26E-02	7.75E-02	6.77E-02	5.92E-02	4.55E-02	2.33E-02	6.13E-03	1.62E-03
SR 90	5.85E-06	6.01E-04	5.96E-04	5.96E-04	5.90E-04						
Y 90	8.67E-12	1.38E-04	2.44E-04	4.38E-04	5.58E-04	5.96E-04	6.01E-04	6.01E-04	5.96E-04	5.96E-04	5.90E-04
SR 91	7.90E-01	2.83E+00	5.07E-01	2.91E-03	5.32E-07	1.80E-14	6.11E-22	6.96E-37	0.	0.	0.

TSCHARLIE                    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 = 1.428E-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	5.32E-05	1.83E+00	3.27E-01	1.88E-03	3.45E-07	1.16E-14	3.94E-22	4.49E-37	0.	0.	0.	0.
Y 91	2.18E-08	8.70E-02	1.03E-01	1.03E-01	9.69E-02	8.60E-02	7.65E-02	6.06E-02	3.35E-02	1.03E-02	3.18E-03	
SR 92	1.01E+01	1.26E-01	2.72E-04	2.74E-12	1.28E-25	0.	0.	0.	0.	0.	0.	
Y 92	4.67E-01	1.32E+00	1.47E-02	1.13E-08	6.60E-19	2.26E-39	7.73E-60	0.	0.	0.	0.	
Y 93	5.02E-01	3.39E+00	6.62E-01	4.97E-03	1.43E-06	1.18E-13	9.76E-21	6.66E-35	0.	0.	0.	
ZR 95	9.77E-04	1.22E-01	1.21E-01	1.17E-01	1.11E-01	9.94E-02	8.96E-02	7.24E-02	4.24E-02	1.46E-02	5.02E-03	
NB 95M	2.08E-11	4.14E-04	7.54E-04	1.44E-03	1.94E-03	2.05E-03	1.89E-03	1.53E-03	9.00E-04	3.10E-04	1.07E-04	
NB 95	1.09E-10	2.36E-03	4.67E-03	1.12E-02	2.08E-02	3.59E-02	4.63E-02	5.74E-02	5.53E-02	2.66E-02	1.02E-02	
ZR 97	2.38E+00	4.04E+00	1.52E+00	8.05E-02	6.05E-04	3.41E-08	1.91E-12	6.05E-21	3.41E-42	0.	0.	
NB 97M	1.22E-02	3.88E+00	1.46E+00	7.77E-02	5.80E-04	3.27E-08	1.84E-12	5.80E-21	3.28E-42	0.	0.	
NB 97	1.19E+00	4.06E+00	1.52E+00	8.09E-02	6.09E-04	3.67E-08	2.06E-12	6.54E-21	3.68E-42	0.	0.	
M0 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	6.69E-08	2.06E+00	1.73E+00	8.30E-01	2.39E-01	2.00E-02	1.67E-03	1.16E-05	4.72E-11	7.80E-22	1.28E-32	
RU103	6.46E-05	1.48E-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	1.48E-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	4.67E-01	4.47E-01	1.05E-02	1.38E-07	1.01E-15	5.39E-32	2.89E-48	0.	0.	0.	0.	
RH105M	3.07E-03	4.47E-01	1.05E-02	1.39E-07	1.01E-15	5.43E-32	2.90E-48	0.	0.	0.	0.	
RH105	5.05E-09	1.61E+00	1.05E+00	2.63E-01	2.59E-02	2.52E-04	2.45E-06	2.31E-10	2.00E-20	1.50E-40	1.13E-60	
RU106	4.09E-04	7.75E-03	7.71E-03	7.68E-03	7.61E-03	7.48E-03	7.31E-03	7.04E-03	6.40E-03	5.30E-03	4.39E-03	
RH106	4.43E-06	7.75E-03	7.71E-03	7.68E-03	7.61E-03	7.48E-03	7.31E-03	7.04E-03	6.40E-03	5.30E-03	4.39E-03	
PD109	6.08E-03	1.55E-01	4.51E-02	1.12E-03	2.36E-06	1.05E-11	4.68E-17	9.25E-28	0.	0.	0.	
AG109M	3.51E-05	1.55E-01	4.52E-02	1.12E-03	2.37E-06	1.05E-11	4.68E-17	9.27E-28	0.	0.	0.	
PD111M	7.34E-01	3.56E-02	1.73E-03	1.99E-07	5.37E-14	3.92E-27	2.88E-40	0.	0.	0.	0.	
PD111	2.61E-01	2.88E-02	1.39E-03	1.60E-07	4.33E-14	3.15E-27	2.31E-40	0.	0.	0.	0.	
AG111M	2.08E-03	3.75E-02	1.83E-03	2.10E-07	5.67E-14	4.16E-27	3.04E-40	0.	0.	0.	0.	
AG111	7.40E-10	2.04E-02	1.96E-02	1.49E-02	9.40E-03	3.73E-03	1.48E-03	2.33E-04	2.29E-06	2.22E-10	2.15E-14	
PD112	1.40E-01	6.35E-02	2.87E-02	2.67E-03	5.07E-05	1.84E-08	6.69E-12	8.78E-19	5.54E-36	0.	0.	
AG112	4.21E-06	7.38E-02	3.39E-02	3.15E-03	6.01E-05	2.17E-08	7.89E-12	1.04E-18	6.52E-36	0.	0.	
AG113	1.25E-03	1.33E-02	5.73E-04	4.66E-08	7.12E-15	1.67E-28	3.90E-42	0.	0.	0.	0.	
CD115M	3.52E-09	1.02E-04	1.00E-04	9.55E-05	8.83E-05	7.49E-05	6.40E-05	4.62E-05	2.07E-05	4.11E-06	8.21E-07	
CD115	1.36E-06	2.05E-02	1.50E-02	5.92E-03	1.25E-03	5.58E-05	2.49E-06	4.96E-09	8.76E-16	2.74E-29	8.59E-43	
IN115M	1.70E-11	2.16E-02	1.64E-02	6.47E-03	1.36E-03	6.09E-05	2.71E-06	5.41E-09	9.58E-16	3.00E-29	9.38E-43	
CD117	3.02E-02	6.59E-04	6.42E-07	5.99E-16	5.32E-31	0.	0.	0.	0.	0.	0.	
IN117M	1.45E-06	2.74E-03	3.17E-06	3.06E-15	2.72E-30	0.	0.	0.	0.	0.	0.	
IN117	5.85E-11	1.80E-03	2.14E-06	2.07E-15	1.84E-30	0.	0.	0.	0.	0.	0.	
SN121	6.16E-04	3.51E-02	1.90E-02	2.99E-03	1.37E-04	2.89E-07	6.09E-10	2.72E-15	1.13E-28	0.	0.	
SN123	3.32E-06	3.47E-04	3.44E-04	3.38E-04	3.29E-04	3.11E-04	2.95E-04	2.64E-04	2.00E-04	1.15E-04	6.61E-05	
SN125	9.43E-03	8.76E-03	8.15E-03	6.52E-03	4.50E-03	2.16E-03	1.03E-03	2.36E-04	5.91E-06	3.72E-09	2.33E-12	
SB125	5.66E-05	6.28E-05	6.87E-05	8.39E-05	1.03E-04	1.25E-04	1.34E-04	1.40E-04	1.37E-04	1.28E-04	1.19E-04	
SB126	1.76E-03	1.66E-03	1.57E-03	1.33E-03	1.01E-03	5.78E-04	3.34E-04	1.10E-04	6.87E-06	3.34E-08	6.70E-09	

TSCHARLIE                    MICRORCURIES/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 = 1.428E-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
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SN127	2.46E+00	8.92E-04	3.24E-07	1.55E-17	9.71E-35	0.	0.	0.	0.	0.
SB127	2.87E-02	1.18E-01	9.87E-02	5.76E-02	2.36E-02	3.94E-03	6.59E-04	1.84E-05	2.40E-09	4.10E-17
TE127M	2.32E-10	1.80E-04	3.29E-04	6.39E-04	8.84E-04	9.75E-04	9.39E-04	8.33E-04	6.08E-04	3.21E-04
TE127	1.62E-02	8.44E-02	8.29E-02	5.05E-02	2.13E-02	4.38E-03	1.50E-03	8.41E-04	6.00E-04	3.17E-04
SB128	6.98E-01	1.19E-01	1.88E-02	7.34E-05	7.12E-09	6.68E-17	6.28E-25	5.53E-41	0.	0.
SB129	3.97E+00	2.03E-01	4.24E-03	3.86E-08	1.54E-16	2.42E-33	3.82E-50	0.	0.	0.
TE129M	7.50E-08	7.90E-03	7.90E-03	7.45E-03	6.74E-03	5.49E-03	4.46E-03	2.97E-03	1.07E-03	1.40E-04
TE129	2.86E+00	2.38E-01	9.91E-03	4.78E-03	4.31E-03	3.51E-03	2.87E-03	1.91E-03	6.87E-04	8.97E-05
I130	1.92E-02	5.01E-03	1.31E-03	2.34E-05	2.86E-08	4.26E-14	6.36E-20	1.42E-31	0.	0.
TE131M	7.65E-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.
TE131	7.04E+01	4.88E-02	2.80E-02	5.32E-03	3.32E-04	1.30E-06	5.06E-09	7.75E-14	7.04E-26	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
XE131M	2.77E-11	2.56E-04	4.86E-04	1.01E-03	1.45E-03	1.43E-03	1.06E-03	4.39E-04	2.93E-05	8.76E-08
TE132	8.07E-01	1.60E+00	1.29E+00	6.80E-01	2.34E-01	2.78E-02	3.29E-03	4.62E-05	1.08E-09	5.92E-19
I132	1.98E+00	1.65E+00	1.33E+00	6.99E-01	2.42E-01	2.86E-02	3.39E-03	4.76E-05	1.12E-09	6.07E-19
I133	8.51E-01	4.74E+00	2.14E+00	1.98E-01	3.78E-03	1.37E-06	4.97E-10	6.55E-17	4.12E-34	0.
XE133M	3.62E-08	4.48E-02	5.30E-02	3.11E-02	7.30E-03	3.43E-04	1.59E-05	3.46E-08	7.58E-15	3.62E-28
XE133	6.32E-07	8.60E-01	1.15E+00	1.03E+00	5.62E-01	1.52E-01	4.09E-02	2.94E-03	4.10E-06	7.95E-12
I135	1.44E+01	2.35E+00	1.96E-01	1.14E-04	4.64E-10	7.66E-21	1.26E-31	3.42E-53	0.	0.
XE135M	1.59E-03	7.33E-01	6.13E-02	3.57E-05	1.45E-10	2.39E-21	3.93E-32	1.07E-53	0.	0.
XE135	1.66E+00	6.34E+00	1.55E+00	8.86E-03	1.09E-06	1.52E-14	2.14E-22	4.23E-38	0.	0.
CS136	5.29E-03	5.01E-03	4.75E-03	4.05E-03	3.10E-03	1.82E-03	1.07E-03	3.68E-04	2.56E-05	1.23E-07
CS137	7.09E-05	7.64E-04	7.60E-04	7.55E-04						
BA137M	1.49E-07	7.13E-04	7.09E-04	7.04E-04						
BA139	9.62E+00	1.03E-03	6.06E-09	1.25E-24	0.	0.	0.	0.	0.	0.
BA140	9.90E-02	5.85E-01	5.56E-01	4.72E-01	3.60E-01	2.09E-01	1.22E-01	4.13E-02	2.75E-03	1.23E-05
LA140	2.35E-07	2.04E-01	3.28E-01	4.53E-01	4.03E-01	2.41E-01	1.40E-01	4.76E-02	3.16E-03	1.41E-05
LA141	1.75E+00	6.94E-01	9.74E-03	2.70E-08	1.47E-17	4.40E-36	1.31E-54	0.	0.	0.
CE141	2.16E-07	2.40E-01	2.38E-01	2.24E-01	2.01E-01	1.62E-01	1.31E-01	8.52E-02	2.93E-02	3.44E-03
LA142	1.16E+01	2.54E-03	4.92E-08	3.62E-22	0.	0.	0.	0.	0.	0.
CE143	7.57E-02	3.11E+00	1.88E+00	4.15E-01	3.34E-02	2.16E-04	1.40E-06	5.85E-11	6.60E-22	0.
PR143	2.21E-08	1.99E-01	3.10E-01	4.00E-01	3.43E-01	2.09E-01	1.26E-01	4.56E-02	3.65E-03	2.32E-05
CE144	3.03E-03	2.16E-02	2.15E-02	2.14E-02	2.11E-02	2.06E-02	2.01E-02	1.92E-02	1.70E-02	1.33E-02
PR144	8.30E-07	2.16E-02	2.15E-02	2.14E-02	2.11E-02	2.06E-02	2.01E-02	1.92E-02	1.70E-02	1.33E-02
PR145	1.22E-01	1.25E+00	7.71E-02	1.83E-05	1.67E-11	1.38E-23	1.15E-35	0.	0.	0.
ND147	1.49E-05	2.50E-01	2.35E-01	1.95E-01	1.42E-01	7.64E-02	4.08E-02	1.17E-02	5.14E-04	1.00E-06
PM147	4.12E-14	1.87E-04	3.62E-04	8.26E-04	1.43E-03	2.18E-03	2.57E-03	2.87E-03	2.90E-03	2.70E-03
ND149	2.16E+01	2.09E-03	2.02E-07	1.84E-19	1.57E-39	0.	0.	0.	0.	0.
PM149	3.00E-03	5.54E-01	4.06E-01	1.59E-01	3.31E-02	1.44E-03	6.28E-05	1.19E-07	1.88E-14	4.65E-28
PM150	2.49E-01	5.25E-04	1.11E-06	1.04E-14	4.34E-28	0.	0.	0.	0.	0.

TSCHARLIE                   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 = 1.428E-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
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PM151	5.41E-02	3.69E-01	2.03E-01	3.43E-02	1.76E-03	4.61E-06	1.22E-08	8.38E-14	1.05E-26	0.	0.
SM153	1.85E-01	1.30E-01	9.11E-02	3.15E-02	5.35E-03	1.56E-04	4.52E-06	3.80E-09	7.83E-17	3.34E-32	1.42E-47
SM156	1.80E-01	3.07E-02	5.24E-03	2.58E-05	3.72E-09	7.64E-17	1.58E-24	6.71E-40	0.	0.	0.
EU155	7.59E-06	2.57E-04	2.57E-04	2.56E-04	2.55E-04	2.54E-04	2.52E-04	2.47E-04	2.37E-04	2.28E-04	
EU156	5.27E-04	4.29E-03	4.75E-03	4.26E-03	3.38E-03	2.13E-03	1.34E-03	5.32E-04	5.27E-05	5.19E-07	5.11E-09
EU157	2.93E-02	3.39E-02	1.14E-02	4.27E-04	1.79E-06	3.16E-11	5.60E-16	1.74E-25	0.	0.	0.
GD159	5.60E-03	1.10E-02	4.39E-03	2.74E-04	2.69E-06	2.61E-10	2.53E-14	2.37E-22	2.03E-42	0.	0.
TB161	7.12E-05	4.65E-04	4.20E-04	3.11E-04	1.88E-04	6.89E-05	2.52E-05	3.38E-06	2.23E-08	9.66E-13	4.20E-17
<b>TOTAL</b>	<b>2.64E+02</b>	<b>8.46E+01</b>	<b>4.31E+01</b>	<b>1.58E+01</b>	<b>5.75E+00</b>	<b>1.96E+00</b>	<b>1.20E+00</b>	<b>6.74E-01</b>	<b>3.03E-01</b>	<b>1.15E-01</b>	<b>5.78E-02</b>

TSCHARLIE                    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 = 1.428E-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	2.92E-07	2.52E-09	2.35E-10	2.18E-11	1.75E-14	1.40E-17	1.05E-21	6.73E-28	0	0	0
* MN	54	5.00E-06	2.16E-06	1.42E-06	9.34E-07	2.67E-07	7.61E-08	1.43E-08	1.17E-09	2.75E-13	9.96E-19	3.60E-24
* FE	55	7.36E-06	2.66E-08	1.59E-09	9.58E-11	2.08E-14	4.49E-18	5.85E-23	2.74E-30	0	0	0
* CD	57	5.98E-05	2.36E-05	1.47E-05	9.25E-06	2.28E-06	5.62E-07	8.68E-09	5.27E-09	4.60E-13	3.78E-19	0
* CD	58	6.24E-04	1.79E-05	3.04E-06	5.15E-07	2.51E-09	1.22E-11	1.01E-14	2.39E-19	9.14E-35	0	0
* CD	60	1.50E-05	1.31E-05	1.14E-05	9.39E-06	7.71E-06	5.92E-06	3.99E-06	1.07E-06	1.49E-07	2.05E-08	0
W181	0	0	0	0	0	0	0	0	0	0	0	0
W185	7.50E-07	2.58E-08	4.77E-09	8.84E-10	5.63E-12	3.59E-14	4.23E-17	1.72E-21	0	0	0	0
W188	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	1.14E-01	2.85E-10	2.78E-10	2.70E-10	2.53E-10	2.35E-10	2.13E-10	1.85E-10	1.15E-10	5.65E-11	2.78E-11	0
* AM241	6.76E-09	6.76E-09	6.76E-09	6.76E-09	6.79E-09	6.82E-09	6.82E-09	6.85E-09	6.88E-09	6.82E-09	6.73E-09	0
* CM242	3.42E-07	7.24E-08	3.33E-08	1.53E-08	1.49E-09	1.45E-10	6.52E-12	6.16E-14	1.77E-18	1.65E-18	1.54E-18	0
KR	85	3.40E-06	8.45E-05	8.18E-05	7.92E-05	7.22E-05	6.52E-05	5.73E-05	4.73E-05	2.50E-05	9.54E-06	3.65E-06
SR	89	2.91E-06	6.81E-04	5.96E-05	5.24E-06	3.52E-09	2.38E-12	1.40E-16	6.38E-23	4.64E-44	0	0
SR	90	5.85E-06	5.85E-04	5.80E-04	5.74E-04	5.53E-04	5.32E-04	5.06E-04	4.70E-04	3.67E-04	5.4E-04	1.75E-04
Y	90	8.67E-12	5.85E-04	5.80E-04	5.74E-04	5.53E-04	5.32E-04	5.06E-04	4.70E-04	3.67E-04	5.4E-04	1.75E-04
Y	91	2.18E-08	1.47E-03	1.71E-04	1.99E-05	3.12E-08	4.89E-11	8.95E-15	1.2E-20	4.44E-39	0	0
ZR	95M	9.77E-04	2.51E-03	3.58E-04	5.10E-05	1.49E-07	4.33E-10	1.79E-13	1.51E-18	1.85E-35	0	0
NB	95M	2.08E-11	5.32E-05	7.59E-06	1.08E-06	3.15E-09	9.17E-12	3.80E-15	3.21E-20	3.93E-37	0	0
NB	95	1.09E-10	5.40E-03	7.76E-04	1.11E-04	3.21E-07	9.30E-10	3.88E-13	3.28E-18	4.02E-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	0
RH103M	4.31E-09	2.52E-04	1.03E-05	4.23E-07	2.89E-11	1.98E-15	5.55E-21	2.61E-29	0	0	0	0
RU106	4.09E-04	3.89E-03	2.75E-03	1.95E-03	6.94E-04	2.46E-04	6.20E-05	7.85E-06	7.91E-09	2.54E-13	8.18E-18	0
RH106	4.43E-06	3.89E-03	2.75E-03	1.95E-03	6.94E-04	2.46E-04	6.20E-05	7.85E-06	7.91E-09	2.54E-13	8.18E-18	0
SN123	3.32E-06	4.60E-05	1.67E-05	6.06E-06	2.91E-07	1.39E-08	2.43E-10	5.60E-13	6.98E-22	5.79E-35	3.72E-48	0
SB125	5.66E-05	1.14E-04	1.00E-04	8.81E-05	6.01E-05	4.09E-05	2.44E-05	1.13E-05	8.69E-07	1.85E-08	3.94E-10	0
TE125M	1.52E-12	4.65E-05	4.14E-05	3.64E-05	2.49E-05	1.69E-05	1.01E-05	4.68E-06	3.59E-07	7.66E-09	1.63E-10	0
TE127M	2.32E-10	1.11E-04	3.48E-05	1.09E-05	3.35E-07	1.03E-08	9.90E-11	9.31E-14	7.66E-24	5.72E-39	4.26E-54	0
TE127	1.62E-02	1.10E-04	3.44E-05	1.08E-05	3.31E-07	1.02E-08	9.79E-11	9.23E-14	7.58E-24	5.64E-39	4.22E-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	2.16E-07	9.33E-05	1.88E-06	3.77E-08	3.07E-13	2.50E-18	4.10E-25	2.72E-35	0	0	0	0
CE144	3.03E-03	8.89E-03	5.71E-03	3.65E-03	9.57E-04	2.52E-04	4.23E-05	2.92E-06	3.93E-10	6.17E-16	9.62E-22	0
PR144	8.30E-07	8.89E-03	5.71E-03	3.65E-03	9.57E-04	2.52E-04	4.23E-05	2.92E-06	3.93E-10	6.17E-16	9.62E-22	0
PM147	4.12E-14	2.39E-03	2.10E-03	1.84E-03	1.23E-03	8.30E-04	4.88E-04	2.21E-04	1.57E-05	2.97E-07	5.62E-09	0
EU155	7.59E-06	2.22E-04	2.06E-04	1.92E-04	1.55E-04	1.24E-04	9.26E-05	5.98E-05	1.40E-05	1.57E-06	1.77E-07	0

TOTAL 1.36E-01 4.21E-02 2.36E-02 1.62E-02 7.33E-03 4.46E-03 3.16E-03 2.49E-03 1.72E-03 1.18E-03 8.21E-04

**APPENDIX D**  
**DETAILED RESULTS FOR EVENT DOG**

TSDOG			
	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 = 2.436E-13		
TIME	MR/HR	MICROCURIES/SQ METER	
ZERO TIME HOURS	1.04E+02	1.13E+04	
1.00E+00	3.15E+01	2.38E+03	
2.00E+00	1.26E+01	8.92E+02	
3.00E+00	6.92E+00	5.42E+02	
4.00E+00	4.42E+00	4.02E+02	
6.00E+00	2.38E+00	2.77E+02	
9.00E+00	1.39E+00	1.94E+02	
1.20E+01	1.00E+00	1.49E+02	
1.50E+01	7.80E-01	1.20E+02	
1.80E+01	6.36E-01	1.00E+02	
2.10E+01	5.34E-01	8.59E+01	
1.00E+00 DAYS	4.51E-01	7.40E+01	
2.00E+00	2.03E-01	3.54E+01	
5.00E+00	7.44E-02	1.28E+01	
1.00E+01	3.41E-02	5.15E+00	
2.00E+01	1.41E-02	1.98E+00	
5.00E+01	8.37E-03	1.23E+00	
6.00E+01	4.13E-03	6.95E-01	
1.00E+02	1.65E-03	3.13E-01	
2.00E+02	6.02E-04	1.18E-01	
5.00E+02	2.34E-04	5.98E-02	
1.00E+00 YEARS	1.33E-04	4.36E-02	
1.50E+00	3.82E-05	2.45E-02	
2.00E+00	2.11E-05	1.69E-02	
3.50E+00	1.16E-05	7.73E-03	
6.00E+00	8.81E-06	4.74E-03	
7.00E+00	7.29E-06	3.34E-03	
1.00E+01	6.29E-06	2.61E-03	
2.00E+01	4.66E-06	1.77E-03	
3.50E+01	3.26E-06	1.21E-03	
6.00E+01	2.30E-06	8.42E-04	

TSDOG 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 = 2.436E-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	3.05E-07	3.05E-07	3.05E-07	3.05E-07	3.05E-07	3.04E-07	3.04E-07	3.03E-07	3.03E-07	3.02E-07	3.02E-07
* NA 24	2.30E-02	2.20E-02	2.10E-02	2.00E-02	1.91E-02	1.74E-02	1.52E-02	1.32E-02	1.15E-02	1.00E-02	8.70E-03
* MN 54	2.09E-05	2.07E-05	2.07E-05	2.07E-05	2.07E-05						
* FE 55	3.70E-05										
* FE 59	3.08E-05	3.07E-05	3.07E-05	3.07E-05	3.07E-05	3.07E-05	3.06E-05	3.06E-05	3.05E-05	3.04E-05	3.04E-05
CD 57	1.69E-05										
CD 58	3.26E-03	3.26E-03	3.26E-03	3.26E-03	3.26E-03	3.26E-03	3.25E-03	3.25E-03	3.24E-03	3.24E-03	3.23E-03
* CD 60	1.56E-05										
* CU 64	2.40E+00	2.27E+00	2.15E+00	2.04E+00	1.93E+00	1.74E+00	1.47E+00	1.25E+00	1.07E+00	9.07E-01	7.71E-01
* CU 67	1.08E-04	1.07E-04	1.06E-04	1.05E-04	1.04E-04	1.01E-04	9.72E-05	9.44E-05	9.14E-05	8.79E-05	8.54E-05
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W188	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	1.30E-01	1.30E-01	1.29E-01	1.28E-01	1.28E-01	1.27E-01	1.25E-01	1.24E-01	1.22E-01	1.20E-01	1.19E-01
U239	2.37E+03	4.05E+02	6.91E+01	1.18E+01	2.00E+00	5.82E-02	2.89E-04	1.42E-06	7.05E-09	3.49E-11	1.72E-13
U240	7.59E-01	7.23E-01	6.89E-01	6.56E-01	6.24E-01	5.65E-01	4.88E-01	4.20E-01	3.63E-01	3.13E-01	2.70E-01
NP239	8.12E-03	1.36E+01	1.57E+01	1.60E+01	1.59E+01	1.55E+01	1.49E+01	1.44E+01	1.39E+01	1.34E+01	1.29E+01
NP240M	1.20E-03	7.26E-01	6.94E-01	6.61E-01	6.30E-01	5.70E-01	4.92E-01	4.25E-01	3.66E-01	3.16E-01	2.73E-01
NP240	3.04E-11	1.56E-11	8.12E-12	4.19E-12	2.17E-12	5.80E-13	7.99E-14	1.10E-14	1.52E-15	2.09E-16	2.90E-17
* AM241	1.18E-08										
* CM242	3.75E-70	3.75E-70	3.75E-70	3.75E-70	3.75E-70	3.75E-70	3.73E-70	3.73E-70	3.73E-70	3.73E-70	3.73E-70
GE 75	1.19E-05	5.76E-02	3.47E-02	2.09E-02	1.26E-02	4.56E-03	9.95E-04	2.18E-04	4.76E-05	1.04E-05	2.27E-06
GE 77	5.87E-03	1.51E-02	1.42E-02	1.34E-02	1.26E-02	1.11E-02	9.26E-03	7.69E-03	6.41E-03	5.32E-03	4.43E-03
AS 77	6.06E-05	9.58E-03	9.69E-03	9.76E-03	9.82E-03	9.89E-03	9.89E-03	9.82E-03	9.67E-03	9.47E-03	9.23E-03
SE 77M	2.39E-09	2.87E-05	2.91E-05	2.93E-05	2.93E-05	2.96E-05	2.98E-05	2.96E-05	2.91E-05	2.85E-05	2.76E-05
GE 78	7.95E-01	4.97E-01	3.09E-01	1.93E-01	1.21E-01	4.69E-02	1.14E-02	2.76E-03	6.73E-04	1.64E-04	3.97E-05
AS 78	1.43E-02	2.37E-01	2.92E-01	2.74E-01	2.29E-01	1.35E-01	5.02E-02	1.67E-02	5.16E-03	1.54E-03	4.47E-04
AS 79	1.45E+01	1.43E-01	1.41E-03	1.38E-05	1.36E-07	1.32E-11	1.26E-17	1.20E-23	1.15E-29	1.09E-35	1.04E-41
SE 79M	2.14E-02	2.52E-01	2.48E-03	2.45E-05	2.41E-07	2.33E-11	2.22E-17	2.12E-23	2.02E-29	1.93E-35	1.84E-41
BR 80	8.54E-02	8.06E-03	7.57E-04	7.12E-05	6.71E-06	5.95E-08	4.98E-11	4.15E-14	3.46E-17	2.89E-20	2.41E-23
SE 81M	6.77E-02	3.16E+00	1.53E+00	7.33E-01	3.53E-01	8.24E-02	9.22E-03	1.03E-03	1.16E-04	1.30E-05	1.46E-06
SE 81	8.27E-01	3.74E+00	2.16E+00	1.08E+00	5.24E-01	1.22E-01	1.37E-02	1.53E-03	1.72E-04	1.93E-05	2.16E-06
BR 82	3.94E-04	3.87E-04	3.79E-04	3.72E-04	3.64E-04	3.50E-04	3.30E-04	3.11E-04	2.94E-04	2.77E-04	2.61E-04
SE 83	3.60E+01	6.83E+00	1.29E+00	2.45E-01	4.64E-02	1.67E-03	1.13E-05	7.71E-08	5.27E-10	3.57E-12	2.27E-14
BR 83	2.99E-01	4.47E+00	4.13E+00	3.25E+00	2.47E+00	1.39E+00	5.90E-01	2.48E-01	1.05E-01	4.42E-02	1.87E-02
KR 83M	1.55E-05	1.01E+00	2.06E+00	2.57E+00	2.65E+00	2.21E+00	1.30E+00	6.70E-01	3.23E-01	1.49E-01	6.70E-02

TSDOG 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 = 2.436E-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	7.49E-02	1.29E+01	3.49E+00	9.46E-01	2.55E-01	1.87E-02	3.69E-04	7.29E-06	1.44E-07	2.85E-09	5.64E-11
KR 85M	3.52E-03	7.54E+00	6.42E+00	5.48E+00	4.68E+00	3.42E+00	2.13E+00	1.33E+00	8.29E-01	5.15E-01	3.22E-01
KR 87	5.69E+01	3.28E+01	1.90E+01	1.10E+01	6.34E+00	2.13E+00	4.12E-01	7.98E-02	1.55E-02	2.99E-03	5.79E-04
KR 88	3.26E+01	2.54E+01	1.98E+01	1.55E+01	1.21E+01	7.35E+00	3.51E+00	1.67E+00	7.93E-01	3.78E-01	1.80E-01
RB 88	8.28E+00	2.57E+01	2.19E+01	1.73E+01	1.35E+01	8.23E+00	3.93E+00	1.87E+00	8.91E-01	4.24E-01	2.01E-01
RB 89	3.95E+01	3.71E+01	2.50E+00	1.68E-01	1.12E-02	5.09E-05	1.54E-08	4.64E-12	1.42E-15	4.29E-19	1.30E-22
SR 89	3.03E-06	1.06E-01	1.13E-01	1.12E-01	1.12E-01						
SR 90	5.97E-06	6.13E-04									
SR 91	8.09E-01	1.51E+01	1.41E+01	1.31E+01	1.22E+01	1.05E+01	8.50E+00	6.87E+00	5.55E+00	4.45E+00	3.59E+00
Y 91M	5.45E-05	5.19E+00	7.08E+00	7.59E+00	7.48E+00	6.72E+00	5.50E+00	4.42E+00	3.57E+00	2.88E+00	2.32E+00
Y 91	2.23E-08	4.62E-03	1.06E-02	1.70E-02	2.32E-02	3.48E-02	4.94E-02	6.11E-02	7.08E-02	7.84E-02	8.45E-02
SR 92	1.04E+01	4.64E+01	3.60E+01	2.79E+01	2.16E+01	1.29E+01	6.00E+00	2.79E+00	1.29E+00	6.00E-01	2.79E-01
Y 92	4.79E-01	9.77E+00	1.53E+01	1.82E+01	1.93E+01	1.84E+01	1.41E+01	9.63E+00	6.19E+00	3.81E+00	2.30E+00
SR 93	4.21E+02	7.24E+00	4.00E-02	2.21E-04	1.22E-06	3.73E-11	6.28E-18	1.06E-24	1.79E-31	3.02E-38	5.08E-45
Y 93	5.13E-01	1.66E+01	1.56E+01	1.46E+01	1.36E+01	1.19E+01	9.69E+00	7.91E+00	6.43E+00	5.28E+00	4.29E+00
Y 94	6.13E+01	8.38E+01	1.08E+01	1.39E+00	1.79E-01	2.98E-03	6.38E-06	1.37E-08	2.93E-11	6.38E-14	3.54E-15
Y 95	2.65E+02	2.50E+01	5.51E-01	1.22E-02	2.68E-04	1.30E-07	1.39E-12	1.49E-17	1.59E-22	1.70E-27	1.81E-32
ZR 95	9.97E-04	1.30E-01	1.33E-01	1.33E-01	1.33E-01	1.33E-01	1.33E-01	1.32E-01	1.32E-01	1.32E-01	1.32E-01
NB 95	1.11E-10	8.04E-05	1.88E-04	2.95E-04	4.02E-04	6.16E-04	9.36E-04	1.26E-03	1.57E-03	1.89E-03	2.21E-03
ZR 97	2.44E+00	1.06E+01	1.01E+01	9.77E+00	9.35E+00	8.63E+00	7.63E+00	6.75E+00	5.99E+00	5.28E+00	4.69E+00
NB 97M	1.25E-02	1.02E+01	9.77E+00	9.39E+00	9.01E+00	8.30E+00	7.34E+00	6.50E+00	5.74E+00	5.07E+00	4.49E+00
NB 97	1.22E+00	5.32E+00	7.50E+00	8.55E+00	8.97E+00	8.93E+00	8.13E+00	7.25E+00	6.41E+00	5.66E+00	5.03E+00
NB 98	1.39E+01	6.14E+02	2.72E+00	1.20E+00	5.32E-01	1.04E-01	9.01E-03	7.78E-04	6.78E-05	5.87E-06	5.05E-07
M0 99	7.38E-03	3.05E+00	3.01E+00	2.98E+00	2.95E+00	2.89E+00	2.81E+00	2.72E+00	2.64E+00	2.56E+00	2.48E+00
TC 99M	6.86E-08	2.90E-01	5.45E-01	7.71E-01	9.68E-01	1.29E+00	1.64E+00	1.86E+00	2.00E+00	2.07E+00	2.11E+00
M0101	1.08E+02	4.86E+01	2.82E+00	1.63E-01	9.49E-03	3.18E-05	6.17E-09	1.20E-12	2.34E-16	4.54E-20	8.85E-24
TC101	4.54E+00	1.36E+02	1.49E+01	1.22E+00	8.90E-02	4.01E-04	1.00E-07	2.25E-11	4.77E-15	9.80E-19	1.98E-22
M0102	9.08E+02	2.07E+01	4.71E-01	1.08E-02	2.46E-04	1.28E-07	1.52E-12	1.80E-17	2.13E-22	2.53E-27	3.01E-32
TC102M	5.84E-01	1.75E+01	4.01E-01	9.17E-03	2.09E-04	1.08E-07	1.28E-12	1.52E-17	1.80E-22	2.14E-27	2.54E-32
TC102	2.73E+03	1.04E+01	2.38E-01	5.40E-03	1.24E-04	6.44E-08	7.65E-13	9.08E-18	1.08E-22	1.28E-27	1.51E-32
RU103	6.63E-05	1.54E-01	1.53E-01	1.53E-01	1.53E-01	1.53E-01	1.53E-01	1.53E-01	1.52E-01	1.52E-01	1.51E-01
RH103M	4.42E-09	7.95E-02	1.18E-01	1.36E-01	1.45E-01	1.51E-01	1.53E-01	1.53E-01	1.52E-01	1.52E-01	1.52E-01
TC104	5.84E+01	4.19E+01	4.19E+00	4.15E-01	4.11E-02	4.04E-04	3.95E-07	3.86E-10	3.77E-13	3.68E-16	3.60E-19
RU105	4.92E-01	1.70E+01	1.45E+01	1.25E+01	1.07E+01	7.79E+00	4.88E+00	3.05E+00	1.91E+00	1.20E+00	7.51E-01
RH105M	3.24E-03	1.71E+01	1.46E+01	1.25E+01	1.07E+01	7.83E+00	4.88E+00	3.06E+00	1.92E+00	1.20E+00	7.51E-01
RH105	5.31E-09	3.46E-01	6.43E-01	8.87E-01	1.09E+00	1.40E+00	1.67E+00	1.80E+00	1.83E+00	1.81E+00	1.77E+00
RU106	4.33E-04	8.19E-03									
RH106	4.68E-06	8.19E-03									
RH107	1.26E-01	1.72E+01	2.60E+00	3.92E-01	5.91E-02	1.35E-03	4.65E-06	1.60E-08	5.51E-11	1.89E-14	1.88E-17
PD107M	2.63E-04	3.50E+00	5.28E-01	7.98E-02	1.20E-02	2.75E-04	9.46E-07	3.26E-09	1.12E-11	3.87E-14	1.32E-16

TSDOG MICROCURIES/SQ METER  
 MR/HR AT H+12 HOURS = 1,000  
 FRACTION OF REFRACTORIES PRESENT = 1,000  
 RELAXATION LENGTH = 0.16 GM/SQCM  
 RCMR FRACTION PER SQ METER = 2.136E-13

DEBRIS DECAY ESRM 1 TA 21 HANIBS

TSD8G 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 = 2.436E-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	2.24E-02	2.12E-02	2.01E-02	1.89E-02	1.79E-02	1.60E-02	1.35E-02	1.15E-02	9.68E-03	8.20E-03	6.93E-03
SB131	1.72E+02	4.48E+01	7.32E+00	1.20E+00	1.97E-01	5.31E-03	2.34E-05	1.03E-07	4.55E-10	2.01E-12	1.00E-14
TE131M	8.25E-05	4.32E-01	4.92E-01	4.93E-01	4.84E-01	4.62E-01	4.31E-01	4.02E-01	3.75E-01	3.50E-01	3.27E-01
TE131	7.60E+01	8.25E+01	2.69E+01	6.99E+00	1.70E+00	1.60E-01	7.92E-02	7.32E-02	6.83E-02	6.39E-02	5.96E-02
I131	1.10E-02	3.83E-01	5.63E-01	6.18E-01	6.28E-01	6.34E-01	6.34E-01	6.28E-01	6.28E-01	6.23E-01	6.23E-01
TE132	8.33E-01	2.02E+00	2.00E+00	1.99E+00	1.97E+00	1.93E+00	1.88E+00	1.83E+00	1.79E+00	1.74E+00	1.69E+00
I132	2.04E+00	2.04E+00	2.03E+00	2.02E+00	2.01E+00	1.98E+00	1.94E+00	1.89E+00	1.84E+00	1.79E+00	1.75E+00
TE133M	9.98E-02	3.46E+01	1.51E+01	6.56E+00	2.85E+00	5.42E-01	4.46E-02	3.68E-03	3.03E-04	2.50E-05	2.06E-06
TE133	5.61E+02	3.18E+01	3.54E+00	1.17E+00	4.94E-01	9.37E-02	7.75E-03	6.37E-04	5.28E-05	4.34E-06	3.58E-07
I133	8.70E-01	9.37E+00	1.01E+01	1.01E+01	9.94E+00	9.41E+00	8.56E+00	7.75E+00	6.99E+00	6.37E+00	5.75E+00
XE133M	3.70E-08	2.11E-03	5.09E-03	8.13E-03	1.11E-02	1.66E-02	2.41E-02	3.06E-02	3.60E-02	4.07E-02	4.46E-02
XE133	6.47E-07	3.68E-02	8.94E-02	1.43E-01	1.96E-01	2.97E-01	4.35E-01	5.56E-01	6.66E-01	7.61E-01	8.46E-01
TE134	1.74E+02	8.06E+01	3.00E+01	1.12E+01	4.14E+00	5.74E-01	2.93E-02	1.50E-03	7.70E-05	3.95E-06	2.03E-07
I134	7.97E+01	1.07E+02	7.47E+01	4.38E+01	2.35E+01	5.97E+00	6.56E-01	6.70E-02	6.56E-03	6.29E-04	5.97E-05
I135	1.47E+01	2.58E+01	2.33E+01	2.10E+01	1.90E+01	1.54E+01	1.13E+01	8.26E+00	6.06E+00	4.46E+00	3.26E+00
XE135M	1.62E-03	7.45E+00	7.24E+00	6.57E+00	5.90E+00	4.80E+00	3.53E+00	2.58E+00	1.90E+00	1.39E+00	1.02E+00
XE135	1.69E+00	3.34E+00	4.89E+00	6.15E+00	7.16E+00	8.59E+00	9.52E+00	9.56E+00	9.10E+00	8.30E+00	7.41E+00
CS136	1.08E-02	1.07E-02	1.07E-02	1.07E-02	1.07E-02	1.06E-02	1.05E-02	1.05E-02	1.04E-02	1.03E-02	1.03E-02
CS137	7.30E-05	7.87E-04									
BA137M	1.54E-07	7.34E-04									
XE138	5.51E+02	4.74E+01	4.12E+00	3.57E-01	3.09E-02	2.32E-04	1.51E-07	9.79E-11	6.37E-14	4.14E-17	2.69E-20
CS138	8.21E+01	1.38E+02	4.79E+01	1.41E+01	3.94E+00	3.00E-01	6.24E-03	1.29E-04	2.69E-06	5.60E-08	1.16E-09
CS139	5.29E+02	1.69E+01	2.12E-01	2.66E-03	3.34E-05	5.24E-09	1.04E-14	2.06E-20	4.08E-26	8.09E-32	1.60E-37
BA139	9.77E+00	1.09E+02	6.72E+01	4.08E+01	2.47E+01	9.06E+00	2.01E+00	4.46E-01	9.92E-02	2.20E-02	4.89E-03
BA140	1.00E-01	6.24E-01	6.24E-01	6.19E-01	6.19E-01	6.14E-01	6.14E-01	6.09E-01	6.05E-01	6.00E-01	5.95E-01
LA140	2.38E-07	1.07E-02	2.11E-02	3.14E-02	4.14E-02	6.09E-02	8.90E-02	1.15E-01	1.40E-01	1.63E-01	1.85E-01
BA141	1.93E+02	5.83E+01	5.78E+00	5.73E-01	5.69E-02	5.64E-04	5.50E-07	5.37E-10	5.23E-13	5.14E-16	5.00E-19
LA141	1.78E+00	3.77E+01	3.52E+01	2.98E+01	2.50E+01	1.75E+01	1.03E+01	6.01E+00	3.54E+00	2.07E+00	1.22E+00
CE141	2.20E-07	2.45E-02	5.73E-02	8.62E-02	1.11E-01	1.48E-01	1.84E-01	2.05E-01	2.16E-01	2.23E-01	2.27E-01
BA142	5.09E+02	2.02E+01	4.62E-01	1.05E-02	2.40E-04	1.25E-07	1.48E-12	1.76E-17	2.08E-22	2.47E-27	2.93E-32
LA142	1.17E+01	8.11E+01	5.35E+01	3.40E+01	2.17E+01	8.76E+00	2.26E+00	5.83E-01	1.50E-01	3.87E-02	9.97E-03
LA143	1.90E+02	3.71E+01	1.90E+00	9.78E-02	5.02E-03	1.32E-05	1.77E-09	2.39E-13	3.22E-17	4.35E-21	5.87E-25
CE143	7.60E-02	4.84E+00	5.02E+00	4.89E+00	4.80E+00	4.62E+00	4.33E+00	4.07E+00	3.82E+00	3.58E+00	3.36E+00
PR143	2.22E-08	7.42E-03	1.79E-02	2.83E-02	3.85E-02	5.82E-02	8.58E-02	1.12E-01	1.36E-01	1.59E-01	1.80E-01
CE144	3.03E-03	2.17E-02									
PR144	8.32E-07	1.98E-02	2.16E-02	2.17E-02							
PR145	1.23E-01	1.81E+01	1.60E+01	1.43E+01	1.27E+01	1.01E+01	7.12E+00	5.02E+00	3.56E+00	2.51E+00	1.78E+00
CE146	3.62E+02	1.86E+01	9.51E-01	4.86E-02	2.50E-03	6.60E-06	8.88E-10	1.20E-13	1.61E-17	2.17E-21	2.93E-25
PR146	7.48E+00	6.51E+01	1.48E+01	2.77E+00	4.99E-01	1.57E-02	8.67E-05	4.78E-07	2.65E-09	1.46E-11	7.99E-14
PR147	4.22E+01	1.22E+01	3.81E-01	1.19E-02	3.73E-04	3.64E-07	1.11E-11	3.39E-16	1.03E-20	3.16E-25	9.63E-30

TSDOG 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 = 2.436E-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	1.51E-05	2.84E-01	2.92E-01	2.91E-01	2.90E-01	2.89E-01	2.87E-01	2.84E-01	2.82E-01	2.80E-01	2.78E-01
ND149	2.17E+01	1.48E+01	1.00E+01	6.85E+00	4.63E+00	2.15E+00	6.77E-01	2.14E-01	6.73E-02	2.12E-02	6.68E-03
PM149	3.02E-03	2.36E-01	3.92E-01	4.96E-01	5.62E-01	6.32E-01	6.56E-01	6.44E-01	6.27E-01	6.03E-01	5.82E-01
PM150	2.56E-01	1.98E-01	1.53E-01	1.18E-01	9.13E-02	5.48E-02	2.54E-02	1.17E-02	5.44E-03	2.51E-03	1.16E-03
ND151	8.81E+01	2.75E+00	8.61E-02	2.69E-03	8.42E-05	8.22E-08	2.51E-12	7.67E-17	2.34E-21	7.12E-26	2.18E-30
PM151	5.58E-02	6.53E-01	6.57E-01	6.41E-01	6.25E-01	5.94E-01	5.51E-01	5.11E-01	4.76E-01	4.40E-01	4.09E-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	9.38E-53	8.72E-62
SM153	1.97E-01	1.94E-01	1.91E-01	1.88E-01	1.86E-01	1.80E-01	1.73E-01	1.65E-01	1.58E-01	1.51E-01	1.45E-01
SM155	1.53E+01	2.52E+00	4.13E-01	6.75E-02	1.11E-02	2.98E-04	1.31E-06	5.79E-09	2.55E-11	1.14E-13	2.79E-16
EU155	1.13E-05	3.21E-04	3.72E-04	3.80E-04	3.82E-04						
SM156	2.10E-01	1.95E-01	1.81E-01	1.68E-01	1.56E-01	1.35E-01	1.08E-01	8.68E-02	6.96E-02	5.57E-02	4.46E-02
EU156	6.15E-04	1.00E-03	1.36E-03	1.70E-03	2.01E-03	2.56E-03	3.25E-03	3.77E-03	4.22E-03	4.55E-03	4.79E-03
EU157	3.25E-02	1.08E-01	1.03E-01	9.83E-02	9.37E-02	8.57E-02	7.48E-02	6.53E-02	5.69E-02	4.95E-02	4.32E-02
EU158	1.28E+00	5.19E-01	2.10E-01	8.50E-02	3.44E-02	5.63E-03	3.75E-04	2.49E-05	1.65E-06	1.10E-07	7.28E-09
EU159	1.55E+00	1.54E-01	1.52E-02	1.51E-03	1.50E-04	1.48E-06	1.45E-09	1.41E-12	1.38E-15	1.35E-18	1.32E-21
GD159	6.63E-03	2.90E-02	3.02E-02	2.93E-02	2.82E-02	2.61E-02	2.33E-02	2.07E-02	1.84E-02	1.64E-02	1.47E-02
TB161	1.13E-04	8.16E-04	8.11E-04	8.08E-04	8.06E-04	7.98E-04	7.90E-04	7.79E-04	7.68E-04	7.60E-04	7.49E-04

TOTAL 1.13E+04 2.38E+03 8.92E+02 5.42E+02 4.02E+02 2.77E+02 1.94E+02 1.49E+02 1.20E+02 1.00E+02 8.59E+01

TSDOG 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 = 2.436E-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	3.05E-07	3.02E-07	2.98E-07	2.86E-07	2.68E-07	2.36E-07	2.07E-07	1.59E-07	8.33E-08	2.26E-08	6.15E-09
* NA 24	2.30E-02	7.59E-03	2.50E-03	8.98E-05	3.51E-07	5.37E-12	8.19E-17	1.91E-26	0.	0.	0.
* MN 54	2.09E-05	2.07E-05	2.07E-05	2.04E-05	2.02E-05	1.98E-05	1.94E-05	1.85E-05	1.65E-05	1.31E-05	1.05E-05
* FE 55	3.70E-05	3.70E-05	3.70E-05	3.68E-05	3.67E-05	3.66E-05	3.62E-05	3.57E-05	3.43E-05	3.20E-05	2.97E-05
* FE 59	3.08E-05	3.03E-05	2.98E-05	2.85E-05	2.64E-05	2.26E-05	1.94E-05	1.43E-05	6.62E-06	1.41E-06	3.03E-07
CO 57	1.69E-05	1.69E-05	1.67E-05	1.67E-05	1.65E-05	1.60E-05	1.56E-05	1.49E-05	1.31E-05	1.01E-05	7.85E-06
CO 58	3.26E-03	3.23E-03	3.20E-03	3.10E-03	2.96E-03	2.69E-03	2.44E-03	2.01E-03	1.24E-03	4.67E-04	1.76E-04
* CO 60	1.56E-05	1.56E-05	1.56E-05	1.56E-05	1.55E-05	1.55E-05	1.55E-05	1.54E-05	1.50E-05	1.45E-05	1.40E-05
* CU 64	2.40E+00	6.54E-01	1.78E-01	3.63E-03	5.44E-06	1.24E-11	2.80E-17	1.44E-28	0.	0.	0.
* CU 67	1.08E-04	8.26E-05	6.30E-05	2.80E-05	7.30E-06	4.92E-07	3.32E-08	1.51E-10	2.11E-16	0.	0.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W187	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W188	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	1.30E-01	1.17E-01	1.06E-01	7.79E-02	4.66E-02	1.67E-02	5.98E-03	7.65E-04	4.52E-06	4.86E-10	3.27E-10
U240	7.59E-01	2.34E-01	7.17E-02	2.08E-03	5.71E-06	4.29E-11	3.23E-16	1.82E-26	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	8.12E-03	1.24E+01	9.23E+00	3.81E+00	8.72E-01	4.56E-02	2.39E-03	6.55E-06	2.57E-12	6.15E-22	6.15E-22
NP240M	1.20E-03	2.35E-01	7.23E-02	2.09E-03	5.75E-06	4.33E-11	3.26E-16	1.84E-26	0.	0.	0.
* AM241	1.18E-08										
* CM242	3.75E-70	3.73E-70	3.71E-70	3.67E-70	3.60E-70	3.44E-70	3.30E-70	3.03E-70	2.47E-70	1.61E-70	1.05E-70
GE 77	5.87E-03	3.69E-03	8.45E-04	1.02E-05	6.50E-09	2.63E-15	1.06E-21	1.73E-34	0.	0.	0.
AS 77	6.06E-05	8.95E-03	6.47E-03	1.87E-03	2.19E-04	2.98E-06	4.04E-08	7.45E-12	3.45E-21	7.41E-40	1.59E-58
SE 77M	2.39E-09	2.69E-05	1.94E-05	5.63E-06	6.56E-07	8.93E-09	1.21E-10	2.24E-14	1.04E-23	2.22E-42	4.78E-61
AS 78	1.43E-02	1.27E-04	3.72E-09	3.15E-23	0.	0.	0.	0.	0.	0.	0.
BR 82	3.94E-04	2.46E-04	1.54E-04	3.73E-05	3.54E-06	3.18E-08	2.85E-10	2.31E-14	1.35E-24	4.62E-45	1.57E-65
BR 83	2.99E-01	7.88E-03	7.92E-06	8.05E-15	8.22E-30	0.	0.	0.	0.	0.	0.
KR 83M	1.55E-05	3.45E-02	3.91E-05	3.52E-14	3.61E-29	0.	0.	0.	0.	0.	0.
KR 85M	3.52E-03	2.01E-01	4.58E-03	5.43E-08	3.35E-16	1.27E-32	4.83E-49	0.	0.	0.	0.
KR 85	3.64E-06	9.56E-05	9.74E-05	9.74E-05	9.74E-05	9.74E-05	9.70E-05	9.60E-05	9.42E-05	9.28E-05	9.28E-05
KR 87	5.69E+01	1.12E-04	2.22E-10	1.72E-27	0.	0.	0.	0.	0.	0.	0.
KR 88	3.26E+01	8.57E-02	2.25E-04	4.08E-12	5.14E-25	0.	0.	0.	0.	0.	0.
RB 88	8.28E+00	9.55E-02	2.52E-04	4.57E-12	5.73E-25	0.	0.	0.	0.	0.	0.
SR 89	3.03E-06	9.07E-02	8.94E-02	8.58E-02	8.05E-02	7.03E-02	6.15E-02	4.73E-02	2.42E-02	6.37E-03	1.68E-03
SR 90	5.97E-06	6.13E-04	6.08E-04	6.08E-04	6.02E-04						
Y 90	8.84E-12	1.41E-04	2.48E-04	4.46E-04	5.70E-04	6.08E-04	6.13E-04	6.13E-04	6.08E-04	6.08E-04	6.02E-04
SR 91	8.09E-01	2.90E+00	5.19E-01	2.98E-03	5.45E-07	1.85E-14	6.26E-22	7.13E-37	0.	0.	0.

TSDOG 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 = 2.436E-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	5.45E-05	1.87E+00	3.35E-01	1.92E-03	3.53E-07	1.19E-14	4.03E-22	4.60E-37	0.	0.	0.
Y 91	2.23E-08	8.91E-02	1.05E-01	1.05E-01	9.93E-02	8.81E-02	7.84E-02	6.21E-02	3.44E-02	1.06E-02	3.25E-03
SR 92	1.04E+01	1.30E-01	2.80E-04	2.81E-12	1.32E-25	0.	0.	0.	0.	0.	0.
Y 92	4.79E-01	1.36E+00	1.51E-02	1.16E-08	6.77E-19	2.32E-39	7.93E-60	0.	0.	0.	0.
Y 93	5.13E-01	3.47E+00	6.76E-01	5.08E-03	1.46E-06	1.21E-13	9.98E-21	6.81E-35	0.	0.	0.
ZR 95	9.97E-04	1.25E-01	1.23E-01	1.19E-01	1.13E-01	1.01E-01	9.14E-02	7.39E-02	4.33E-02	1.49E-02	5.12E-03
NB 95M	2.12E-11	4.22E-04	7.69E-04	1.47E-03	1.98E-03	2.09E-03	1.93E-03	1.57E-03	9.18E-04	3.16E-04	1.09E-04
NB 95	1.11E-10	2.41E-03	4.77E-03	1.14E-02	2.12E-02	3.66E-02	4.72E-02	5.86E-02	5.64E-02	2.71E-02	1.04E-02
ZR 97	2.44E+00	4.15E+00	1.56E+00	8.26E-02	6.20E-04	3.49E-08	1.96E-12	6.20E-21	3.50E-42	0.	0.
NB 97M	1.25E-02	3.98E+00	1.50E+00	7.96E-02	5.95E-04	3.35E-08	1.89E-12	5.95E-21	3.37E-42	0.	0.
NB 97	1.22E+00	4.16E+00	1.56E+00	8.30E-02	6.25E-04	3.76E-08	2.11E-12	6.71E-21	3.77E-42	0.	0.
MO 99	7.38E-03	2.40E+00	1.88E+00	8.88E-01	2.57E-01	2.15E-02	1.79E-03	1.25E-05	5.08E-11	8.37E-22	1.38E-32
TC 99M	6.86E-08	2.11E+00	1.78E+00	8.51E-01	2.45E-01	2.05E-02	1.71E-03	1.19E-05	4.84E-11	7.99E-22	1.32E-32
RU103	6.63E-05	1.51E-01	1.48E-01	1.41E-01	1.29E-01	1.08E-01	9.09E-02	6.42E-02	2.67E-02	4.63E-03	8.07E-04
RH103M	4.42E-09	1.51E-01	1.49E-01	1.41E-01	1.29E-01	1.08E-01	9.09E-02	6.42E-02	2.67E-02	4.63E-03	8.07E-04
RU105	4.92E-01	4.70E-01	1.11E-02	1.45E-07	1.06E-15	5.67E-32	3.04E-48	0.	0.	0.	0.
RH105M	3.24E-03	4.70E-01	1.11E-02	1.46E-07	1.07E-15	5.71E-32	3.05E-48	0.	0.	0.	0.
RH105	5.31E-09	1.70E+00	1.11E+00	2.77E-01	2.73E-02	2.65E-04	2.57E-06	2.43E-10	2.11E-20	1.58E-40	1.19E-60
RU106	4.33E-04	8.19E-03	8.16E-03	8.12E-03	8.05E-03	7.91E-03	7.73E-03	7.45E-03	6.77E-03	5.60E-03	4.65E-03
RH106	4.68E-06	8.19E-03	8.16E-03	8.12E-03	8.05E-03	7.91E-03	7.73E-03	7.45E-03	6.77E-03	5.60E-03	4.65E-03
PD109	1.11E-02	2.83E-01	8.23E-02	2.04E-03	4.30E-06	1.92E-11	8.55E-17	1.69E-27	0.	0.	0.
AG109M	6.40E-05	2.83E-01	8.25E-02	2.05E-03	4.32E-06	1.92E-11	8.55E-17	1.69E-27	0.	0.	0.
PD111M	1.51E+00	7.31E-02	3.55E-03	4.07E-07	1.10E-13	8.04E-27	5.90E-40	0.	0.	0.	0.
PD111	5.36E-01	5.90E-02	2.86E-03	3.28E-07	8.88E-14	6.46E-27	4.74E-40	0.	0.	0.	0.
AG111M	4.26E-03	7.70E-02	3.75E-03	4.31E-07	1.16E-13	8.54E-27	6.24E-40	0.	0.	0.	0.
AG111	1.52E-09	4.19E-02	4.02E-02	3.06E-02	1.93E-02	7.64E-03	3.03E-03	4.78E-04	4.70E-06	4.56E-10	4.42E-14
PD112	3.78E-01	1.72E-01	7.77E-02	7.21E-03	1.37E-04	4.98E-08	1.81E-11	2.37E-18	1.50E-35	0.	0.
AG112	1.14E-05	1.99E-01	9.16E-02	8.50E-03	1.62E-04	5.88E-08	2.13E-11	2.81E-18	1.76E-35	0.	0.
AG113	4.34E-03	4.59E-02	1.99E-03	1.61E-07	2.47E-14	5.78E-28	1.35E-41	0.	0.	0.	0.
CD115M	1.32E-08	3.81E-04	3.74E-04	3.56E-04	3.30E-04	2.80E-04	2.39E-04	1.72E-04	7.72E-05	1.53E-05	3.07E-06
CD115	5.09E-06	7.65E-02	5.61E-02	2.21E-02	4.66E-03	2.08E-04	9.29E-06	1.85E-08	3.27E-15	1.02E-28	3.21E-42
IN115M	6.34E-11	8.08E-02	6.12E-02	2.41E-02	5.09E-03	2.27E-04	1.01E-05	2.02E-08	3.58E-15	1.12E-28	3.50E-42
CD117	1.12E-01	2.45E-03	2.38E-06	2.23E-15	1.98E-30	0.	0.	0.	0.	0.	0.
IN117M	5.40E-06	1.02E-02	1.18E-05	1.14E-14	1.01E-29	0.	0.	0.	0.	0.	0.
IN117	2.17E-10	6.70E-03	7.94E-06	7.69E-15	6.82E-30	0.	0.	0.	0.	0.	0.
SN121	2.35E-03	1.34E-01	7.24E-02	1.14E-02	5.23E-04	1.11E-06	2.33E-09	1.04E-14	4.33E-28	0.	0.
SN123	1.13E-05	1.18E-03	1.17E-03	1.15E-03	1.12E-03	1.05E-03	1.00E-03	8.95E-04	6.78E-04	3.90E-04	2.24E-04
SN125	2.67E-02	2.49E-02	2.31E-02	1.85E-02	1.28E-02	6.12E-03	2.93E-03	6.70E-04	1.68E-05	1.05E-08	6.61E-12
SB125	1.61E-04	1.78E-04	1.95E-04	2.38E-04	2.92E-04	3.53E-04	3.81E-04	3.97E-04	3.89E-04	3.63E-04	3.39E-04
SB126	3.63E-03	3.44E-03	3.25E-03	2.75E-03	2.09E-03	1.20E-03	6.90E-04	2.27E-04	1.42E-05	6.90E-08	1.39E-08

TSDDG AT H+12 HOURS = 1.0000  
 FRACTION OF REFRACTORIES PRESENT = 1.000  
 RELAXATION LENGTH = 0.16 GM/SQCM  
 BOMB FRACTION PER SQ. METER = 2.436E-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
3.79E+00	1.37E-03	4.99E-07	2.38E-17	1.49E-34	0.63E-02	6.07E-03	0.01E-03	0.84E-03	3.70E-09	6.32E-17
4.42E-02	1.82E-01	1.52E-01	8.87E-02	3.29E-01	1.50E-03	6.74E-02	2.31E-03	1.28E-03	9.35E-04	4.94E-04
3.58E-10	2.77E-04	9.84E-04	9.07E-04	1.30E-02	3.29E-02	6.52E-08	1.05E-04	7.77E-04	9.23E-04	4.88E-04
2.956E-02	1.30E-01	1.28E-01	7.70E-02	3.29E-01	1.05E-04	9.52E-07	6.96E-25	7.89E-41	0.0	2.58E-04
SB127M	TE127M	TE128M	SB129M	TE129M	TE131M	XE131M	TE132M	XE132M	XE133M	XE133M
2.63E+00	1.70E-01	1.61E-01	2.45E-03	4.96E-08	1.97E-16	3.11E-33	4.91E-50	0.0	0.0	0.0
9.63E+00	2.61E-01	2.01E-02	5.45E-03	8.66E-03	3.66E-03	4.51E-03	4.73E-03	8.82E-03	1.79E-03	2.33E-05
9.58E-03	8.83E-04	1.15E-04	1.50E-05							
3.62E-02	4.45E-03	0.0	0.0							
2.506E-01	1.66E-31	4.15E-25	0.0							
2.99E-01	4.57E-08	4.36E-08	4.26E-12							
2.61E-01	5.51E-02	2.28E-04	3.45E-08							
2.45E-01	4.74E-04	3.112E-05	6.11E-19							
2.30E-01	4.77E-05	3.33E-28	3.33E-28							
2.16E-01	4.70E-09	6.26E-19	3.43E-28							
2.02E-01	4.92E-04	7.21E-34	0.0							
1.90E-01	6.30E-05	3.54E-15	3.70E-28							
1.80E-01	0.0	7.19E-06	8.13E-12							
1.70E-01	4.18E-02	1.58E-06	1.58E-17							
1.60E-01	0.0	0.0	0.0							
1.50E-01	4.28E-02	3.13E-32	0.0							
1.40E-01	1.09E-02	0.0	0.0							
1.30E-01	4.20E-03	0.0	0.0							
1.20E-01	1.87E-03	0.0	0.0							
1.10E-01	4.87E-04	0.0	0.0							
1.00E-01	3.45E-04	0.0	0.0							
9.00E-02	0.0	0.0	0.0							
8.00E-02	0.0	0.0	0.0							
7.00E-02	0.0	0.0	0.0							
6.00E-02	0.0	0.0	0.0							
5.00E-02	0.0	0.0	0.0							
4.00E-02	0.0	0.0	0.0							
3.00E-02	0.0	0.0	0.0							
2.00E-02	0.0	0.0	0.0							
1.00E-02	0.0	0.0	0.0							
0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

SN127M  
 CS136M  
 BA137M  
 BA139M  
 LA140M  
 LA141M  
 LA142M  
 CE142M  
 CE143M  
 PR143M  
 PR144M  
 PR145M  
 ND147M  
 PM147M  
 PM149M  
 PM150M

TSDOG 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 = 2.436E-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	5.58E-02	3.81E-01	2.10E-01	3.54E-02	1.81E-03	4.76E-06	1.25E-08	8.65E-14	1.09E-26	0.	0.
SM153	1.97E-01	1.38E-01	9.71E-02	3.35E-02	5.70E-03	1.66E-04	4.82E-06	4.05E-09	8.35E-17	3.56E-32	1.51E-47
SM156	2.10E-01	3.59E-02	6.12E-03	3.01E-05	4.34E-09	8.92E-17	1.84E-24	7.83E-40	0.	0.	
EU155	1.13E-05	3.82E-04	3.81E-04	3.81E-04	3.80E-04	3.79E-04	3.77E-04	3.74E-04	3.67E-04	3.52E-04	3.39E-04
EU156	6.15E-04	5.00E-03	5.54E-03	4.97E-03	3.95E-03	2.48E-03	1.56E-03	6.21E-04	6.15E-05	6.06E-07	5.97E-09
EU157	3.25E-02	3.76E-02	1.26E-02	4.74E-04	1.99E-06	3.51E-11	6.21E-16	1.93E-25	0.	0.	
GD159	6.63E-03	1.31E-02	5.19E-03	3.24E-04	3.19E-06	3.09E-10	2.99E-14	2.81E-22	2.40E-42	0.	0.
TB161	1.13E-04	7.41E-04	6.69E-04	4.95E-04	3.00E-04	1.10E-04	4.02E-05	5.38E-06	3.56E-08	1.54E-12	6.69E-17
<b>TOTAL</b>	<b>2.76E+02</b>	<b>7.40E+01</b>	<b>3.54E+01</b>	<b>1.28E+01</b>	<b>5.15E+00</b>	<b>1.98E+00</b>	<b>1.23E+00</b>	<b>6.95E-01</b>	<b>3.13E-01</b>	<b>1.18E-01</b>	<b>5.98E-02</b>

TSDOG 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 = 2.436E-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
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* BE 7	3.05E-07	2.64E-09	2.45E-10	2.28E-11	1.83E-14	1.47E-17	1.10E-21	7.03E-28	0.	0.	0.
* MN 54	2.09E-05	9.01E-06	5.94E-06	3.91E-06	1.12E-06	3.18E-07	6.00E-08	4.91E-09	1.15E-12	4.16E-18	1.51E-23
* FE 59	3.08E-05	1.11E-07	6.66E-09	4.01E-10	8.70E-14	1.88E-17	2.45E-22	1.15E-29	0.	0.	0.
CO 57	1.69E-05	6.65E-06	4.16E-06	2.61E-06	6.43E-07	1.59E-07	2.45E-09	1.49E-09	1.30E-13	1.07E-19	0.
CO 58	3.26E-03	9.37E-05	1.59E-05	2.69E-06	1.31E-08	6.39E-11	5.27E-14	1.25E-18	4.78E-34	0.	0.
* CO 60	1.56E-05	1.37E-05	1.28E-05	1.19E-05	9.81E-06	8.06E-06	6.19E-06	4.17E-06	1.12E-06	1.55E-07	2.15E-08
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.30E-01	3.25E-10	3.16E-10	3.08E-10	2.88E-10	2.67E-10	2.43E-10	2.11E-10	1.31E-10	6.44E-11	3.16E-11
* AM241	1.18E-08	1.18E-08	1.18E-08	1.18E-08	1.18E-08	1.18E-08	1.19E-08	1.19E-08	1.20E-08	1.19E-08	1.17E-08
* CM242	3.75E-70	7.95E-71	3.65E-71	1.68E-71	1.64E-72	1.60E-73	7.15E-75	6.76E-77	1.94E-81	1.81E-81	1.69E-81
KR 85	3.64E-06	9.04E-05	8.76E-05	8.48E-05	7.73E-05	6.98E-05	6.14E-05	5.06E-05	2.67E-05	1.02E-05	3.90E-06
SR 89	3.03E-06	7.08E-04	6.19E-05	5.44E-06	3.66E-09	2.47E-12	1.46E-16	6.64E-23	4.82E-44	0.	0.
SR 90	5.97E-06	5.97E-04	5.91E-04	5.86E-04	5.64E-04	5.43E-04	5.16E-04	4.80E-04	3.75E-04	2.59E-04	1.79E-04
Y 90	8.84E-12	5.97E-04	5.91E-04	5.86E-04	5.64E-04	5.43E-04	5.16E-04	4.80E-04	3.75E-04	2.59E-04	1.79E-04
Y 91	2.23E-08	1.51E-03	1.75E-04	2.04E-05	3.19E-08	5.01E-11	9.16E-15	2.25E-20	4.55E-39	0.	0.
ZR 95	9.97E-04	2.56E-03	3.65E-04	5.20E-05	1.52E-07	4.42E-10	1.83E-13	1.54E-18	1.89E-35	0.	0.
NB 95M	2.12E-11	5.42E-05	7.74E-06	1.11E-06	3.21E-09	9.36E-12	3.87E-15	3.27E-20	4.01E-37	0.	0.
NB 95	1.11E-10	5.51E-03	7.91E-04	1.13E-04	3.27E-07	9.49E-10	3.96E-13	3.34E-18	4.10E-35	0.	0.
RU103	6.63E-05	2.58E-04	1.05E-05	4.33E-07	2.96E-11	2.03E-15	5.69E-21	2.68E-29	0.	0.	0.
RH103M	4.42E-09	2.58E-04	1.05E-05	4.33E-07	2.96E-11	2.03E-15	5.69E-21	2.68E-29	0.	0.	0.
RU106	4.33E-04	4.11E-03	2.91E-03	2.06E-03	7.34E-04	2.61E-04	6.56E-05	8.30E-06	8.37E-09	2.69E-13	8.65E-18
RH106	4.68E-06	4.11E-03	2.91E-03	2.06E-03	7.34E-04	2.61E-04	6.56E-05	8.30E-06	8.37E-09	2.69E-13	8.65E-18
SN123	1.13E-05	1.56E-04	5.66E-05	5.06E-05	9.87E-07	4.73E-08	8.25E-10	1.90E-12	3.05E-21	1.96E-34	1.26E-47
SB125	1.61E-04	3.23E-04	2.84E-04	2.50E-04	1.70E-04	1.16E-04	6.93E-05	3.21E-05	2.46E-06	5.24E-08	1.12E-09
TE125M	4.32E-12	1.32E-04	1.17E-04	1.03E-04	7.05E-05	4.80E-05	2.87E-05	1.33E-05	1.02E-06	2.17E-08	4.62E-10
TE127M	3.58E-10	1.71E-04	5.36E-05	1.68E-05	5.16E-07	1.58E-08	1.52E-10	1.43E-13	1.18E-23	8.81E-39	6.56E-54
TE127	2.50E-02	1.69E-04	5.30E-05	1.66E-05	5.09E-07	1.57E-08	1.51E-10	1.42E-13	1.17E-23	8.68E-39	6.50E-54
CS137	7.30E-05	7.69E-04	7.60E-04	7.52E-04	7.25E-04	6.99E-04	6.69E-04	6.25E-04	4.94E-04	3.51E-04	2.48E-04
BA137M	1.54E-07	7.21E-04	7.12E-04	7.04E-04	6.77E-04	6.56E-04	6.25E-04	5.86E-04	4.63E-04	3.28E-04	2.32E-04
CE141	2.20E-07	9.49E-05	1.91E-06	3.83E-08	3.12E-13	2.54E-18	4.17E-25	2.77E-35	0.	0.	0.
CE144	3.03E-03	8.92E-03	5.73E-03	3.66E-03	9.60E-04	2.52E-04	4.24E-05	2.93E-06	3.94E-10	6.19E-16	9.64E-22
PR144	8.32E-07	8.92E-03	5.73E-03	3.66E-03	9.60E-04	2.52E-04	4.24E-05	2.93E-06	3.94E-10	6.19E-16	9.64E-22
PM147	4.18E-14	2.43E-03	2.13E-03	1.86E-03	1.25E-03	8.43E-04	4.95E-04	2.25E-04	1.60E-05	3.02E-07	5.71E-09
EU155	1.13E-05	3.30E-04	3.07E-04	2.85E-04	2.29E-04	1.84E-04	1.38E-04	8.88E-05	2.08E-05	2.34E-06	2.63E-07

TOTAL	1.63E-01	4.36E-02	2.45E-02	1.69E-02	7.73E-03	4.74E-03	3.34E-03	2.61E-03	1.77E-03	1.21E-03	8.42E-04
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**APPENDIX E**  
**DETAILED RESULTS FOR EVENT EASY**

TSEASY AT H+12 HOURS = 1.000  
 MR/HR AT H+12 HOURS = 1.000  
 FRACTION OF REFRACTORIES PRESENT = 0.500  
 RELAXATION LENGTH = 0.16 GM/SQCM  
 BOMB FRACTION LENGTH = 4.976E-13  
 BOMB FRACTION PER SQ. METER = 4.976E-13

TIME	MR/HR	HOURS	MICROCURIES/SQ METER
ZERO			
1.00E+00	1.11E+02	1.06E+04	
2.00E+00	3.52E+01	2.25E+03	
3.00E+00	1.39E+01	8.90E+02	
4.00E+00	7.42E+00	5.41E+02	
5.00E+00	4.59E+00	3.92E+02	
6.00E+00	2.37E+00	2.58E+02	
7.00E+00	1.38E+00	1.74E+02	
8.00E+00	1.00E+00	1.31E+02	
9.00E+00	7.80E-01	1.04E+02	
1.00E+01	6.33E-01	8.58E+01	
1.10E+01	5.27E-01	7.24E+01	
1.20E+01	4.41E-01	6.13E+01	
1.30E+01	3.67E-02	5.99E+01	
1.40E+01	3.15E-02	4.85E+00	
1.50E+01	2.77E-02	4.62E+00	
1.60E+01	2.44E-02	4.00E+00	
1.70E+01	2.19E-02	2.24E+00	
1.80E+01	1.93E-02	6.84E-01	
1.90E+01	1.67E-02	2.94E-01	
2.00E+01	1.43E-02	1.03E-01	
2.10E+01	1.21E-02	5.09E-02	
2.20E+01	1.01E-02	3.72E-02	
2.30E+01	8.65E-03	2.17E-02	
2.40E+01	7.39E-03	1.55E-02	
2.50E+01	6.29E-03	1.05E-02	
2.60E+01	5.33E-04	7.65E-03	
2.70E+01	4.47E-04	5.03E-03	
2.80E+01	3.70E-04	3.80E-03	
2.90E+01	3.01E-04	2.30E-03	
3.00E+01	2.35E-05	1.16E-03	
3.10E+01	1.80E-05	6.59E-03	
3.20E+01	1.35E-05	3.59E-03	
3.30E+01	1.00E-05	1.11E-03	
3.40E+01	7.50E-06	4.28E-06	
3.50E+01	5.50E-06	3.02E-06	
3.60E+01	3.50E-06	2.59E-06	
3.70E+01	2.00E-06	1.59E-06	
3.80E+01	1.00E-06	1.11E-06	
3.90E+01	5.00E-07		

1.00E+00  
2.00E+00  
3.00E+00  
4.00E+00  
5.00E+00  
6.00E+00  
7.00E+00  
8.00E+00  
9.00E+00  
1.00E+01  
1.10E+01  
1.20E+01  
1.30E+01  
1.40E+01  
1.50E+01  
1.60E+01  
1.70E+01  
1.80E+01  
1.90E+01  
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2.30E+01  
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9.80E+01  
9.90E+01  
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9.20E+03  
9.30E+03  
9.40E+03  
9.50E+03  
9.60E+03  
9.70E+03  
9.80E+03  
9.90E+03  
1.00E+04

TSEASY 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 = 4.976E-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	1.58E-06	1.57E-06	1.57E-06	1.57E-06	1.57E-06	1.57E-06	1.56E-06	1.56E-06	1.56E-06	1.56E-06
*NA 24	2.97E-03	2.84E-03	2.71E-03	2.59E-03	2.47E-03	2.25E-03	1.96E-03	1.71E-03	1.49E-03	1.30E-03
MN 54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 58	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
* CU 64	6.65E-01	6.29E-01	5.96E-01	5.65E-01	5.35E-01	4.80E-01	4.08E-01	3.47E-01	2.95E-01	2.51E-01
* CU 67	1.05E-05	1.04E-05	1.02E-05	1.01E-05	1.00E-05	9.76E-06	9.41E-06	9.14E-06	8.85E-06	8.51E-06
W181	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	3.19E-05	3.19E-05	3.18E-05
W187	3.55E-03	3.44E-03	3.34E-03	3.25E-03	3.16E-03	2.97E-03	2.73E-03	2.51E-03	2.29E-03	2.11E-03
W188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	3.72E-02	3.70E-02	3.68E-02	3.67E-02	3.65E-02	3.62E-02	3.57E-02	3.53E-02	3.48E-02	3.43E-02
U239	5.56E+02	9.48E+01	1.62E+01	2.76E+00	4.68E-01	1.36E-02	6.76E-05	3.34E-07	1.65E-09	8.16E-12
U240	6.63E-02	6.32E-02	6.02E-02	5.73E-02	5.46E-02	4.94E-02	4.26E-02	3.67E-02	3.17E-02	2.73E-02
NP239M	1.90E-03	3.19E+00	3.69E+00	3.75E+00	3.72E+00	3.63E+00	3.48E+00	3.37E+00	3.25E+00	3.13E+00
NP240M	1.05E-04	6.35E-02	6.07E-02	5.78E-02	5.51E-02	4.98E-02	4.30E-02	3.71E-02	3.20E-02	2.76E-02
NP240M	2.66E-12	1.37E-12	7.10E-13	3.66E-13	1.89E-13	5.07E-14	6.99E-15	9.64E-16	1.33E-16	1.83E-17
* AM241	1.84E-08									
* CM242	3.40E-07	3.40E-07	3.40E-07	3.40E-07	3.40E-07	3.40E-07	3.38E-07	3.38E-07	3.38E-07	3.38E-07
GE 75	8.05E-06	3.90E-02	2.35E-02	1.41E-02	8.51E-03	3.09E-03	6.74E-04	1.48E-04	3.22E-05	7.03E-06
GE 77	5.45E-03	1.40E-02	1.32E-02	1.24E-02	1.17E-02	1.03E-02	8.60E-03	7.14E-03	5.95E-03	4.94E-03
AS 77	5.63E-05	8.90E-03	9.00E-03	9.06E-03	9.12E-03	9.18E-03	9.18E-03	9.12E-03	8.98E-03	8.80E-03
SE 77M	2.22E-09	2.66E-05	2.70E-05	2.72E-05	2.72E-05	2.74E-05	2.76E-05	2.74E-05	2.70E-05	2.64E-05
GE 78	8.50E-01	5.32E-01	3.31E-01	2.07E-01	1.29E-01	5.02E-02	1.22E-02	2.95E-03	7.20E-04	1.75E-04
AS 78	1.53E-02	2.54E-01	3.13E-01	2.93E-01	2.45E-01	1.45E-01	5.37E-02	1.78E-02	5.52E-03	1.65E-03
AS 79	1.65E+01	1.63E-01	1.60E-03	1.58E-05	1.56E-07	1.51E-11	1.44E-17	1.37E-23	1.31E-29	1.25E-35
SE 79M	2.45E-02	2.87E-01	2.84E-03	2.79E-05	2.75E-07	2.66E-11	2.54E-17	2.42E-23	2.31E-29	2.20E-35
BR 80	1.01E-01	9.57E-03	9.00E-04	8.46E-05	7.97E-06	7.07E-08	5.92E-11	4.93E-14	4.11E-17	3.43E-20
SE 81M	8.26E-02	3.85E+00	1.86E+00	8.94E-01	4.30E-01	1.00E-01	1.12E-02	1.26E-03	1.41E-04	1.58E-05
SE 81	1.01E+00	4.55E+00	2.63E+00	1.31E+00	6.38E-01	1.49E-01	1.67E-02	1.87E-03	2.09E-04	2.35E-05
BR 82	4.94E-04	4.85E-04	4.75E-04	4.66E-04	4.57E-04	4.39E-04	4.14E-04	3.90E-04	3.68E-04	3.47E-04
SE 83	4.50E+01	8.52E+00	1.61E+00	3.06E-01	5.78E-02	2.08E-03	1.41E-05	9.62E-08	6.57E-10	4.45E-12
BR 83	3.73E-01	5.57E+00	5.16E+00	4.06E+00	3.08E+00	1.74E+00	7.36E-01	3.10E-01	1.31E-01	5.52E-02
KR 83M	1.93E-05	1.26E+00	2.58E+00	3.20E+00	3.30E+00	2.75E+00	1.62E+00	8.36E-01	4.03E-01	1.86E-01

TSEASY                   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 = 4.976E-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	9.39E-02	1.62E+01	4.38E+00	1.19E+00	3.20E-01	2.34E-02	4.63E-04	9.14E-06	1.81E-07	3.58E-09	7.07E-11
KR 85M	4.41E-03	9.45E+00	8.04E+00	6.87E+00	5.87E+00	4.28E+00	2.67E+00	1.67E+00	1.04E+00	6.46E-01	4.03E-01
KR 87	7.40E+01	4.27E+01	2.47E+01	1.43E+01	8.25E+00	2.77E+00	5.37E-01	1.04E-01	2.01E-02	3.90E-03	7.53E-04
KR 88	4.19E+01	3.27E+01	2.55E+01	1.99E+01	1.56E+01	9.45E+00	4.51E+00	2.15E+00	1.02E+00	4.86E-01	2.31E-01
RB 88	1.06E+01	3.31E+01	2.82E+01	2.22E+01	1.74E+01	1.06E+01	5.05E+00	2.41E+00	1.15E+00	5.45E-01	2.59E-01
RB 89	5.12E+01	4.81E+01	3.23E+00	2.17E-01	1.46E-02	6.59E-05	2.00E-08	6.02E-12	1.83E-15	5.56E-19	1.69E-22
SR 89	3.92E-06	1.38E-01	1.47E-01	1.47E-01	1.47E-01	1.47E-01	1.47E-01	1.46E-01	1.46E-01	1.46E-01	1.46E-01
SR 90	7.88E-06	8.10E-04									
SR 91	9.32E-01	1.74E+01	1.62E+01	1.51E+01	1.40E+01	1.21E+01	9.79E+00	7.92E+00	6.39E+00	5.13E+00	4.14E+00
Y 91M	6.27E-05	5.98E+00	8.15E+00	8.74E+00	8.62E+00	7.74E+00	6.33E+00	5.10E+00	4.11E+00	3.31E+00	2.67E+00
Y 91	2.57E-08	5.32E-03	1.23E-02	1.96E-02	2.67E-02	4.01E-02	5.69E-02	7.04E-02	8.15E-02	9.03E-02	9.73E-02
SR 92	6.83E+00	3.05E+01	2.36E+01	1.83E+01	1.42E+01	8.48E+00	3.94E+00	1.83E+00	8.48E-01	3.94E-01	1.83E-01
Y 92	3.15E-01	6.42E+00	1.01E+01	1.20E+01	1.27E+01	1.21E+01	9.28E+00	6.32E+00	4.07E+00	2.50E+00	1.51E+00
SR 93	2.77E+02	4.77E+00	2.63E-02	1.46E-04	8.02E-07	2.45E-11	4.14E-18	6.98E-25	1.18E-31	1.99E-38	3.35E-45
Y 93	3.38E-01	1.09E+01	1.03E+01	9.60E+00	8.97E+00	7.83E+00	6.38E+00	5.21E+00	4.23E+00	3.47E+00	2.82E+00
Y 94	4.04E+01	5.52E+01	7.10E+00	9.15E-01	1.18E-01	1.96E-03	4.20E-06	9.01E-09	1.93E-11	4.20E-14	2.33E-15
Y 95	1.75E+02	1.65E+01	3.63E-01	8.02E-03	1.77E-04	8.57E-08	9.17E-13	9.81E-18	1.05E-22	1.12E-27	1.20E-32
ZR 95	6.58E-04	8.60E-02	8.77E-02	8.77E-02	8.77E-02	8.77E-02	8.77E-02	8.74E-02	8.74E-02	8.71E-02	8.71E-02
NB 95	7.33E-11	5.31E-05	1.24E-04	1.94E-04	2.65E-04	4.07E-04	6.17E-04	8.31E-04	1.04E-03	1.25E-03	1.46E-03
ZR 97	1.60E+00	6.95E+00	6.65E+00	6.40E+00	6.12E+00	5.66E+00	5.00E+00	4.42E+00	3.93E+00	3.46E+00	3.08E+00
NB 97M	8.21E-03	6.67E+00	6.40E+00	6.15E+00	5.90E+00	5.44E+00	4.81E+00	4.26E+00	3.76E+00	3.32E+00	2.94E+00
NB 97	7.99E-01	3.49E+00	4.92E+00	5.60E+00	5.88E+00	5.85E+00	5.33E+00	4.75E+00	4.20E+00	3.71E+00	3.30E+00
NB 98	9.09E+00	4.03E+00	1.78E+00	7.87E-01	3.49E-01	6.83E-02	5.90E-03	5.10E-04	4.44E-05	3.85E-06	3.31E-07
M0 99	4.85E-03	2.00E+00	1.98E+00	1.96E+00	1.94E+00	1.90E+00	1.84E+00	1.78E+00	1.73E+00	1.68E+00	1.63E+00
TC 99M	4.51E-08	1.91E-01	3.58E-01	5.06E-01	6.36E-01	8.49E-01	1.08E+00	1.22E+00	1.31E+00	1.36E+00	1.38E+00
M0101	1.41E+02	6.38E+01	3.70E+00	2.15E-01	1.25E-02	4.17E-05	8.11E-09	1.58E-12	3.07E-16	5.96E-20	1.16E-23
TC101	5.96E+00	1.79E+02	1.96E+01	1.60E+00	1.17E-01	5.27E-04	1.32E-07	2.95E-11	6.26E-15	1.29E-18	2.61E-22
M0102	1.19E+03	2.71E+01	6.16E-01	1.41E-02	3.21E-04	1.67E-07	1.98E-12	2.35E-17	2.79E-22	3.31E-27	3.93E-32
TC102M	7.63E-01	2.29E+01	5.24E-01	1.20E-02	2.73E-04	1.41E-07	1.68E-12	1.99E-17	2.36E-22	2.80E-27	3.32E-32
TC102	3.57E+03	1.36E+01	3.11E-01	7.06E-03	1.62E-04	8.42E-08	1.00E-12	1.19E-17	1.41E-22	1.67E-27	1.98E-32
RU103	8.66E-05	2.01E-01	2.00E-01	2.00E-01	2.00E-01	2.00E-01	1.99E-01	1.99E-01	1.99E-01	1.98E-01	1.98E-01
RH103M	5.77E-09	1.04E-01	1.54E-01	1.78E-01	1.90E-01	1.98E-01	1.99E-01	1.99E-01	1.99E-01	1.98E-01	1.98E-01
TC104	7.63E+01	5.48E+01	5.48E+00	5.43E-01	5.37E-02	5.29E-04	5.16E-07	5.05E-10	4.93E-13	4.82E-16	4.70E-19
RU105	6.36E-01	2.20E+01	1.88E+01	1.61E+01	1.38E+01	1.01E+01	6.31E+00	3.94E+00	2.47E+00	1.54E+00	9.69E-01
RH105M	4.18E-03	2.20E+01	1.88E+01	1.61E+01	1.38E+01	1.01E+01	6.31E+00	3.96E+00	2.48E+00	1.55E+00	9.69E-01
RH105	6.87E-09	4.47E-01	8.30E-01	1.15E+00	1.41E+00	1.80E+00	2.16E+00	2.32E+00	2.37E+00	2.34E+00	2.28E+00
RU106	5.56E-04	1.05E-02									
RH106	6.01E-06	1.05E-02									
RH107	1.44E-01	1.96E+01	2.97E+00	4.47E-01	6.75E-02	1.54E-03	5.30E-06	1.83E-08	6.30E-11	2.15E-14	2.14E-17
PD107M	3.00E-04	3.99E+00	6.03E-01	9.11E-02	1.37E-02	3.13E-04	1.08E-06	3.72E-09	1.28E-11	4.42E-14	1.51E-16

TSEASY                   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 = 4.976E-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	6.94E-01	6.60E-01	6.25E-01	5.94E-01	5.36E-01	4.61E-01	3.95E-01	3.38E-01	2.90E-01	2.49E-01
AG109M	4.83E-05	6.94E-01	6.60E-01	6.27E-01	5.95E-01	5.38E-01	4.61E-01	3.95E-01	3.38E-01	2.90E-01	2.49E-01
PD111M	1.03E+00	9.04E-01	7.97E-01	7.05E-01	6.21E-01	4.83E-01	3.30E-01	2.26E-01	1.55E-01	1.06E-01	7.28E-02
PD111	3.66E-01	6.59E-01	6.32E-01	5.63E-01	4.98E-01	3.87E-01	2.66E-01	1.82E-01	1.25E-01	8.54E-02	5.86E-02
AG111M	2.90E-03	8.89E-01	8.35E-01	7.47E-01	6.59E-01	5.10E-01	3.48E-01	2.39E-01	1.64E-01	1.12E-01	7.66E-02
AG111	1.03E-09	3.07E-03	6.44E-03	9.46E-03	1.21E-02	1.66E-02	2.13E-02	2.44E-02	2.64E-02	2.77E-02	2.84E-02
PD112	1.93E-01	1.87E-01	1.81E-01	1.75E-01	1.70E-01	1.58E-01	1.44E-01	1.30E-01	1.18E-01	1.07E-01	9.66E-02
AG112	5.82E-06	3.71E-02	6.54E-02	8.78E-02	1.04E-01	1.25E-01	1.37E-01	1.37E-01	1.30E-01	1.21E-01	1.12E-01
AG113	1.73E-03	3.69E-01	3.24E-01	2.84E-01	2.49E-01	1.92E-01	1.30E-01	8.76E-02	5.92E-02	3.99E-02	2.70E-02
AG115	5.93E-01	6.35E-01	7.91E-02	9.88E-03	1.24E-03	1.93E-05	3.78E-08	7.39E-11	1.43E-13	1.42E-162	1.32E-16
CD115M	4.85E-09	1.29E-04	1.45E-04	1.47E-04	1.47E-04	1.47E-04	1.46E-04	1.46E-04	1.46E-04	1.45E-04	1.45E-04
CD115	1.87E-06	3.53E-02	3.80E-02	3.79E-02	3.74E-02	3.65E-02	3.51E-02	3.37E-02	3.25E-02	3.12E-02	3.00E-02
IN115M	2.33E-11	3.90E-03	8.66E-03	1.28E-02	1.64E-02	2.18E-02	2.70E-02	2.97E-02	3.10E-02	3.12E-02	3.10E-02
CD117	4.16E-02	6.92E-01	5.21E-01	3.89E-01	2.92E-01	1.64E-01	6.87E-02	2.89E-02	1.22E-02	5.12E-03	2.15E-03
IN117M	2.00E-06	2.41E-01	3.48E-01	3.78E-01	3.65E-01	2.88E-01	1.65E-01	8.43E-02	4.05E-02	1.88E-02	8.48E-03
IN117	8.04E-11	4.39E-02	1.06E-01	1.48E-01	1.65E-01	1.52E-01	9.65E-02	5.16E-02	2.57E-02	1.21E-02	5.55E-03
CD118	2.74E+00	1.18E+00	5.04E-01	2.15E-01	9.21E-02	1.68E-02	1.32E-03	1.03E-04	8.13E-06	6.37E-07	5.00E-08
IN118	1.82E-01	1.18E+00	5.04E-01	2.15E-01	9.21E-02	1.69E-02	1.32E-03	1.04E-04	8.13E-06	6.37E-07	5.00E-08
CD119	6.84E+00	1.07E-01	1.66E-03	2.60E-05	4.07E-07	9.96E-11	3.79E-16	1.45E-21	5.51E-27	2.11E-32	8.07E-38
IN119M	1.03E-02	1.15E+00	1.26E-01	1.27E-02	1.26E-03	1.24E-05	1.21E-08	1.18E-11	1.15E-14	1.13E-17	1.10E-20
IN119	5.09E-01	6.08E-02	7.05E-03	7.15E-04	7.15E-05	7.00E-07	6.84E-10	6.69E-13	6.54E-16	6.38E-19	6.23E-22
SN121	8.48E-04	8.73E-02	8.48E-02	8.28E-02	8.08E-02	7.68E-02	7.08E-02	6.58E-02	6.09E-02	5.64E-02	5.24E-02
SN123M	4.87E-01	9.12E-01	3.23E-01	1.14E-01	4.04E-02	5.04E-03	2.23E-04	9.87E-06	4.37E-07	1.93E-08	8.53E-10
SN123	4.58E-06	4.79E-04	4.79E-04								
SN125	1.31E-02	1.30E-02	1.30E-02	1.29E-02	1.29E-02	1.28E-02	1.27E-02	1.26E-02	1.25E-02	1.23E-02	1.22E-02
SB125	7.84E-05	7.87E-05	7.91E-05	7.94E-05	7.97E-05	8.04E-05	8.18E-05	8.28E-05	8.38E-05	8.49E-05	8.59E-05
SB126	2.44E-03	2.44E-03	2.43E-03	2.43E-03	2.42E-03	2.41E-03	2.39E-03	2.38E-03	2.36E-03	2.34E-03	2.33E-03
SN127	3.41E+00	2.45E+00	1.76E+00	1.27E+00	9.13E-01	4.71E-01	1.75E-01	6.51E-02	2.41E-02	8.97E-03	3.33E-03
SB127	3.98E-02	1.37E-01	1.52E-01	1.62E-01	1.69E-01	1.76E-01	1.79E-01	1.77E-01	1.74E-01	1.71E-01	1.67E-01
TE127	2.25E-02	2.80E-02	3.40E-02	4.04E-02	4.66E-02	5.85E-02	7.49E-02	8.75E-02	9.73E-02	1.05E-01	1.10E-01
SN128	2.29E+01	1.13E+01	5.60E+00	2.77E+00	1.37E+00	3.34E-01	4.03E-02	4.87E-03	5.87E-04	7.12E-05	8.58E-06
SB128M	1.17E-02	1.29E+01	6.69E+00	3.30E+00	1.63E+00	3.99E-01	4.80E-02	5.80E-03	6.99E-04	8.45E-05	1.02E-05
SB128	9.67E-01	9.31E-01	8.76E-01	8.21E-01	7.66E-01	6.57E-01	5.24E-01	4.16E-01	3.30E-01	2.62E-01	2.08E-01
SN129M	1.46E+01	7.25E+00	3.64E+00	1.82E+00	9.10E-01	2.27E-01	2.85E-02	3.56E-03	4.44E-04	5.56E-05	6.95E-06
SN129	9.71E+01	9.53E-01	9.41E-03	9.28E-05	9.10E-07	8.85E-11	8.42E-17	8.05E-23	7.68E-29	7.32E-35	7.01E-41
SB129	5.46E+00	9.16E+00	8.61E+00	7.68E+00	6.76E+00	5.02E+00	3.13E+00	1.94E+00	1.19E+00	7.38E-01	4.54E-01
TE129M	1.03E-07	1.14E-03	2.35E-03	3.46E-03	4.44E-03	6.02E-03	7.62E-03	8.61E-03	9.22E-03	9.59E-03	9.84E-03
TE129	3.93E+00	5.41E+00	6.33E+00	6.58E+00	6.33E+00	5.24E+00	3.49E+00	2.20E+00	1.37E+00	8.48E-01	5.26E-01
SB130M	5.49E-01	1.04E+00	2.72E-03	7.15E-06	1.88E-08	1.30E-13	2.36E-21	4.30E-29	7.80E-37	1.42E-44	2.58E-52
SB130	9.41E+01	2.85E+01	8.10E+00	2.29E+00	6.49E-01	5.22E-02	1.19E-03	2.72E-05	6.19E-07	1.41E-08	3.22E-10

TSEASY 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 = 4.976E-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	2.62E-02	2.48E-02	2.35E-02	2.22E-02	2.10E-02	1.88E-02	1.58E-02	1.34E-02	1.13E-02	9.59E-03	8.10E-03
SB131	2.16E+02	5.63E+01	9.20E+00	1.51E+00	2.48E-01	6.67E-03	2.94E-05	1.30E-07	5.71E-10	2.52E-12	1.26E-14
TE131M	1.04E-04	5.42E-01	6.19E-01	6.19E-01	6.08E-01	5.81E-01	5.42E-01	5.05E-01	4.72E-01	4.40E-01	4.11E-01
TE131	9.55E+01	1.04E+02	3.38E+01	8.79E+00	2.14E+00	2.01E-01	9.96E-02	9.20E-02	8.58E-02	8.03E-02	7.48E-02
I131	1.39E-02	4.81E-01	7.07E-01	7.76E-01	7.90E-01	7.97E-01	7.97E-01	7.90E-01	7.90E-01	7.83E-01	7.83E-01
TE132	1.09E+00	2.64E+00	2.62E+00	2.60E+00	2.57E+00	2.53E+00	2.46E+00	2.39E+00	2.33E+00	2.27E+00	2.21E+00
I132	2.67E+00	2.66E+00	2.66E+00	2.64E+00	2.62E+00	2.59E+00	2.53E+00	2.47E+00	2.40E+00	2.34E+00	2.28E+00
TE133M	1.32E-01	4.57E+01	1.99E+01	8.67E+00	3.77E+00	7.16E-01	5.89E-02	4.86E-03	4.01E-04	3.31E-05	2.73E-06
TE133	7.42E+02	4.20E+01	4.68E+00	1.55E+00	6.54E-01	1.24E-01	1.02E-02	8.42E-04	6.98E-05	5.74E-06	4.73E-07
I133	1.15E+00	1.24E+01	1.34E+01	1.34E+01	1.31E+01	1.24E+01	1.13E+01	1.02E+01	9.24E+00	8.42E+00	7.60E+00
XE133M	4.90E-08	2.78E-03	6.72E-03	1.07E-02	1.46E-02	2.20E-02	3.19E-02	4.04E-02	4.76E-02	5.39E-02	5.90E-02
XE133	8.55E-07	4.86E-02	1.18E-01	1.89E-01	2.59E-01	3.92E-01	5.75E-01	7.35E-01	8.80E-01	1.01E+00	1.12E+00
TE134	2.34E+02	1.08E+02	4.03E+01	1.50E+01	5.56E+00	7.71E-01	3.94E-02	2.02E-03	1.03E-04	5.31E-06	2.72E-07
I134	1.07E+02	1.43E+02	1.00E+02	5.88E+01	3.16E+01	8.02E+00	8.82E-01	9.00E-02	8.82E-03	8.45E-04	8.02E-05
I135	1.95E+01	3.43E+01	3.09E+01	2.78E+01	2.52E+01	2.04E+01	1.50E+01	1.10E+01	8.05E+00	5.92E+00	4.33E+00
XE135M	2.15E-03	9.89E+00	9.61E+00	8.72E+00	7.82E+00	6.37E+00	4.68E+00	3.43E+00	2.52E+00	1.84E+00	1.35E+00
XE135	2.24E+00	4.43E+00	6.48E+00	8.16E+00	9.50E+00	1.14E+01	1.26E+01	1.27E+01	1.21E+01	1.10E+01	9.84E+00
CS136	7.57E-03	7.55E-03	7.54E-03	7.52E-03	7.50E-03	7.46E-03	7.42E-03	7.37E-03	7.32E-03	7.27E-03	7.22E-03
CS137	9.59E-05	1.03E-03									
BA137M	2.02E-07	9.65E-04									
XE138	7.29E+02	6.27E+01	5.45E+00	4.72E-01	4.09E-02	3.07E-04	1.99E-07	1.29E-10	8.41E-14	5.47E-17	3.55E-20
CS138	1.08E+02	1.82E+02	6.33E+01	1.86E+01	5.21E+00	3.96E-01	8.25E-03	1.71E-04	3.55E-06	7.40E-08	1.53E-09
CS139	7.08E+02	2.26E+01	2.83E-01	3.56E-03	4.46E-05	7.01E-09	1.40E-14	2.76E-20	5.46E-26	1.08E-31	2.14E-37
BA139	1.31E+01	1.46E+02	8.98E+01	5.46E+01	3.30E+01	1.21E+01	2.69E+00	5.97E-01	1.33E-01	2.94E-02	6.53E-03
BA140	1.13E-01	7.05E-01	7.05E-01	6.99E-01	6.99E-01	6.94E-01	6.94E-01	6.88E-01	6.83E-01	6.78E-01	6.72E-01
LA140	2.68E-07	1.20E-02	2.39E-02	3.54E-02	4.68E-02	6.88E-02	1.01E-01	1.30E-01	1.58E-01	1.84E-01	2.09E-01
BA141	1.70E+02	5.14E+01	5.10E+00	5.05E-01	5.01E-02	4.97E-04	4.85E-07	4.73E-10	4.61E-13	4.53E-16	4.41E-19
LA141	1.57E+00	3.32E+01	3.10E+01	2.63E+01	2.20E+01	1.54E+01	9.06E+00	5.30E+00	3.12E+00	1.83E+00	1.07E+00
CE141	1.94E-07	2.16E-02	5.05E-02	7.60E-02	9.75E-02	1.31E-01	1.62E-01	1.80E-01	1.91E-01	1.97E-01	2.00E-01
BA142	3.41E+02	1.35E+01	3.09E-01	7.04E-03	1.60E-04	8.34E-08	9.90E-13	1.17E-17	1.39E-22	1.65E-27	1.96E-32
LA142	7.82E+00	5.43E+01	3.58E+01	2.28E+01	1.45E+01	5.86E+00	1.51E+00	3.90E-01	1.00E-01	2.59E-02	6.67E-03
LA143	1.28E+02	2.49E+01	1.25E+00	6.56E-02	3.37E-03	8.83E-06	1.19E-09	1.61E-13	2.16E-17	2.92E-21	3.94E-25
CE143	5.10E-02	3.25E+00	3.37E+00	3.28E+00	3.22E+00	3.10E+00	2.91E+00	2.73E+00	2.56E+00	2.41E+00	2.26E+00
PR143	1.49E-08	4.98E-03	1.20E-02	1.90E-02	2.58E-02	3.91E-02	5.76E-02	7.52E-02	9.13E-02	1.07E-01	1.21E-01
CE144	2.03E-03	1.45E-02									
PR144	5.56E-07	1.32E-02	1.44E-02	1.45E-02							
PR145	8.18E-02	1.20E+01	1.07E+01	9.51E+00	8.49E+00	6.72E+00	4.74E+00	3.35E+00	2.37E+00	1.67E+00	1.18E+00
CE146	2.40E+02	1.23E+01	6.31E-01	3.22E-02	1.66E-03	4.37E-06	5.89E-10	7.93E-14	1.07E-17	1.44E-21	1.94E-25
PR146	2.96E+00	4.32E+01	9.78E+00	1.84E+00	3.31E-01	1.04E-02	5.75E-05	3.17E-07	1.76E-09	9.70E-12	5.30E-14
PR147	2.78E+01	8.05E+00	2.51E-01	7.85E-03	2.46E-04	2.40E-07	7.32E-12	2.24E-16	6.82E-21	2.08E-25	6.35E-30

TSEASY MICROCURIES/SQ METER  
 MR/HR AT H+12 HOURS = 1,000  
 FRACTION OF REFRACTORIES PRESENT = 0.500  
 RELAXATION LENGTH = 0.16 GM/SQCM = 0.500  
 BOMB FRACTION PER SQ. METER = 4.976E-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	9.93E-06	1.87E-01	1.92E-01	1.91E-01	1.90E-01	1.89E-01	1.88E-01	1.86E-01	1.85E-01	1.85E-01	1.83E-01
ND149	1.43E+01	9.76E+00	6.64E+00	4.53E+00	3.06E+00	1.42E+00	4.47E-01	1.41E-01	4.45E-02	1.40E-02	4.42E-03
PM149	2.00E-03	1.56E-01	2.28E-01	3.59E-01	3.71E-01	4.18E-01	4.34E-01	4.26E-01	4.15E-01	3.99E-01	3.85E-01
PM150	1.66E+01	1.28E+00	1.94E+00	2.67E+00	5.97E+02	5.44E+05	5.31E+08	1.62E+12	4.96E+17	1.51E+21	4.60E+26
ND151	5.70E+01	1.78E+00	5.57E+00	1.74E+02	1.74E+03	1.74E+04	1.74E+05	1.74E+06	1.74E+07	1.74E+08	1.74E+09
PM151	3.61E-02	4.22E-01	4.25E-01	4.14E-01	4.14E-01	4.04E-01	3.84E-01	3.56E-01	3.31E-01	3.08E-01	2.85E-01
PM152	9.20E+01	9.00E-02	8.78E-05	8.58E-08	8.18E-01	8.00E-11	8.00E-17	7.45E-26	6.95E-35	6.47E-44	6.04E-53
SM153	1.23E+01	1.21E-01	1.20E-01	1.19E-01	1.18E-01	1.16E-01	1.13E-01	1.08E-01	1.03E-01	9.88E-02	9.47E-02
SM155	7.06E+00	1.16E+00									
SM156	5.19E-06	1.48E-04	1.71E-04								
SM157	5.124E-01	1.15E-01	1.07E-01	9.90E-02	9.19E-02	7.93E-02	6.36E-02	5.10E-02	4.09E-02	3.28E-02	2.62E-02
EUJ156	3.61E-04	5.90E-04	8.00E-04	9.97E-04	1.18E-03	1.50E-03	1.91E-03	2.21E-03	2.48E-03	2.67E-03	2.82E-03
EUJ157	2.03E-02	6.74E-02	6.43E-02	6.15E-02	5.86E-02	5.36E-02	4.68E-02	4.08E-02	3.56E-02	3.10E-02	2.70E-02
EUJ158	7.62E-01	3.09E-01	1.25E-01	5.06E-01	2.05E-02	3.35E-03	2.23E-04	1.48E-05	9.83E-07	6.53E-08	4.34E-09
EUJ159	9.20E-01	9.14E-02	9.06E-03	9.00E-04	8.92E-05	8.80E-07	8.59E-10	8.39E-13	8.19E-16	8.00E-19	7.82E-22
GD159	3.94E-03	1.73E-02	1.60E-02	1.62E-04	1.74E-02	1.68E-02	1.55E-02	1.38E-02	1.23E-02	1.10E-02	9.77E-03
TB161	5.06E-05	3.64E-04	3.62E-04	3.61E-04	3.61E-04	3.59E-04	3.56E-04	3.52E-04	3.47E-04	3.43E-04	3.39E-04
TOTAL	1.06E+04	2.25E+03	8.90E+02	5.41E+02	3.92E+02	2.58E+02	1.74E+02	1.31E+02	1.04E+02	8.58E+01	7.24E+01

TSEASY 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 = 4.976E-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-06	1.56E-06	1.54E-06	1.48E-06	1.39E-06	1.22E-06	1.07E-06	8.22E-07	4.30E-07	1.17E-07	3.18E-08
*NA	24	2.97E-03	9.79E-04	3.23E-04	1.16E-05	4.53E-08	6.93E-13	1.06E-17	2.46E-27	0.	0.	0.
MN	54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE	55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE	59	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD	57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD	58	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD	60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
*CU	64	6.65E-01	1.81E-01	4.94E-02	1.00E-03	1.50E-06	3.42E-12	7.75E-18	3.99E-29	0.	0.	0.
*CU	67	1.05E-05	7.99E-06	6.10E-06	2.71E-06	7.07E-07	4.77E-08	3.22E-09	1.46E-11	2.04E-17	0.	0.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W187	0.	3.21E-05	3.18E-05	3.12E-05	3.06E-05	2.93E-05	2.66E-05	2.43E-05	2.02E-05	1.27E-05	5.06E-06	2.01E-06
W188	0.	3.55E-03	1.77E-03	8.77E-04	1.09E-04	3.36E-06	3.21E-09	3.03E-12	2.73E-20	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	0.	3.72E-02	3.35E-02	3.02E-02	2.23E-02	1.33E-02	4.76E-03	1.71E-03	2.18E-04	1.29E-06	1.39E-10	9.35E-11
U240	0.	6.63E-02	2.04E-02	6.27E-03	1.82E-04	4.99E-07	3.75E-12	2.82E-17	1.59E-27	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	0.	1.90E-03	2.90E+00	2.16E+00	8.92E-01	2.04E-01	1.07E-02	5.59E-04	1.53E-06	6.03E-13	1.44E-22	1.44E-22
NP240M	0.	1.05E-04	2.06E-02	6.32E-03	1.83E-04	5.03E-07	3.79E-12	2.85E-17	1.61E-27	0.	0.	0.
* AM241	0.	1.84E-08										
* CM242	0.	3.40E-07	3.38E-07	3.36E-07	3.33E-07	3.26E-07	3.12E-07	2.99E-07	2.75E-07	2.24E-07	1.46E-07	9.51E-08
GE	77	5.45E-03	3.43E-03	7.85E-04	9.48E-06	6.03E-09	2.44E-15	9.85E-22	1.61E-34	0.	0.	0.
AS	77	5.63E-05	8.31E-03	6.01E-03	1.74E-03	2.04E-04	2.76E-06	3.75E-08	6.92E-12	3.21E-21	6.88E-40	1.48E-58
SE	77M	2.22E-09	2.50E-05	1.80E-05	5.23E-06	6.09E-07	8.29E-09	1.13E-10	2.08E-14	9.62E-24	2.06E-42	4.44E-61
AS	78	1.53E-02	1.36E-04	3.99E-09	3.37E-23	0.	0.	0.	0.	0.	0.	0.
BR	82	4.94E-04	3.08E-04	1.93E-04	4.68E-05	4.44E-06	3.99E-08	3.58E-10	2.89E-14	1.69E-24	5.79E-45	1.97E-65
BR	83	3.73E-01	9.83E-03	9.88E-06	1.00E-14	1.03E-29	0.	0.	0.	0.	0.	0.
KR	83M	1.93E-05	4.30E-02	4.88E-05	4.39E-14	4.51E-29	0.	0.	0.	0.	0.	0.
KR	85M	4.41E-03	2.52E-01	5.73E-03	6.81E-08	4.20E-16	1.60E-32	6.05E-49	0.	0.	0.	0.
KR	85	4.56E-06	1.20E-04	1.22E-04	1.22E-04	1.22E-04	1.22E-04	1.22E-04	1.21E-04	1.20E-04	1.18E-04	1.16E-04
KR	87	7.40E+01	1.46E-04	2.89E-10	2.24E-27	0.	0.	0.	0.	0.	0.	0.
KR	88	4.19E+01	1.10E-01	2.89E-04	5.26E-12	6.62E-25	0.	0.	0.	0.	0.	0.
RB	88	1.06E+01	1.23E-01	3.24E-04	5.88E-12	7.37E-25	0.	0.	0.	0.	0.	0.
SR	89	3.92E-06	1.18E-01	1.16E-01	1.11E-01	1.04E-01	9.12E-02	7.97E-02	6.14E-02	3.14E-02	8.26E-03	2.18E-03
SR	90	7.88E-06	8.10E-04	8.03E-04	8.03E-04	7.95E-04						
Y	90	1.17E-11	1.86E-04	3.28E-04	5.90E-04	7.52E-04	8.03E-04	8.10E-04	8.10E-04	8.03E-04	8.03E-04	7.95E-04
SR	91	9.32E-01	3.34E+00	5.98E-01	3.43E-03	6.27E-07	2.13E-14	7.21E-22	8.21E-37	0.	0.	0.

TSEASY 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 = 4.976E-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	6.27E-05	2.16E+00	3.86E-01	2.22E-03	4.07E-07	1.37E-14	4.64E-22	5.30E-37	0.	0.	0.
Y 91	2.57E-08	1.03E-01	1.21E-01	1.21E-01	1.14E-01	1.01E-01	9.03E-02	7.15E-02	3.96E-02	1.22E-02	3.75E-03
SR 92	6.83E+00	8.52E-02	1.84E-04	1.85E-12	8.64E-26	0.	0.	0.	0.	0.	0.
Y 92	3.15E-01	8.93E-01	9.91E-03	7.63E-09	4.45E-19	1.52E-39	5.21E-60	0.	0.	0.	0.
Y 93	3.38E-01	2.28E+00	4.45E-01	3.35E-03	9.63E-07	7.96E-14	6.57E-21	4.49E-35	0.	0.	0.
ZR 95	6.58E-04	8.22E-02	8.13E-02	7.87E-02	7.47E-02	6.69E-02	6.03E-02	4.87E-02	2.86E-02	9.84E-03	3.37E-03
NB 95M	1.40E-11	2.78E-04	5.08E-04	9.69E-04	1.31E-03	1.38E-03	1.27E-03	1.03E-03	6.06E-04	2.09E-04	7.18E-05
NB 95	7.33E-11	1.59E-03	3.14E-03	7.53E-03	1.40E-02	2.41E-02	3.12E-02	3.87E-02	3.72E-02	1.79E-02	6.87E-03
ZR 97	1.60E+00	2.72E+00	1.02E+00	5.41E-02	4.06E-04	2.29E-08	1.29E-12	4.06E-21	2.29E-42	0.	0.
NB 97M	8.21E-03	2.61E+00	9.80E-01	5.22E-02	3.90E-04	2.20E-08	1.24E-12	3.90E-21	2.21E-42	0.	0.
NB 97	7.99E-01	2.73E+00	1.02E+00	5.44E-02	4.09E-04	2.46E-08	1.38E-12	4.39E-21	2.47E-42	0.	0.
MO 99	4.85E-03	1.58E+00	1.23E+00	5.84E-01	1.69E-01	1.41E-02	1.18E-03	8.21E-06	3.33E-11	5.50E-22	9.05E-33
TC 99M	4.51E-08	1.39E+00	1.17E+00	5.59E-01	1.61E-01	1.35E-02	1.12E-03	7.84E-06	3.18E-11	5.25E-22	8.65E-33
RU103	8.66E-05	1.98E-01	1.94E-01	1.84E-01	1.69E-01	1.42E-01	1.19E-01	8.38E-02	3.49E-02	6.05E-03	1.05E-03
RH103M	5.77E-09	1.98E-01	1.94E-01	1.84E-01	1.69E-01	1.42E-01	1.19E-01	8.38E-02	3.49E-02	6.05E-03	1.05E-03
RU105	6.36E-01	6.08E-01	1.43E-02	1.88E-07	1.37E-15	7.33E-32	3.93E-48	0.	0.	0.	0.
RH105M	4.18E-03	6.08E-01	1.43E-02	1.88E-07	1.38E-15	7.38E-32	3.94E-48	0.	0.	0.	0.
RH105	6.87E-09	2.19E+00	1.43E+00	3.57E-01	3.52E-02	3.42E-04	3.33E-06	3.14E-10	2.72E-20	2.05E-40	1.54E-60
RU106	5.56E-04	1.05E-02	1.05E-02	1.04E-02	1.03E-02	1.02E-02	9.93E-03	9.57E-03	8.70E-03	7.20E-03	5.97E-03
RH106	6.01E-06	1.05E-02	1.05E-02	1.04E-02	1.03E-02	1.02E-02	9.93E-03	9.57E-03	8.70E-03	7.20E-03	5.97E-03
PD109	8.37E-03	2.13E-01	6.21E-02	1.54E-03	3.24E-06	1.45E-11	6.44E-17	1.27E-27	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.
PD111M	1.03E+00	4.98E-02	2.42E-03	2.78E-07	7.51E-14	5.48E-27	4.02E-40	0.	0.	0.	0.
PD111	3.66E-01	4.02E-02	1.95E-03	2.23E-07	6.05E-14	4.41E-27	3.23E-40	0.	0.	0.	0.
AG111M	2.90E-03	5.25E-02	2.56E-03	2.94E-07	7.93E-14	5.82E-27	4.25E-40	0.	0.	0.	0.
AG111	1.03E-09	2.85E-02	2.74E-02	2.09E-02	1.31E-02	5.21E-03	2.07E-03	3.26E-04	3.21E-06	3.11E-10	3.01E-14
PD112	1.93E-01	8.78E-02	3.97E-02	3.69E-03	7.01E-05	2.55E-08	9.25E-12	1.21E-18	7.66E-36	0.	0.
AG112	5.82E-06	1.02E-01	4.68E-02	4.35E-03	8.31E-05	3.00E-08	1.09E-11	1.44E-18	9.01E-36	0.	0.
AG113	1.73E-03	1.82E-02	7.89E-04	6.41E-08	9.81E-15	2.30E-28	5.36E-42	0.	0.	0.	0.
CD115M	4.85E-09	1.40E-04	1.38E-04	1.31E-04	1.21E-04	1.03E-04	8.80E-05	6.35E-05	2.84E-05	5.65E-06	1.13E-06
CD115	1.87E-06	2.82E-02	2.07E-02	8.14E-03	1.72E-03	7.67E-05	3.42E-06	6.82E-09	1.20E-15	3.77E-29	1.18E-42
IN115M	2.33E-11	2.97E-02	2.25E-02	8.89E-03	1.87E-03	8.38E-05	3.73E-06	7.44E-09	1.32E-15	4.12E-29	1.29E-42
CD117	4.16E-02	9.06E-04	8.82E-07	8.23E-16	7.31E-31	0.	0.	0.	0.	0.	0.
IN117M	2.00E-06	3.76E-03	4.36E-06	4.20E-15	3.73E-30	0.	0.	0.	0.	0.	0.
IN117	8.04E-11	2.48E-03	2.94E-06	2.85E-15	2.52E-30	0.	0.	0.	0.	0.	0.
SN121	8.48E-04	4.83E-02	2.61E-02	4.11E-03	1.89E-04	3.98E-07	8.38E-10	3.74E-15	1.56E-28	0.	0.
SN123	4.58E-06	4.79E-04	4.75E-04	4.66E-04	4.54E-04	4.29E-04	4.07E-04	3.64E-04	2.76E-04	1.58E-04	9.12E-05
SN125	1.31E-02	1.21E-02	1.13E-02	9.03E-03	6.24E-03	2.99E-03	1.43E-03	3.27E-04	8.18E-06	5.15E-09	3.22E-12
SB125	7.84E-05	8.69E-05	9.51E-05	1.16E-04	1.42E-04	1.72E-04	1.86E-04	1.94E-04	1.90E-04	1.77E-04	1.65E-04
SB126	2.44E-03	2.31E-03	2.19E-03	1.85E-03	1.40E-03	8.04E-04	4.64E-04	1.53E-04	9.55E-06	4.64E-08	9.32E-09

TSEASY MICROSURIES/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 = 4.976E-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
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SN127	3.41E+00	1.24E-03	4.49E-07	2.14E-17	1.35E-34	0.	0.	0.	0.	0.	0.
SB127	3.98E-02	1.64E-01	1.37E-01	7.98E-02	3.27E-02	5.46E-03	9.13E-04	2.55E-05	3.33E-09	5.69E-17	9.68E-25
TE127M	3.22E-10	2.49E-04	4.57E-04	8.86E-04	1.23E-03	1.35E-03	1.30E-03	1.15E-03	8.42E-04	4.45E-04	2.35E-04
TE127	2.25E-02	1.17E-01	1.15E-01	7.00E-02	2.96E-02	6.07E-03	2.08E-03	1.16E-03	8.31E-04	4.40E-04	2.32E-04
SB128	9.67E-01	1.65E-01	2.60E-02	1.02E-04	9.85E-09	9.24E-17	8.70E-25	7.66E-41	0.	0.	0.
SB129	5.46E+00	2.80E-01	5.84E-03	5.32E-08	2.11E-16	3.34E-33	5.27E-50	0.	0.	0.	0.
TE129M	1.03E-07	1.09E-02	1.09E-02	1.03E-02	9.28E-03	7.56E-03	6.15E-03	4.09E-03	1.48E-03	1.92E-04	2.50E-05
TE129	3.93E+00	3.28E-01	1.36E-02	6.58E-03	5.93E-03	4.84E-03	3.95E-03	2.62E-03	9.47E-04	1.24E-04	1.60E-05
I130	2.62E-02	6.85E-03	1.79E-03	3.20E-05	3.91E-08	5.83E-14	8.69E-20	1.94E-31	0.	0.	0.
TE131M	1.04E-04	3.63E-01	2.08E-01	3.94E-02	2.47E-03	9.61E-06	3.76E-08	5.74E-13	5.22E-25	0.	0.
TE131	9.55E+01	6.61E-02	3.80E-02	7.21E-03	4.50E-04	1.76E-06	6.86E-09	1.05E-13	9.55E-26	0.	0.
I131	1.39E-02	7.48E-01	7.07E-01	5.69E-01	3.74E-01	1.58E-01	6.69E-02	1.19E-02	1.61E-04	2.94E-08	5.36E-12
XE131M	3.76E-11	3.47E-04	6.59E-04	1.37E-03	1.96E-03	1.94E-03	1.44E-03	5.95E-04	3.97E-05	1.19E-07	3.35E-10
TE132	1.09E+00	2.16E+00	1.74E+00	9.16E-01	3.16E-01	3.74E-02	4.44E-03	6.23E-05	1.46E-09	7.98E-19	4.35E-28
I132	2.67E+00	2.22E+00	1.79E+00	9.43E-01	3.26E-01	3.86E-02	4.57E-03	6.42E-05	1.50E-09	8.18E-19	4.48E-28
I133	1.15E+00	6.41E+00	2.89E+00	2.68E-01	5.12E-03	1.85E-06	6.72E-10	8.86E-17	5.57E-34	0.	0.
XE133M	4.90E-08	6.05E-02	7.16E-02	4.20E-02	9.87E-03	4.63E-04	2.16E-05	4.68E-08	1.02E-14	4.90E-28	2.34E-41
XE133	8.55E-07	1.16E+00	1.56E+00	1.40E+00	7.60E-01	2.05E-01	5.52E-02	3.98E-03	5.54E-06	1.07E-11	2.09E-17
I135	1.95E+01	3.17E+00	2.65E-01	1.54E-04	6.26E-10	1.03E-20	1.70E-31	4.62E-53	0.	0.	0.
XE135M	2.15E-03	9.89E-01	8.27E-02	4.81E-05	1.96E-10	3.22E-21	5.30E-32	1.44E-53	0.	0.	0.
XE135	2.24E+00	8.55E+00	2.09E+00	1.20E-02	1.46E-06	2.06E-14	2.88E-22	5.70E-38	0.	0.	0.
CS136	7.57E-03	7.17E-03	6.80E-03	5.80E-03	4.44E-03	2.61E-03	1.53E-03	5.27E-04	3.66E-05	1.76E-07	8.55E-10
CS137	9.59E-05	1.03E-03	1.02E-03	1.02E-03							
BA137M	2.02E-07	9.65E-04	9.59E-04	9.53E-04	9.48E-04						
BA139	1.31E+01	1.40E-03	8.23E-09	1.69E-24	0.	0.	0.	0.	0.	0.	0.
BA140	1.13E-01	6.67E-01	6.35E-01	5.38E-01	4.10E-01	2.39E-01	1.39E-01	4.71E-02	3.14E-03	1.40E-05	6.19E-08
LA140	2.68E-07	2.32E-01	3.74E-01	5.17E-01	4.59E-01	2.75E-01	1.60E-01	5.43E-02	3.61E-03	1.61E-05	7.15E-08
LA141	1.57E+00	6.23E-01	8.73E-03	2.42E-08	1.32E-17	3.95E-36	1.18E-54	0.	0.	0.	0.
CE141	1.94E-07	2.15E-01	2.14E-01	2.01E-01	1.80E-01	1.46E-01	1.17E-01	7.64E-02	2.62E-02	3.09E-03	3.64E-04
LA142	7.82E+00	1.71E-03	3.32E-08	2.44E-22	0.	0.	0.	0.	0.	0.	0.
CE143	5.10E-02	2.10E+00	1.27E+00	2.79E-01	2.25E-02	1.45E-04	9.40E-07	3.94E-11	4.45E-22	0.	0.
PR143	1.49E-08	1.34E-01	2.09E-01	2.70E-01	2.31E-01	1.41E-01	8.50E-02	3.07E-02	2.46E-03	1.56E-05	9.91E-08
CE144	2.03E-03	1.45E-02	1.44E-02	1.43E-02	1.42E-02	1.38E-02	1.35E-02	1.29E-02	1.14E-02	8.90E-03	6.99E-03
PR144	5.56E-07	1.45E-02	1.44E-02	1.43E-02	1.42E-02	1.38E-02	1.35E-02	1.29E-02	1.14E-02	8.90E-03	6.99E-03
PR145	8.18E-02	8.36E-01	5.17E-02	1.23E-05	1.12E-11	9.26E-24	7.68E-36	0.	0.	0.	0.
ND147	9.93E-06	1.67E-01	1.57E-01	1.30E-01	9.52E-02	5.11E-02	2.73E-02	7.85E-03	3.44E-04	6.70E-07	1.30E-09
PM147	2.76E-14	1.25E-04	2.42E-04	5.53E-04	9.55E-04	1.46E-03	1.72E-03	1.92E-03	1.94E-03	1.80E-03	1.68E-03
ND149	1.43E+01	1.39E-03	1.34E-07	1.23E-19	1.05E-39	0.	0.	0.	0.	0.	0.
PM149	2.00E-03	3.69E-01	2.70E-01	1.05E-01	2.20E-02	9.60E-04	4.18E-05	7.94E-08	1.25E-14	3.09E-28	7.70E-42
PM150	1.66E-01	3.51E-04	7.38E-07	6.94E-15	2.90E-28	0.	0.	0.	0.	0.	0.

TSEASY                   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 = 4.976E-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
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PM151	3.61E-02	2.46E-01	1.36E-01	2.29E-02	1.17E-03	3.08E-06	8.11E-09	5.59E-14	7.02E-27	0.	0.
SM153	1.23E-01	8.66E-02	6.08E-02	2.10E-02	3.57E-03	1.04E-04	3.02E-06	2.53E-09	5.23E-17	2.23E-32	9.47E-48
SM156	1.24E-01	2.11E-02	3.59E-03	1.77E-05	2.55E-09	5.24E-17	1.08E-24	4.60E-40	0.	0.	0.
EU155	5.19E-06	1.76E-04	1.75E-04	1.75E-04	1.75E-04	1.74E-04	1.74E-04	1.72E-04	1.69E-04	1.62E-04	1.56E-04
EU156	3.61E-04	2.94E-03	3.26E-03	2.92E-03	2.32E-03	1.46E-03	9.19E-04	3.65E-04	3.61E-05	3.56E-07	3.51E-09
EU157	2.03E-02	2.35E-02	7.90E-03	2.96E-04	1.24E-06	2.20E-11	3.89E-16	1.21E-25	0.	0.	0.
GD159	3.94E-03	7.76E-03	3.09E-03	1.93E-04	1.90E-06	1.84E-10	1.78E-14	1.67E-22	1.43E-42	0.	0.
TB161	5.06E-05	3.31E-04	2.99E-04	2.21E-04	1.34E-04	4.90E-05	1.79E-05	2.40E-06	1.59E-08	6.87E-13	2.99E-17
<b>TOTAL</b>	<b>3.14E+02</b>	<b>6.13E+01</b>	<b>2.69E+01</b>	<b>9.85E+00</b>	<b>4.62E+00</b>	<b>2.00E+00</b>	<b>1.24E+00</b>	<b>6.84E-01</b>	<b>2.94E-01</b>	<b>1.03E-01</b>	<b>5.09E-02</b>

TSEASY                    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 = 4.976E-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-06	1.36E-08	1.27E-09	1.18E-10	9.46E-14	7.57E-17	5.66E-21	3.63E-27	0.	0.	0.
MN 54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 58	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W188	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	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	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NB 95	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
RU103	0.	0.	0.	0.	0.	0.	0.	0.	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	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SN123	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
SB125	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
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	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
BA137M	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE141	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CE144	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PR144	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
PM147	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
EU155	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
TOTAL	6.32E-02	3.72E-02	2.17E-02	1.55E-02	7.65E-03	5.03E-03	3.80E-03	3.16E-03	2.30E-03	1.59E-03	1.11E-03

**APPENDIX F**  
**DETAILED RESULTS FOR EVENT FOX**

TSFOX		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 = 5.281E-13	MICROCURIES/SQ METER
TIME	TIME	MR/HR					
ZERO	TIME	HOURS	1.10E+02	1.22E+04			
1.00E+00			3.44E+01	2.52E+03			
2.00E+00			1.36E+01	9.32E+02			
3.00E+00			7.25E+00	5.48E+02			
4.00E+00			4.49E+00	3.95E+02			
5.00E+00			2.34E+00	2.63E+02			
6.00E+00			1.37E+00	1.81E+02			
7.00E+00			1.00E+00	1.39E+02			
8.00E+00			7.85E-01	1.13E+02			
9.00E+00			6.42E-01	9.41E+01			
1.00E+01			6.65E-01	9.80E+01			
1.10E+01			4.07E-01	6.95E+01			
1.20E+01			2.07E-02	3.35E+01			
1.30E+01			3.76E-02	5.21E+00			
1.40E+01			1.49E-02	1.99E+00			
1.50E+01			8.46E-03	1.21E+00			
1.60E+01			3.82E-03	6.68E-01			
1.70E+01			2.26E-03	2.86E-01			
1.80E+01			4.22E-04	1.00E-01			
1.90E+01			9.95E-02	4.95E-02			
2.00E+01			1.66E-04	3.62E-02			
2.10E+01			4.22E-04	2.11E-02			
2.20E+01			9.80E-05	1.50E-02			
2.30E+01			3.32E-05	7.43E-03			
2.40E+01			9.14E-05	4.89E-03			
2.50E+01			2.7E-05	3.70E-03			
2.60E+01			6.88E-06	3.07E-03			
2.70E+01			5.56E-06	2.24E-03			
2.80E+01			4.15E-06	1.54E-03			
2.90E+01			2.93E-06	1.08E-03			
3.00E+01							

TSFOX 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 = 5.281E-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	1.53E-06	1.52E-06	1.52E-06	1.52E-06	1.51E-06						
NA 24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MN 54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 58	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
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.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	9.84E-08	9.84E-08	9.84E-08	9.84E-08	9.84E-08	9.81E-08	9.81E-08	9.81E-08	9.79E-08	9.79E-08	9.76E-08
W187	1.41E-02	1.36E-02	1.32E-02	1.29E-02	1.25E-02	1.18E-02	1.08E-02	9.94E-03	9.08E-03	8.37E-03	7.63E-03
W188	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	1.08E-01	1.08E-01	1.08E-01	1.07E-01	1.07E-01	1.06E-01	1.04E-01	1.03E-01	1.02E-01	1.00E-01	9.90E-02
U239	2.43E+03	4.14E+02	7.07E+01	1.20E+01	2.04E+00	5.96E-02	2.95E-04	1.46E-06	7.21E-09	3.57E-11	1.76E-13
U240	3.07E-01	2.93E-01	2.79E-01	2.65E-01	2.53E-01	2.29E-01	1.97E-01	1.70E-01	1.47E-01	1.27E-01	1.09E-01
NP239	8.31E-03	1.39E+01	1.61E+01	1.64E+01	1.62E+01	1.58E+01	1.52E+01	1.47E+01	1.42E+01	1.37E+01	1.32E+01
NP240M	4.86E-04	2.94E-01	2.81E-01	2.68E-01	2.55E-01	2.31E-01	1.99E-01	1.72E-01	1.48E-01	1.28E-01	1.10E-01
NP240	1.23E-11	6.33E-12	3.29E-12	1.70E-12	8.77E-13	2.35E-13	3.24E-14	4.47E-15	6.16E-16	8.48E-17	1.17E-17
* AM241	9.85E-09										
* CM242	3.08E-07	3.08E-07	3.08E-07	3.08E-07	3.08E-07	3.08E-07	3.07E-07	3.07E-07	3.07E-07	3.07E-07	3.07E-07
GE 75	7.71E-06	3.74E-02	2.25E-02	1.36E-02	8.16E-03	2.96E-03	6.46E-04	1.41E-04	3.09E-05	6.73E-06	1.47E-06
GE 77	5.20E-03	1.34E-02	1.26E-02	1.18E-02	1.11E-02	9.85E-03	8.20E-03	6.81E-03	5.68E-03	4.72E-03	3.93E-03
AS 77	5.37E-05	8.49E-03	8.58E-03	8.64E-03	8.70E-03	8.76E-03	8.76E-03	8.70E-03	8.57E-03	8.39E-03	8.18E-03
SE 77M	2.12E-09	2.54E-05	2.58E-05	2.60E-05	2.60E-05	2.62E-05	2.64E-05	2.62E-05	2.58E-05	2.52E-05	2.44E-05
GE 78	8.08E-01	5.05E-01	3.14E-01	1.96E-01	1.23E-01	4.77E-02	1.16E-02	2.81E-03	6.85E-04	1.66E-04	4.04E-05
AS 78	1.45E-02	2.41E-01	2.98E-01	2.79E-01	2.33E-01	1.38E-01	5.11E-02	1.70E-02	5.25E-03	1.57E-03	4.55E-04
AS 79	1.58E+01	1.56E-01	1.53E-03	1.51E-05	1.49E-07	1.44E-11	1.37E-17	1.31E-23	1.25E-29	1.19E-35	1.14E-41
SE 79M	2.34E-02	2.75E-01	2.71E-03	2.67E-05	2.63E-07	2.54E-11	2.42E-17	2.31E-23	2.21E-29	2.11E-35	2.01E-41
BR 80	9.76E-02	9.21E-03	8.65E-04	8.14E-05	7.66E-06	6.80E-08	5.69E-11	4.74E-14	3.95E-17	3.30E-20	2.75E-23
SE 81M	7.99E-02	3.73E+00	1.80E+00	8.65E-01	4.16E-01	9.72E-02	1.09E-02	1.22E-03	1.37E-04	1.53E-05	1.72E-06
SE 81	9.76E-01	4.41E+00	2.55E+00	1.27E+00	6.18E-01	1.44E-01	1.61E-02	1.81E-03	2.03E-04	2.27E-05	2.55E-06
BR 82	4.80E-04	4.70E-04	4.61E-04	4.52E-04	4.43E-04	4.26E-04	4.02E-04	3.79E-04	3.57E-04	3.37E-04	3.18E-04
SE 83	4.39E+01	8.31E+00	1.57E+00	2.99E-01	5.64E-02	2.03E-03	1.38E-05	9.39E-08	6.41E-10	4.35E-12	2.76E-14
BR 83	3.64E-01	5.44E+00	5.03E+00	3.96E+00	3.01E+00	1.70E+00	7.18E-01	3.02E-01	1.28E-01	5.39E-02	2.27E-02
KR 83M	1.88E-05	1.23E+00	2.51E+00	3.12E+00	3.22E+00	2.69E+00	1.59E+00	8.16E-01	3.93E-01	1.82E-01	8.16E-02

TSFOX 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 = 5.281E-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
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BR 84	9.17E-02	1.58E+01	4.27E+00	1.16E+00	3.13E-01	2.29E-02	4.52E-04	8.92E-06	1.77E-07	3.49E-09	6.90E-11
KR 85M	4.31E-03	9.24E+00	7.87E+00	6.72E+00	5.74E+00	4.19E+00	2.61E+00	1.63E+00	1.02E+00	6.32E-01	3.94E-01
KR 87	7.19E+01	4.15E+01	2.40E+01	1.39E+01	8.00E+00	2.69E+00	5.21E-01	1.01E-01	1.95E-02	3.78E-03	7.31E-04
KR 88	4.08E+01	3.19E+01	2.49E+01	1.94E+01	1.52E+01	9.21E+00	4.40E+00	2.09E+00	9.95E-01	4.74E-01	2.25E-01
RB 88	1.04E+01	3.22E+01	2.75E+01	2.17E+01	1.69E+01	1.03E+01	4.92E+00	2.35E+00	1.12E+00	5.31E-01	2.52E-01
RB 89	4.99E+01	4.69E+01	3.15E+02	2.12E-01	1.42E-02	6.42E-05	1.94E-08	5.86E-12	1.79E-15	5.41E-19	1.64E-22
SR 89	3.82E-06	1.34E-01	1.43E-01	1.43E-01	1.43E-01	1.43E-01	1.43E-01	1.42E-01	1.42E-01	1.42E-01	1.42E-01
SR 90	7.68E-06	7.68E-04	7.68E-04								
SR 91	9.07E-01	1.69E+01	1.57E+01	1.47E+01	1.36E+01	1.18E+01	9.53E+00	7.70E+00	6.22E+00	4.99E+00	4.03E+00
Y 91M	6.11E-05	5.82E+00	7.93E+00	8.50E+00	8.39E+00	7.53E+00	6.16E+00	4.96E+00	4.00E+00	3.22E+00	2.60E+00
Y 91	2.50E-08	5.18E-03	1.19E-02	1.91E-02	2.60E-02	3.90E-02	5.53E-02	6.85E-02	7.93E-02	8.79E-02	9.47E-02
SR 92	6.65E+00	2.97E+01	2.30E+01	1.78E+01	1.38E+01	8.25E+00	3.83E+00	1.78E+00	8.25E-01	3.83E-01	1.78E-01
YY 92	3.06E-01	6.25E+00	9.80E+00	1.17E+01	1.24E+01	1.18E+01	9.03E+00	6.15E+00	3.96E+00	2.44E+00	1.47E+00
SR 93	2.70E+02	4.65E+00	2.57E-02	1.42E-04	7.82E-07	2.39E-11	4.03E-18	6.80E-25	1.15E-31	1.94E-38	3.26E-45
Y 93	3.29E-01	1.07E+01	1.00E+01	9.36E+00	8.74E+00	7.64E+00	6.22E+00	5.08E+00	4.13E+00	3.39E+00	2.75E+00
Y 94	3.94E+01	5.38E+01	6.92E+00	8.92E-01	1.15E-01	1.91E-03	4.10E-06	8.79E-09	1.88E-11	4.10E-14	2.27E-15
Y 95	1.71E+02	1.61E+01	3.54E-01	7.82E-03	1.72E-04	8.35E-08	8.94E-13	9.56E-18	1.02E-22	1.09E-27	1.17E-32
ZR 95	6.41E-04	8.38E-02	8.55E-02	8.55E-02	8.55E-02	8.55E-02	8.55E-02	8.52E-02	8.52E-02	8.49E-02	8.49E-02
NB 95	7.14E-11	5.17E-05	1.21E-04	1.90E-04	2.59E-04	3.97E-04	6.02E-04	8.10E-04	1.01E-03	1.22E-03	1.42E-03
ZR 97	1.56E+00	6.79E+00	6.49E+00	6.25E+00	5.98E+00	5.52E+00	4.88E+00	4.32E+00	3.84E+00	3.38E+00	3.00E+00
NB 97M	8.02E-03	6.52E+00	6.25E+00	6.01E+00	5.77E+00	5.31E+00	4.69E+00	4.16E+00	3.67E+00	3.25E+00	2.87E+00
NB 97	7.80E-01	3.41E+00	4.80E+00	5.47E+00	5.74E+00	5.71E+00	5.20E+00	4.64E+00	4.10E+00	3.62E+00	3.22E+00
NB 98	8.87E+00	3.93E+00	1.74E+00	7.68E-01	3.40E-01	6.66E-02	5.76E-03	4.97E-04	4.33E-05	3.75E-06	3.23E-07
MD 99	4.72E-03	1.95E+00	1.93E+00	1.91E+00	1.89E+00	1.85E+00	1.80E+00	1.74E+00	1.69E+00	1.64E+00	1.59E+00
TC 99M	4.39E-08	1.86E-01	3.49E-01	4.93E-01	6.20E-01	8.27E-01	1.05E+00	1.19E+00	1.28E+00	1.33E+00	1.35E+00
M0101	1.38E+02	6.21E+01	3.61E+02	2.09E-01	1.21E-02	4.07E-05	7.90E-09	1.54E-12	2.99E-16	5.81E-20	1.13E-23
TC101	5.81E+00	1.74E+02	1.90E+01	1.56E+00	1.14E-01	5.13E-04	1.28E-07	2.87E-11	6.10E-15	1.25E-18	2.54E-22
M0102	1.16E+03	2.64E+01	6.01E-01	1.37E-02	3.13E-04	1.63E-07	1.94E-12	2.29E-17	2.72E-22	3.23E-27	3.83E-32
TC102M	7.45E-01	2.23E+01	5.12E-01	1.17E-02	2.66E-04	1.38E-07	1.64E-12	1.94E-17	2.30E-22	2.73E-27	3.24E-32
TC102	3.49E+03	1.33E+01	3.03E-01	6.89E-03	1.58E-04	8.22E-08	9.76E-13	1.16E-17	1.37E-22	1.63E-27	1.93E-32
RU103	8.48E-05	1.97E-01	1.96E-01	1.96E-01	1.96E-01	1.96E-01	1.95E-01	1.95E-01	1.95E-01	1.94E-01	1.94E-01
RH103M	5.65E-09	1.02E-01	1.51E-01	1.75E-01	1.86E-01	1.94E-01	1.95E-01	1.95E-01	1.95E-01	1.94E-01	1.94E-01
TC104	7.42E+01	5.33E+01	5.33E+00	5.28E-01	5.22E-02	5.14E-04	5.02E-07	4.91E-10	4.79E-13	4.68E-16	4.57E-19
RU105	6.13E-01	2.12E+01	1.81E+01	1.55E+01	1.33E+01	9.72E+00	6.09E+00	3.81E+00	2.38E+00	1.49E+00	9.36E-01
RH105M	4.03E-03	2.13E+01	1.82E+01	1.56E+01	1.33E+01	9.76E+00	6.09E+00	3.82E+00	2.39E+00	1.50E+00	9.36E-01
RH105	6.63E-09	4.32E-01	8.01E-01	1.11E+00	1.36E+00	1.74E+00	2.08E+00	2.24E+00	2.28E+00	2.26E+00	2.20E+00
RU106	5.37E-04	1.02E-02	1.02E-02								
RH106	5.81E-06	1.02E-02	1.02E-02								
RH107	1.37E-01	1.86E+01	2.83E+00	4.25E-01	6.42E-02	1.46E-03	5.04E-06	1.74E-08	5.98E-11	2.05E-146	2.04E-17
PD107M	2.85E-04	3.79E+00	5.73E-01	8.66E-02	1.31E-02	2.98E-04	1.03E-06	3.54E-09	1.22E-11	4.20E-14	1.43E-16

TSFOX 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 = 5.281E-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	7.98E-03	6.62E-01	6.29E-01	5.96E-01	5.66E-01	5.11E-01	4.39E-01	3.76E-01	3.23E-01	2.76E-01	2.37E-01
AG109M	4.60E-05	6.62E-01	6.29E-01	5.97E-01	5.68E-01	5.12E-01	4.39E-01	3.76E-01	3.23E-01	2.76E-01	2.37E-01
PD111M	9.63E-01	8.48E-01	7.48E-01	6.61E-01	5.82E-01	4.53E-01	3.10E-01	2.12E-01	1.46E-01	9.96E-02	6.83E-02
PD111	3.43E-01	6.18E-01	5.93E-01	5.28E-01	4.67E-01	3.63E-01	2.49E-01	1.71E-01	1.17E-01	8.02E-02	5.50E-02
AG111M	2.73E-03	8.34E-01	7.84E-01	7.01E-01	6.18E-01	4.78E-01	3.27E-01	2.24E-01	1.54E-01	1.05E-01	7.19E-02
AG111	9.71E-10	2.88E-03	6.04E-03	8.88E-03	1.14E-02	1.55E-02	2.00E-02	2.29E-02	2.48E-02	2.60E-02	2.67E-02
PD112	1.83E-01	1.78E-01	1.72E-01	1.66E-01	1.61E-01	1.50E-01	1.36E-01	1.24E-01	1.12E-01	1.01E-01	9.17E-02
AG112	5.53E-06	3.52E-02	6.21E-02	8.34E-02	9.90E-02	1.19E-01	1.30E-01	1.30E-01	1.24E-01	1.15E-01	1.06E-01
AG113	1.65E-03	3.52E-01	3.09E-01	2.71E-01	2.38E-01	1.83E-01	1.24E-01	8.36E-02	5.64E-02	3.81E-02	2.57E-02
AG115	5.66E-01	6.06E-01	7.54E-02	9.43E-03	1.18E-03	1.85E-05	3.61E-08	7.05E-11	1.37E-13	1.36E-12	1.26E-16
CD115M	4.62E-09	1.23E-04	1.38E-04	1.40E-04	1.40E-04	1.40E-04	1.40E-04	1.40E-04	1.39E-04	1.39E-04	1.39E-04
CD115	1.79E-06	3.37E-02	3.62E-02	3.61E-02	3.57E-02	3.48E-02	3.35E-02	3.22E-02	3.10E-02	2.98E-02	2.86E-02
IN115M	2.23E-11	3.72E-03	8.26E-03	1.23E-02	1.56E-02	2.08E-02	2.57E-02	2.83E-02	2.95E-02	2.98E-02	2.96E-02
CD117	3.97E-02	6.61E-01	4.98E-01	3.72E-01	2.79E-01	1.56E-01	6.56E-02	2.76E-02	1.16E-02	4.88E-03	2.06E-03
IN117M	1.91E-06	2.30E-01	3.33E-01	3.61E-01	3.49E-01	2.75E-01	1.57E-01	8.05E-02	3.87E-02	1.79E-02	8.09E-03
IN117	7.68E-11	4.19E-02	1.01E-01	1.41E-01	1.57E-01	1.45E-01	9.21E-02	4.93E-02	2.45E-02	1.15E-02	5.30E-03
CD118	2.62E+00	1.12E+00	4.82E-01	2.05E-01	8.79E-02	1.61E-02	1.26E-03	9.87E-05	7.76E-06	6.08E-07	4.77E-08
IN118	1.74E-01	1.12E+00	4.82E-01	2.06E-01	8.79E-02	1.61E-02	1.26E-03	9.92E-05	7.76E-06	6.08E-07	4.77E-08
CD119	6.53E+00	1.02E-01	1.59E-03	2.49E-05	3.88E-07	9.51E-11	3.62E-16	1.38E-21	5.26E-27	2.01E-32	7.70E-38
IN119M	9.85E-03	1.10E+00	1.20E-01	1.21E-02	1.20E-03	1.18E-05	1.16E-08	1.13E-11	1.10E-14	1.08E-17	1.05E-20
IN119	4.85E-01	5.80E-02	6.73E-03	6.82E-04	6.82E-05	6.68E-07	6.53E-10	6.39E-13	6.24E-16	6.09E-19	5.95E-22
SN121	8.09E-04	8.32E-02	8.09E-02	7.90E-02	7.71E-02	7.32E-02	6.75E-02	6.28E-02	5.80E-02	5.37E-02	4.99E-02
SN123M	4.64E-01	8.67E-01	3.07E-01	1.09E-01	3.84E-02	4.80E-03	2.12E-04	9.39E-06	4.16E-07	1.83E-08	8.11E-10
SN123	4.36E-06	4.56E-04									
SN125	1.24E-02	1.23E-02	1.23E-02	1.23E-02	1.22E-02	1.21E-02	1.20E-02	1.19E-02	1.18E-02	1.17E-02	1.16E-02
SB125	7.43E-05	7.46E-05	7.49E-05	7.53E-05	7.56E-05	7.62E-05	7.75E-05	7.85E-05	7.95E-05	8.04E-05	8.14E-05
SB126	2.31E-03	2.30E-03	2.29E-03	2.29E-03	2.28E-03	2.27E-03	2.26E-03	2.24E-03	2.23E-03	2.21E-03	2.20E-03
SN127	3.23E+00	2.32E+00	1.67E+00	1.20E+00	8.65E-01	4.46E-01	1.66E-01	6.16E-02	2.28E-02	8.49E-03	3.15E-03
SB127	3.77E-02	1.30E-01	1.44E-01	1.53E-01	1.60E-01	1.67E-01	1.69E-01	1.68E-01	1.65E-01	1.62E-01	1.58E-01
TE127	2.13E-02	2.65E-02	3.22E-02	3.82E-02	4.42E-02	5.54E-02	7.09E-02	8.28E-02	9.22E-02	9.94E-02	1.04E-01
SN128	2.17E+01	1.07E+01	5.31E+00	2.62E+00	1.30E+00	3.16E-01	3.82E-02	4.61E-03	5.56E-04	6.74E-05	8.13E-06
SB128M	1.11E-02	1.22E+01	6.34E+00	3.13E+00	1.54E+00	3.78E-01	4.55E-02	5.50E-03	6.63E-04	8.01E-05	9.68E-06
SB128	9.16E-01	8.82E-01	8.30E-01	7.78E-01	7.26E-01	6.22E-01	4.97E-01	3.94E-01	3.13E-01	2.48E-01	1.97E-01
SN129M	1.39E+01	6.91E+00	3.47E+00	1.73E+00	8.67E-01	2.17E-01	2.71E-02	3.39E-03	4.23E-04	5.29E-05	6.62E-06
SN129	9.25E+01	9.08E-01	8.96E-03	8.84E-05	8.67E-07	8.43E-11	8.02E-17	7.67E-23	7.32E-29	6.97E-35	6.68E-41
SB129	5.21E+00	8.72E+00	8.20E+00	7.32E+00	6.44E+00	4.78E+00	2.98E+00	1.84E+00	1.14E+00	7.03E-01	4.32E-01
TE129M	9.84E-08	1.09E-03	2.24E-03	3.30E-03	4.23E-03	5.74E-03	7.26E-03	8.20E-03	8.78E-03	9.13E-03	9.37E-03
TE129	3.75E+00	5.15E+00	6.03E+00	6.27E+00	6.03E+00	4.99E+00	3.33E+00	2.10E+00	1.31E+00	8.08E-01	5.01E-01
SB130M	5.27E-01	9.94E-01	2.61E-03	6.86E-06	1.81E-08	1.25E-13	2.27E-21	4.13E-29	7.49E-37	1.36E-44	2.47E-52
SB130	9.03E+01	2.73E+01	7.77E+00	2.20E+00	6.23E-01	5.01E-02	1.14E-03	2.61E-05	5.94E-07	1.35E-08	3.09E-10

TSFOX 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 = 5.281E-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
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I130	2.51E-02	2.38E-02	2.25E-02	2.13E-02	2.01E-02	1.80E-02	1.52E-02	1.29E-02	1.09E-02	9.20E-03	7.77E-03
SB131	2.09E+02	5.45E+01	8.90E+00	1.46E+00	2.40E-01	6.46E-03	2.84E-05	1.26E-07	5.53E-10	2.44E-12	1.22E-14
TE131M	1.00E-04	5.25E-01	5.99E-01	5.99E-01	5.88E-01	5.62E-01	5.24E-01	4.89E-01	4.56E-01	4.26E-01	3.97E-01
TE131	9.23E+01	1.00E+02	3.27E+01	8.50E+00	2.07E+00	1.94E-01	9.63E-02	8.90E-02	8.30E-02	7.77E-02	7.24E-02
I131	1.34E-02	4.65E-01	6.84E-01	7.51E-01	7.64E-01	7.71E-01	7.71E-01	7.64E-01	7.57E-01	7.57E-01	7.57E-01
TE132	1.06E+00	2.57E+00	2.55E+00	2.53E+00	2.50E+00	2.46E+00	2.39E+00	2.33E+00	2.27E+00	2.21E+00	2.15E+00
I132	2.60E+00	2.59E+00	2.59E+00	2.57E+00	2.55E+00	2.52E+00	2.46E+00	2.40E+00	2.34E+00	2.28E+00	2.22E+00
TE133M	1.28E-01	4.44E+01	1.93E+01	8.42E+00	3.66E+00	6.95E-01	5.72E-02	4.72E-03	3.89E-04	3.21E-05	2.65E-06
TE133	7.20E+02	4.08E+01	4.54E+00	1.50E+00	6.34E-01	1.20E-01	9.94E-03	8.17E-04	6.77E-05	5.57E-06	4.59E-07
I133	1.12E+00	1.20E+01	1.30E+01	1.30E+01	1.27E+01	1.21E+01	1.10E+01	9.94E+00	8.97E+00	8.17E+00	7.38E+00
XE133M	4.75E-08	2.70E-03	6.53E-03	1.04E-02	1.42E-02	2.13E-02	3.09E-02	3.92E-02	4.62E-02	5.23E-02	5.73E-02
XE133	8.30E-07	4.72E-02	1.15E-01	1.83E-01	2.51E-01	3.81E-01	5.58E-01	7.14E-01	8.54E-01	9.76E-01	1.09E+00
TE134	2.27E+02	1.05E+02	3.92E+01	1.46E+01	5.41E+00	7.50E-01	3.84E-02	1.97E-03	1.01E-04	5.17E-06	2.65E-07
I134	1.04E+02	1.39E+02	9.77E+01	5.72E+01	3.07E+01	7.80E+00	8.58E-01	8.75E-02	8.58E-03	8.22E-04	7.80E-05
I135	1.89E+01	3.33E+01	3.01E+01	2.71E+01	2.45E+01	1.98E+01	1.46E+01	1.07E+01	7.83E+00	5.76E+00	4.21E+00
XE135M	2.09E-03	9.62E+00	9.35E+00	8.48E+00	7.61E+00	6.20E+00	4.55E+00	3.33E+00	2.45E+00	1.79E+00	1.32E+00
XE135	2.18E+00	4.31E+00	6.31E+00	7.94E+00	9.24E+00	1.11E+01	1.23E+01	1.23E+01	1.17E+01	1.07E+01	9.57E+00
CS136	6.94E-03	6.92E-03	6.91E-03	6.90E-03	6.87E-03	6.84E-03	6.80E-03	6.75E-03	6.71E-03	6.66E-03	6.62E-03
CS137	9.30E-05	1.00E-03									
BA137M	1.96E-07	9.35E-04									
XE138	7.12E+02	6.12E+01	5.32E+00	4.61E-01	3.99E-02	3.00E-04	1.95E-07	1.26E-10	8.22E-14	5.34E-17	3.47E-20
CS138	1.06E+02	1.78E+02	6.18E+01	1.82E+01	5.09E+00	3.87E-01	8.05E-03	1.67E-04	3.47E-06	7.23E-08	1.50E-09
CS139	6.84E+02	2.18E+02	2.74E-01	3.42E-03	4.31E-05	6.77E-09	1.35E-14	2.66E-20	5.27E-26	1.05E-31	2.06E-37
BA139	1.26E+01	1.41E+02	8.68E+01	5.27E+01	3.19E+01	1.17E+01	1.20E+01	5.77E-01	1.28E-01	2.84E-02	6.31E-03
BA140	1.10E-01	6.89E-01	6.89E-01	6.84E-01	6.84E-01	6.78E-01	6.78E-01	6.73E-01	6.68E-01	6.63E-01	6.57E-01
LA140	2.62E-07	1.18E-02	2.33E-02	3.47E-02	4.58E-02	6.73E-02	9.83E-02	1.27E-01	1.55E-01	1.80E-01	2.05E-01
BA141	1.65E+02	5.00E+01	4.96E+00	4.92E-01	4.88E-02	4.84E-04	4.72E-07	4.60E-10	4.48E-13	4.41E-16	4.29E-19
LA141	1.53E+00	3.23E+01	3.02E+01	2.56E+01	2.14E+01	1.50E+01	8.81E+00	5.15E+00	3.03E+00	1.78E+00	1.04E+00
CE141	1.89E-07	2.10E-02	4.92E-02	7.40E-02	9.48E-02	1.27E-01	1.58E-01	1.75E-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	7.60E+00	5.28E+01	3.48E+01	2.21E+01	1.41E+01	5.70E+00	1.47E+00	3.79E-01	9.77E-02	2.51E-02	6.48E-03
LA143	1.24E+02	2.43E+01	1.24E+00	6.39E-02	3.28E-03	8.60E-06	1.16E-09	1.56E-13	2.11E-17	2.84E-21	3.84E-25
CE143	4.97E-02	3.17E+00	3.28E+00	3.20E+00	3.14E+00	3.02E+00	2.83E+00	2.66E+00	2.50E+00	2.34E+00	2.20E+00
PR143	1.45E-08	4.85E-03	1.17E-02	1.85E-02	2.52E-02	3.81E-02	5.61E-02	7.32E-02	8.89E-02	1.04E-01	1.17E-01
CE144	1.98E-03	1.42E-02									
PR144	5.45E-07	1.29E-02	1.41E-02	1.42E-02							
PR145	8.00E-02	1.18E+01	1.05E+01	9.30E+00	8.30E+00	6.57E+00	4.63E+00	3.27E+00	2.32E+00	1.64E+00	1.16E+00
CE146	2.35E+02	1.21E+01	6.18E-01	3.16E-02	1.63E-03	4.29E-06	5.77E-10	7.78E-14	1.05E-17	1.41E-21	1.90E-25
PR146	4.87E+00	4.23E+01	9.59E+00	1.80E+00	3.24E-01	1.02E-02	5.63E-05	3.11E-07	1.72E-09	9.51E-12	5.19E-14
PR147	2.73E+01	7.90E+00	2.46E-01	7.70E-03	2.41E-04	2.35E-07	7.18E-12	2.19E-16	6.69E-21	2.04E-25	6.23E-30

TSFOX                    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 = 5.281E-13

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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	9.74E-06	1.83E-01	1.89E-01	1.88E-01	1.88E-01	1.87E-01	1.85E-01	1.84E-01	1.82E-01	1.81E-01	1.80E-01
ND149	1.41E+01	9.62E+00	6.55E+00	4.46E+00	3.02E+00	1.40E+00	4.41E-01	1.39E-01	4.38E-02	1.38E-02	4.36E-03
PM149	1.97E-03	1.54E-01	2.56E-01	3.24E-01	3.66E-01	4.12E-01	4.28E-01	4.20E-01	4.09E-01	3.93E-01	3.80E-01
PM150	1.63E-01	1.26E-01	9.77E-02	7.54E-02	5.83E-02	3.50E-02	1.62E-02	7.49E-03	3.47E-03	1.61E-03	7.43E-04
ND151	5.60E+01	1.75E+00	5.47E-02	1.71E-03	5.35E-05	5.22E-08	1.59E-12	4.87E-17	1.48E-21	4.52E-26	1.38E-30
PM151	3.55E-02	4.15E-01	4.17E-01	4.07E-01	3.97E-01	3.77E-01	3.50E-01	3.25E-01	3.02E-01	2.80E-01	2.60E-01
PM152	9.03E+01	8.83E-02	8.61E-05	8.42E-08	8.22E-11	7.85E-17	7.31E-26	6.82E-35	6.35E-44	5.93E-53	5.51E-62
SM153	1.21E-01	1.19E-01	1.18E-01	1.16E-01	1.14E-01	1.11E-01	1.06E-01	1.01E-01	9.71E-02	9.30E-02	8.90E-02
SM155	6.77E+00	1.11E+00	1.82E-01	2.98E-02	4.89E-03	1.32E-04	5.81E-07	2.56E-09	1.13E-11	5.02E-14	1.23E-16
EU155	4.98E-06	1.42E-04	1.64E-04	1.68E-04	1.69E-04						
SM156	1.18E-01	1.10E-01	1.02E-01	9.47E-02	8.79E-02	7.59E-02	6.08E-02	4.88E-02	3.91E-02	3.13E-02	2.51E-02
EU156	3.46E-04	5.64E-04	7.66E-04	9.54E-04	1.13E-03	1.44E-03	1.83E-03	2.12E-03	2.37E-03	2.56E-03	2.69E-03
EU157	1.92E-02	6.37E-02	6.08E-02	5.81E-02	5.54E-02	5.07E-02	4.42E-02	3.86E-02	3.36E-02	2.93E-02	2.55E-02
EU158	7.09E-01	2.87E-01	1.16E-01	4.70E-02	1.90E-02	3.12E-03	2.08E-04	1.38E-05	9.14E-07	6.07E-08	4.03E-09
EU159	8.58E-01	8.52E-02	8.44E-03	8.39E-04	8.31E-05	8.20E-07	8.01E-10	7.82E-13	7.63E-16	7.46E-19	7.29E-22
GD159	3.67E-03	1.61E-02	1.67E-02	1.62E-02	1.56E-02	1.45E-02	1.29E-02	1.15E-02	1.02E-02	9.11E-03	8.12E-03
TB161	4.67E-05	3.36E-04	3.34E-04	3.33E-04	3.32E-04	3.28E-04	3.25E-04	3.21E-04	3.16E-04	3.13E-04	3.09E-04
<b>TOTAL</b>	<b>1.22E+04</b>	<b>2.52E+03</b>	<b>9.32E+02</b>	<b>5.48E+02</b>	<b>3.95E+02</b>	<b>2.63E+02</b>	<b>1.81E+02</b>	<b>1.39E+02</b>	<b>1.13E+02</b>	<b>9.41E+01</b>	<b>8.06E+01</b>

TSFOX 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 = 5.281E-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
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* BE 7	1.53E-06	1.51E-06	1.49E-06	1.44E-06	1.35E-06	1.18E-06	1.04E-06	7.99E-07	4.18E-07	1.14E-07	3.09E-08
NA 24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MN 54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CO 57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 58	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CG 60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
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.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	9.84E-08	9.74E-08	9.57E-08	9.38E-08	8.98E-08	8.17E-08	7.45E-08	6.19E-08	3.91E-08	1.55E-08	6.17E-09
W187	1.41E-02	7.02E-03	3.48E-03	4.34E-04	1.33E-05	1.27E-08	1.20E-11	1.08E-19	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	1.08E-01	9.79E-02	8.82E-02	6.49E-02	3.88E-02	1.39E-02	4.99E-03	6.38E-04	3.76E-06	4.05E-10	2.73E-10
U240	3.07E-01	9.47E-02	2.90E-02	8.42E-04	2.31E-06	1.74E-11	1.31E-16	7.38E-27	0.	0.	0.
-NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	8.31E-03	1.27E+01	9.44E+00	3.90E+00	8.92E-01	4.66E-02	2.44E-03	6.70E-06	2.63E-12	6.29E-22	6.29E-22
NP240M	4.86E-04	9.53E-02	2.93E-02	8.48E-04	2.33E-06	1.75E-11	1.32E-16	7.44E-27	0.	0.	0.
* AM241	9.85E-09										
* CM242	3.08E-07	3.07E-07	3.05E-07	3.02E-07	2.96E-07	2.83E-07	2.72E-07	2.49E-07	2.03E-07	1.32E-07	8.63E-08
GE 77	5.20E-03	3.27E-03	7.49E-04	9.05E-06	5.76E-09	2.33E-15	9.39E-22	1.53E-34	0.	0.	0.
AS 77	5.37E-05	7.93E-03	5.74E-03	1.66E-03	1.94E-04	2.64E-06	3.58E-08	6.60E-12	3.06E-21	6.56E-40	1.41E-58
SE 77M	2.12E-09	2.39E-05	1.72E-05	4.99E-06	5.81E-07	7.91E-09	1.07E-10	1.98E-14	9.18E-24	1.96E-42	4.23E-61
AS 78	1.45E-02	1.29E-04	3.79E-09	3.20E-23	0.	0.	0.	0.	0.	0.	0.
BR 82	4.80E-04	2.99E-04	1.87E-04	4.54E-05	4.31E-06	3.87E-08	3.47E-10	2.80E-14	1.64E-24	5.62E-45	1.91E-65
BR 83	3.64E-01	9.59E-03	9.64E-06	9.80E-15	1.00E-29	0.	0.	0.	0.	0.	0.
KR 83M	1.88E-05	4.20E-02	4.77E-05	4.28E-14	4.40E-29	0.	0.	0.	0.	0.	0.
KR 85M	4.31E-03	2.46E-01	5.61E-03	6.66E-08	4.11E-16	1.56E-32	5.91E-49	0.	0.	0.	0.
KR 85	4.46E-06	1.17E-04	1.19E-04	1.19E-04	1.19E-04	1.19E-04	1.19E-04	1.19E-04	1.18E-04	1.15E-04	1.14E-04
KR 87	7.19E+01	1.42E-04	2.80E-10	2.17E-27	0.	0.	0.	0.	0.	0.	0.
KR 88	4.08E+01	1.07E-01	2.82E-04	5.12E-12	6.45E-25	0.	0.	0.	0.	0.	0.
RB 88	1.04E+01	1.20E-01	3.16E-04	5.73E-12	7.18E-25	0.	0.	0.	0.	0.	0.
SR 89	3.82E-06	1.14E-01	1.13E-01	1.08E-01	1.02E-01	8.88E-02	7.76E-02	5.98E-02	3.06E-02	8.04E-03	2.12E-03
SR 90	7.68E-06	7.88E-04	7.81E-04	7.81E-04	7.74E-04						
Y 90	1.14E-11	1.81E-04	3.20E-04	5.74E-04	7.33E-04	7.81E-04	7.88E-04	7.88E-04	7.81E-04	7.81E-04	7.74E-04
SR 91	9.07E-01	3.25E+00	5.82E-01	3.34E-03	6.11E-07	2.07E-14	7.02E-22	7.99E-37	0.	0.	0.

TSFOX 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 = 5.281E-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	6.11E-05	2.10E+00	3.75E-01	2.16E-03	3.96E-07	1.34E-14	4.52E-22	5.16E-37	0.	0.	0.	0.
Y 91	2.50E-08	9.99E-02	1.18E-01	1.18E-01	1.11E-01	9.87E-02	8.79E-02	6.96E-02	3.85E-02	1.19E-02	3.65E-03	0.
SR 92	6.65E+00	8.29E-02	1.79E-04	1.80E-12	8.41E-26	0.	0.	0.	0.	0.	0.	0.
Y 92	3.06E-01	8.69E-01	9.65E-03	7.42E-09	4.33E-19	1.48E-39	5.07E-60	0.	0.	0.	0.	0.
Y 93	3.29E-01	2.23E+00	4.34E-01	3.26E-03	9.39E-07	7.76E-14	6.40E-21	4.37E-35	0.	0.	0.	0.
ZR 95	6.41E-04	8.01E-02	7.93E-02	7.68E-02	7.28E-02	6.52E-02	5.88E-02	4.75E-02	2.78E-02	9.59E-03	3.29E-03	0.
NB 95M	1.36E-11	2.71E-04	4.95E-04	9.45E-04	1.27E-03	1.34E-03	1.24E-03	1.01E-03	5.91E-04	2.03E-04	7.00E-05	0.
NB 95	7.14E-11	1.55E-03	3.07E-03	7.34E-03	1.36E-02	2.35E-02	3.04E-02	3.77E-02	3.63E-02	1.74E-02	6.69E-03	0.
ZR 97	1.56E+00	2.65E+00	9.98E-01	5.28E-02	3.97E-04	2.23E-08	1.26E-12	3.97E-21	2.24E-42	0.	0.	0.
NB 97M	8.02E-03	2.55E+00	9.57E-01	5.10E-02	3.81E-04	2.15E-08	1.21E-12	3.81E-21	2.15E-42	0.	0.	0.
NB 97	7.80E-01	2.66E+00	1.00E+00	5.31E-02	4.00E-04	2.41E-08	1.35E-12	4.29E-21	2.41E-42	0.	0.	0.
MO 99	4.72E-03	1.54E+00	1.20E+00	5.69E-01	1.65E-01	1.37E-02	1.15E-03	8.00E-06	3.25E-11	5.35E-22	8.81E-33	0.
TC 99M	4.39E-08	1.35E+00	1.14E+00	5.45E-01	1.57E-01	1.31E-02	1.10E-03	7.64E-06	3.10E-11	5.11E-22	8.42E-33	0.
RU103	8.48E-05	1.94E-01	1.90E-01	1.80E-01	1.65E-01	1.39E-01	1.16E-01	8.21E-02	3.41E-02	5.93E-03	1.03E-03	0.
RH103M	5.65E-09	1.94E-01	1.90E-01	1.81E-01	1.65E-01	1.39E-01	1.16E-01	8.21E-02	3.42E-02	5.93E-03	1.03E-03	0.
RU105	6.13E-01	5.87E-01	1.38E-02	1.81E-07	1.33E-15	7.07E-32	3.79E-48	0.	0.	0.	0.	0.
RH105M	4.03E-03	5.87E-01	1.38E-02	1.82E-07	1.33E-15	7.12E-32	3.80E-48	0.	0.	0.	0.	0.
RH105	6.63E-09	2.12E+00	1.38E+00	3.45E-01	3.40E-02	3.30E-04	3.21E-06	3.03E-10	2.63E-20	1.97E-40	1.48E-60	0.
RU106	5.37E-04	1.02E-02	1.01E-02	1.01E-02	9.99E-03	9.81E-03	9.59E-03	9.24E-03	8.40E-03	6.95E-03	5.76E-03	0.
RH106	5.81E-06	1.02E-02	1.01E-02	1.01E-02	9.99E-03	9.81E-03	9.59E-03	9.24E-03	8.40E-03	6.95E-03	5.76E-03	0.
PD109	7.98E-03	2.03E-01	5.91E-02	1.47E-03	3.09E-06	1.38E-11	6.14E-17	1.21E-27	0.	0.	0.	0.
AG109M	4.60E-05	2.03E-01	5.93E-02	1.47E-03	3.11E-06	1.38E-11	6.14E-17	1.22E-27	0.	0.	0.	0.
PD111M	9.63E-01	4.67E-02	2.27E-03	2.61E-07	7.05E-14	5.14E-27	3.77E-40	0.	0.	0.	0.	0.
PD111	3.43E-01	3.77E-02	1.83E-03	2.10E-07	5.68E-14	4.13E-27	3.03E-40	0.	0.	0.	0.	0.
AG111M	2.73E-03	4.93E-02	2.40E-03	2.76E-07	7.44E-14	5.46E-27	3.99E-40	0.	0.	0.	0.	0.
AG111	9.71E-10	2.68E-02	2.57E-02	1.96E-02	1.23E-02	4.89E-03	1.94E-03	3.06E-04	3.01E-06	2.92E-10	2.83E-14	0.
PD112	1.83E-01	8.34E-02	3.77E-02	3.50E-03	6.66E-05	2.42E-08	8.78E-12	1.15E-18	7.27E-36	0.	0.	0.
AG112	5.53E-06	9.68E-02	4.45E-02	4.13E-03	7.89E-05	2.85E-08	1.03E-11	1.36E-18	8.56E-36	0.	0.	0.
AG113	1.65E-03	1.74E-02	7.52E-04	6.11E-08	9.35E-15	2.19E-28	5.11E-42	0.	0.	0.	0.	0.
CD115M	4.62E-09	1.34E-04	1.32E-04	1.25E-04	1.16E-04	9.83E-05	8.40E-05	6.06E-05	2.71E-05	5.39E-06	1.08E-06	0.
CD115	1.79E-06	2.69E-02	1.97E-02	7.77E-03	1.64E-03	7.32E-05	3.26E-06	6.51E-09	1.15E-15	3.60E-29	1.13E-42	0.
IN115M	2.23E-11	2.84E-02	2.15E-02	8.49E-03	1.79E-03	7.99E-05	3.56E-06	7.09E-09	1.26E-15	3.93E-29	1.23E-42	0.
CD117	3.97E-02	8.65E-04	8.42E-07	7.86E-16	6.98E-31	0.	0.	0.	0.	0.	0.	0.
IN117M	1.91E-06	3.59E-03	4.16E-06	4.01E-15	3.56E-30	0.	0.	0.	0.	0.	0.	0.
IN117	7.68E-11	2.37E-03	2.80E-06	2.72E-15	2.41E-30	0.	0.	0.	0.	0.	0.	0.
SN121	8.09E-04	4.61E-02	2.49E-02	3.92E-03	1.80E-04	3.80E-07	7.99E-10	3.56E-15	1.49E-28	0.	0.	0.
SN123	4.36E-06	4.56E-04	4.52E-04	4.44E-04	4.32E-04	4.08E-04	3.87E-04	3.46E-04	2.62E-04	1.51E-04	8.67E-05	0.
SN125	1.24E-02	1.15E-02	1.07E-02	8.56E-03	5.91E-03	2.83E-03	1.35E-03	3.10E-04	7.75E-06	4.88E-09	3.06E-12	0.
SB125	7.43E-05	8.24E-05	9.01E-05	1.10E-04	1.35E-04	1.63E-04	1.76E-04	1.83E-04	1.80E-04	1.68E-04	1.57E-04	0.
SB126	2.31E-03	2.18E-03	2.06E-03	1.75E-03	1.32E-03	7.59E-04	4.38E-04	1.44E-04	9.01E-06	4.38E-08	8.79E-09	0.

TSFOX 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 = 5.281E-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	3.23E+00	1.17E-03	4.25E-07	2.03E-17	1.27E-34	0.	0.	0.	0.	0.
SB127	3.77E-02	1.55E-01	1.29E-01	7.56E-02	3.10E-02	5.17E-03	8.65E-04	2.42E-05	3.15E-09	5.38E-17
TE127M	3.05E-10	2.36E-04	4.32E-04	8.39E-04	1.16E-03	1.28E-03	1.23E-03	1.09E-03	7.97E-04	4.21E-04
TE127	2.13E-02	1.11E-01	1.09E-01	6.63E-02	2.80E-02	5.75E-03	1.97E-03	1.10E-03	7.87E-04	4.16E-04
SB128	9.16E-01	1.56E-01	2.47E-01	9.62E-05	9.34E-09	8.76E-17	8.24E-25	7.26E-41	0.	0.
SB129	5.21E+00	2.66E-01	5.56E-03	5.07E-08	2.01E-16	3.18E-33	5.02E-50	0.	0.	0.
TE129M	9.84E-08	1.04E-02	1.04E-02	9.78E-03	8.84E-03	7.20E-03	5.86E-03	3.90E-03	1.41E-03	1.83E-04
TE129	3.75E+00	3.12E-01	1.30E-02	6.27E-03	5.65E-03	4.61E-03	3.76E-03	2.50E-03	9.02E-04	1.18E-04
I130	2.51E-02	6.57E-03	1.72E-03	3.07E-05	3.75E-08	5.59E-14	8.34E-20	1.86E-31	0.	0.
TE131M	1.00E-04	3.51E-01	2.01E-01	3.81E-02	2.38E-03	9.30E-06	3.64E-08	5.55E-13	5.05E-25	0.
TE131	9.23E+01	6.40E-02	3.67E-02	6.98E-03	4.35E-04	1.70E-06	6.64E-09	1.02E-13	9.23E-26	0.
I131	1.34E-02	7.24E-01	6.84E-01	5.50E-01	3.62E-01	1.53E-01	6.47E-02	1.16E-02	1.56E-04	2.84E-08
XE131M	3.64E-11	3.35E-04	6.37E-04	1.33E-03	1.90E-03	1.88E-03	1.40E-03	5.76E-04	3.84E-05	1.15E-07
TE132	1.06E+00	2.10E+00	1.69E+00	8.92E-01	3.07E-01	3.65E-02	4.32E-03	6.07E-05	1.42E-09	7.77E-19
I132	2.60E+00	2.16E+00	1.75E+00	9.18E-01	3.17E-01	3.75E-02	4.45E-03	6.25E-05	1.46E-09	7.96E-19
I133	1.12E+00	6.22E+00	2.81E+00	2.60E-01	4.96E-03	1.80E-06	6.53E-10	8.60E-17	5.40E-34	0.
XE133M	4.75E-08	5.87E-02	6.95E-02	4.08E-02	9.58E-03	4.50E-04	2.09E-05	4.54E-08	9.94E-15	4.75E-28
XE133	8.30E-07	1.13E+00	1.51E+00	1.35E+00	7.38E-01	1.99E-01	5.36E-02	3.86E-03	5.38E-06	1.04E-11
I135	1.89E+01	3.09E+00	2.58E-01	1.50E-01	6.09E-10	1.01E-20	1.65E-31	4.49E-53	0.	0.
XE135M	2.09E-03	9.62E-01	8.04E-02	4.68E-05	1.90E-10	3.13E-21	5.16E-32	1.40E-53	0.	0.
XE135	2.18E+00	8.32E+00	2.03E+00	1.16E-02	1.42E-06	2.00E-14	2.80E-22	5.54E-38	0.	0.
CS136	6.94E-03	6.57E-03	6.23E-03	5.31E-03	4.07E-03	2.39E-03	1.41E-03	4.83E-04	3.35E-05	1.62E-07
CS137	9.30E-05	1.00E-03	9.97E-04	9.91E-04						
BA137M	1.96E-07	9.35E-04	9.30E-04	9.24E-04						
BA139	1.26E+01	1.35E-03	7.96E-09	1.64E-24	0.	0.	0.	0.	0.	0.
BA140	1.10E-01	6.52E-01	6.21E-01	5.26E-01	4.01E-01	2.33E-01	1.36E-01	4.60E-02	3.07E-03	1.37E-05
LA140	2.62E-07	2.27E-01	3.65E-01	5.05E-01	4.49E-01	2.69E-01	1.56E-01	5.31E-02	3.53E-03	1.57E-05
LA141	1.53E+00	6.06E-01	8.50E-03	2.35E-08	1.29E-17	3.84E-36	1.14E-54	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	7.43E-02	2.55E-02	3.01E-03
LA142	7.60E+00	1.67E-03	3.23E-08	2.37E-22	0.	0.	0.	0.	0.	0.
CE143	4.97E-02	2.04E+00	1.24E+00	2.72E-01	2.19E-02	1.42E-04	9.15E-07	3.84E-11	4.33E-22	0.
PR143	1.45E-08	1.31E-01	2.03E-01	2.63E-01	2.25E-01	1.37E-01	8.28E-02	2.99E-02	2.39E-03	1.52E-05
CE144	1.98E-03	1.42E-02	1.41E-02	1.40E-02	1.39E-02	1.35E-02	1.32E-02	1.26E-02	1.11E-02	8.72E-03
PR144	5.45E-07	1.42E-02	1.41E-02	1.40E-02	1.39E-02	1.35E-02	1.32E-02	1.26E-02	1.11E-02	8.72E-03
PR145	8.00E-02	8.18E-01	5.06E-02	1.20E-05	1.09E-11	9.06E-24	7.51E-36	0.	0.	0.
ND147	9.74E-06	1.64E-01	1.54E-01	1.28E-01	9.34E-02	5.02E-02	2.68E-02	7.70E-03	3.37E-04	6.57E-07
PM147	2.70E-14	1.23E-04	2.37E-04	5.42E-04	9.37E-04	1.43E-03	1.69E-03	1.88E-03	1.90E-03	1.77E-03
ND149	1.41E+01	1.37E-03	1.33E-07	1.21E-19	1.03E-39	0.	0.	0.	0.	0.
PM149	1.97E-03	3.64E-01	2.66E-01	1.04E-01	2.17E-02	9.46E-04	4.12E-05	7.83E-08	1.24E-14	3.05E-28
PM150	1.63E-01	3.45E-04	7.25E-07	6.81E-15	2.85E-28	0.	0.	0.	0.	0.

TSFOX 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 = 5.281E-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
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PM151	3.55E-02	2.42E-01	1.33E-01	2.25E-02	1.15E-03	3.02E-06	7.97E-09	5.50E-14	6.90E-27	0.	0.
SM153	1.21E-01	8.51E-02	5.98E-02	2.06E-02	3.51E-03	1.02E-04	2.97E-06	2.49E-09	5.14E-17	2.19E-32	9.30E-48
SM156	1.18E-01	2.02E-02	3.44E-03	1.69E-05	2.44E-09	5.02E-17	1.04E-24	4.41E-40	0.	0.	0.
EU155	4.98E-06	1.69E-04	1.68E-04	1.68E-04	1.68E-04	1.67E-04	1.67E-04	1.65E-04	1.62E-04	1.56E-04	1.50E-04
EU156	3.46E-04	2.81E-03	3.12E-03	2.80E-03	2.22E-03	1.39E-03	8.79E-04	3.49E-04	3.46E-05	3.41E-07	3.35E-09
EU157	1.92E-02	2.22E-02	7.47E-03	2.80E-04	1.18E-06	2.08E-11	3.67E-16	1.14E-25	0.	0.	0.
GD159	3.67E-03	7.23E-03	2.88E-03	1.79E-04	1.77E-06	1.71E-10	1.66E-14	1.56E-22	1.33E-42	0.	0.
TB161	4.67E-05	3.05E-04	2.75E-04	2.04E-04	1.23E-04	4.52E-05	1.65E-05	2.21E-06	1.47E-08	6.34E-13	2.75E-17
<b>TOTAL</b>	<b>3.05E+02</b>	<b>6.95E+01</b>	<b>3.35E+01</b>	<b>1.27E+01</b>	<b>5.21E+00</b>	<b>1.99E+00</b>	<b>1.21E+00</b>	<b>6.68E-01</b>	<b>2.86E-01</b>	<b>1.00E-01</b>	<b>4.95E-02</b>

TSFOX  
 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 = 5.281E-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	1.53E-06	1.32E-08	1.23E-09	1.14E-10	9.20E-14	7.37E-17	5.51E-21	3.53E-27	0.	0.	0.
MN 54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 58	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	9.84E-08	3.38E-09	6.26E-10	1.16E-10	7.38E-13	4.72E-15	5.55E-18	2.25E-22	0.	0.	0.
W188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.08E-01	2.71E-10	2.63E-10	2.56E-10	2.40E-10	2.23E-10	2.03E-10	1.76E-10	1.09E-10	5.36E-11	2.63E-11
* AM241	9.85E-09	9.85E-09	9.85E-09	9.85E-09	9.90E-09	9.94E-09	9.94E-09	9.99E-09	1.00E-08	9.94E-09	9.81E-09
* CM242	3.08E-07	6.53E-08	3.00E-08	1.38E-08	1.35E-09	1.31E-10	5.88E-12	5.56E-14	1.60E-18	1.49E-18	1.39E-18
KR 85	4.46E-06	1.11E-04	1.07E-04	1.04E-04	9.47E-05	8.56E-05	7.52E-05	6.20E-05	3.28E-05	1.25E-05	4.78E-06
SR 89	3.82E-06	8.94E-04	7.82E-05	6.87E-06	4.62E-09	3.12E-12	1.84E-16	8.38E-23	6.09E-44	0.	0.
SR 90	7.68E-06	7.68E-04	7.61E-04	7.54E-04	7.26E-04	6.98E-04	6.64E-04	6.17E-04	4.82E-04	3.33E-04	2.30E-04
Y 90	1.14E-11	7.68E-04	7.61E-04	7.54E-04	7.26E-04	6.98E-04	6.64E-04	6.17E-04	4.82E-04	3.33E-04	2.30E-04
Y 91	2.50E-08	1.69E-03	1.96E-04	2.28E-05	3.58E-08	5.61E-11	1.03E-14	2.52E-20	5.10E-39	0.	0.
ZR 95	6.41E-04	1.65E-03	2.35E-04	3.35E-05	9.76E-08	2.84E-10	1.18E-13	9.93E-19	1.21E-35	0.	0.
NB 95M	1.36E-11	3.49E-05	4.98E-06	7.11E-07	2.07E-09	6.02E-12	2.49E-15	2.10E-20	2.58E-37	0.	0.
NB 95	7.14E-11	3.54E-03	5.09E-04	7.26E-05	2.10E-07	6.10E-10	2.55E-13	2.15E-18	2.63E-35	0.	0.
RU103	8.48E-05	3.29E-04	1.35E-05	5.55E-07	3.78E-11	2.59E-15	7.29E-21	3.43E-29	0.	0.	0.
RH103M	5.65E-09	3.30E-04	1.35E-05	5.55E-07	3.79E-11	2.60E-15	7.29E-21	3.43E-29	0.	0.	0.
RU106	5.37E-04	5.10E-03	3.61E-03	2.56E-03	9.11E-04	3.23E-04	8.14E-05	1.03E-05	1.04E-08	3.34E-13	1.07E-17
RH106	5.81E-06	5.10E-03	3.61E-03	2.56E-03	9.11E-04	3.23E-04	8.14E-05	1.03E-05	1.04E-08	3.34E-13	1.07E-17
SN123	4.36E-06	6.03E-05	2.19E-05	7.95E-06	3.82E-07	1.83E-08	3.19E-10	7.35E-13	1.18E-21	7.59E-35	4.88E-48
SB125	7.43E-05	1.50E-04	1.31E-04	1.16E-04	7.88E-05	5.36E-05	3.20E-05	1.48E-05	1.14E-06	2.43E-08	5.17E-10
TE125M	2.00E-12	6.10E-05	5.43E-05	4.78E-05	3.26E-05	2.22E-05	1.33E-05	6.14E-06	4.72E-07	1.00E-08	2.14E-10
TE127M	3.05E-10	1.46E-04	4.57E-05	1.43E-05	4.40E-07	1.35E-08	1.30E-10	1.22E-13	1.00E-23	7.51E-39	5.59E-54
TE127	2.13E-02	1.44E-04	4.51E-05	1.41E-05	4.34E-07	1.34E-08	1.28E-10	1.21E-13	9.94E-24	7.40E-39	5.54E-54
CS137	9.30E-05	9.80E-04	9.69E-04	9.58E-04	9.24E-04	8.91E-04	8.52E-04	7.96E-04	6.29E-04	4.47E-04	3.16E-04
BA137M	1.96E-07	9.19E-04	9.08E-04	8.96E-04	8.63E-04	8.35E-04	7.96E-04	7.46E-04	5.90E-04	4.18E-04	2.96E-04
CE141	1.89E-07	8.14E-05	1.64E-06	3.29E-08	2.68E-13	2.18E-18	3.58E-25	2.37E-35	0.	0.	0.
CE144	1.98E-03	5.83E-03	3.75E-03	2.39E-03	6.28E-04	1.65E-04	2.78E-05	1.92E-06	2.58E-10	4.05E-16	6.31E-22
PR144	5.45E-07	5.83E-03	3.75E-03	2.39E-03	6.28E-04	1.65E-04	2.78E-05	1.92E-06	2.58E-10	4.05E-16	6.31E-22
PM147	2.70E-14	1.57E-03	1.37E-03	1.20E-03	8.10E-04	5.45E-04	3.20E-04	1.45E-04	1.03E-05	1.95E-07	3.69E-09
EU155	4.98E-06	1.46E-04	1.35E-04	1.26E-04	1.01E-04	8.14E-05	6.08E-05	3.92E-05	9.17E-06	1.03E-06	1.16E-07

TOTAL 1.33E-01 3.62E-02 2.11E-02 1.50E-02 7.43E-03 4.89E-03 3.70E-03 3.07E-03 2.24E-03 1.54E-03 1.08E-03

**APPENDIX G**  
**DETAILED RESULTS FOR EVENT GEORGE**

TSGEORGE  
 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 = 3.878E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.10E+02	1.21E+04
1.00E+00	3.45E+01	2.50E+03
2.00E+00	1.36E+01	9.29E+02
3.00E+00	7.26E+00	5.47E+02
4.00E+00	4.50E+00	3.95E+02
6.00E+00	2.34E+00	2.63E+02
9.00E+00	1.37E+00	1.81E+02
1.20E+01	1.00E+00	1.39E+02
1.50E+01	7.85E-01	1.12E+02
1.80E+01	6.41E-01	9.37E+01
2.10E+01	5.38E-01	8.02E+01
1.00E+00 DAYS	4.53E-01	6.91E+01
2.00E+00	2.06E-01	3.32E+01
5.00E+00	8.14E-02	1.25E+01
1.00E+01	3.76E-02	5.19E+00
2.00E+01	1.49E-02	2.00E+00
3.00E+01	8.47E-03	1.22E+00
6.00E+01	3.82E-03	6.69E-01
1.00E+02	1.26E-03	2.87E-01
2.00E+02	4.23E-04	1.01E-01
3.00E+02	1.66E-04	4.96E-02
1.00E+00 YEARS	9.81E-05	3.63E-02
1.50E+00	3.41E-05	2.11E-02
2.00E+00	2.14E-05	1.51E-02
3.50E+00	1.27E-05	7.45E-03
5.00E+00	9.93E-06	4.89E-03
7.00E+00	8.48E-06	3.70E-03
1.00E+01	7.57E-06	3.07E-03
2.00E+01	5.86E-06	2.24E-03
3.50E+01	4.16E-06	1.55E-03
5.00E+01	2.93E-06	1.08E-03

TSGEORGE                   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 = 3.878E-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	1.54E-06	1.53E-06	1.53E-06	1.53E-06	1.53E-06	1.53E-06	1.52E-06	1.52E-06	1.52E-06	1.52E-06	
NA 24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
MN 54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
FE 59	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CB 57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CB 58	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CB 60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CU 64	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
CU 67	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
W185	1.08E-07	1.07E-07	1.07E-07								
W187	1.41E-02	1.37E-02	1.33E-02	1.29E-02	1.25E-02	1.18E-02	1.09E-02	9.96E-03	9.09E-03	8.39E-03	
W188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AU198	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
AU199	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
PB203	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	
U237	1.34E-01	1.34E-01	1.33E-01	1.32E-01	1.32E-01	1.31E-01	1.29E-01	1.27E-01	1.26E-01	1.24E-01	
U239	2.32E+03	3.96E+02	6.76E+01	1.15E+01	1.95E+00	5.69E-02	2.82E-04	1.39E-06	6.89E-09	3.41E-11	1.69E-13
U240	3.85E-01	3.66E-01	3.49E-01	3.32E-01	3.16E-01	2.86E-01	2.47E-01	2.13E-01	1.84E-01	1.59E-01	1.37E-01
NP239	7.94E-03	1.33E+01	1.54E+01	1.56E+01	1.55E+01	1.51E+01	1.45E+01	1.40E+01	1.36E+01	1.31E+01	1.26E+01
NP240M	6.09E-04	3.68E-01	3.52E-01	3.35E-01	3.19E-01	2.89E-01	2.49E-01	2.15E-01	1.85E-01	1.60E-01	1.38E-01
NP240	1.54E-11	7.93E-12	4.12E-12	2.12E-12	1.10E-12	2.94E-13	4.05E-14	5.59E-15	7.71E-16	1.06E-16	1.47E-17
*AM241	6.17E-09										
*CM242	2.25E-07	2.25E-07	2.25E-07	2.25E-07	2.25E-07	2.25E-07	2.23E-07	2.23E-07	2.23E-07	2.23E-07	
GE 75	7.72E-06	3.74E-02	2.25E-02	1.36E-02	8.17E-03	2.96E-03	6.47E-04	1.42E-04	3.09E-05	6.74E-06	1.48E-06
GE 77	5.20E-03	1.34E-02	1.26E-02	1.19E-02	1.12E-02	9.87E-03	8.21E-03	6.82E-03	5.69E-03	4.72E-03	3.93E-03
AS 77	5.38E-05	8.50E-03	8.60E-03	8.65E-03	8.71E-03	8.77E-03	8.77E-03	8.71E-03	8.58E-03	8.40E-03	8.19E-03
SE 77M	2.12E-09	2.54E-05	2.58E-05	2.60E-05	2.60E-05	2.62E-05	2.64E-05	2.62E-05	2.58E-05	2.53E-05	2.45E-05
GE 78	8.10E-01	5.06E-01	3.15E-01	1.97E-01	1.23E-01	4.78E-02	1.16E-02	2.81E-03	6.86E-04	1.67E-04	4.05E-05
AS 78	1.46E-02	2.42E-01	2.98E-01	2.79E-01	2.33E-01	1.38E-01	5.12E-02	1.70E-02	5.26E-03	1.57E-03	4.55E-04
AS 79	1.58E+01	1.56E-01	1.53E-03	1.51E-05	1.49E-07	1.44E-11	1.37E-17	1.31E-23	1.25E-29	1.19E-35	1.14E-41
SE 79M	2.34E-02	2.75E-01	2.71E-03	2.67E-05	2.63E-07	2.54E-11	2.43E-17	2.32E-23	2.21E-29	2.11E-35	2.01E-41
BR 80	9.77E-02	9.22E-03	8.66E-04	8.15E-05	7.68E-06	6.80E-08	5.70E-11	4.75E-14	3.96E-17	3.30E-20	2.76E-23
SE 81M	8.00E-02	3.73E+00	1.80E+00	8.66E-01	4.17E-01	9.73E-02	1.09E-02	1.22E-03	1.37E-04	1.53E-05	1.72E-06
SE 81	9.78E-01	4.41E+00	2.55E+00	1.27E+00	6.19E-01	1.44E-01	1.62E-02	1.81E-03	2.03E-04	2.28E-05	2.55E-06
BR 82	4.80E-04	4.71E-04	4.62E-04	4.53E-04	4.44E-04	4.27E-04	4.03E-04	3.79E-04	3.58E-04	3.37E-04	3.18E-04
SE 83	4.39E+01	8.32E+00	1.58E+00	2.99E-01	5.65E-02	2.03E-03	1.38E-05	9.40E-08	6.42E-10	4.35E-12	2.76E-14
BR 83	3.65E-01	5.45E+00	5.04E+00	3.97E+00	3.01E+00	1.70E+00	7.19E-01	3.03E-01	1.28E-01	5.39E-02	2.28E-02
KR 83M	1.89E-05	1.23E+00	2.52E+00	3.13E+00	3.23E+00	2.69E+00	1.59E+00	8.17E-01	3.94E-01	1.82E-01	8.17E-02

TS:GEORGE  
 MR./HR AT H+12 HOURS = 1.000  
 FRACTION OF REFRACTORIES = 0.500  
 RELAXATION LENGTH = 0.16 GM/SQCM  
 BOMB FRACTION PER SQ. METER = 3.878E-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
KR 85M	4.28E+00	1.16E+00	3.13E-01	2.29E-02	4.53E-04	8.94E-06	1.77E-07	3.50E-09	6.91E-11	1.32E-01
KR 87	1.58E+01	4.19E+00	1.17E+00	2.69E+00	1.02E+00	2.10E+00	4.96E-02	1.32E-03	3.79E-03	9.55E-01
KR 88	9.32E-03	2.26E+01	1.19E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
RB 88	9.447414397	0.0470946	0.0132393	0.0122756	0.00117504	0.00117504	0.00117504	0.00117504	0.00117504	0.00117504
RB 89	1.18E-02	2.09E+01	1.19E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
SR 88	1.18E-02	2.09E+01	1.19E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
SR 89	9.447414397	0.0470946	0.0132393	0.0122756	0.00117504	0.00117504	0.00117504	0.00117504	0.00117504	0.00117504
SR 90	1.18E-02	2.09E+01	1.19E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
SR 91M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
SR 92M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
SR 93M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
SR 94M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
SR 95M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
SR 96M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
SR 97M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
SR 98M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
SR 99M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
TC 101M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
TC 102M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
TC 103M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
TC 104M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
TC 105M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
RU 106	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
RU 107	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04
PD 107M	8.4M	1.18E-02	2.09E+01	2.49E+01	1.03E+01	2.03E+00	5.96E-01	1.75E-01	4.32E-01	1.26E-04

TSGEORGE            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 = 3.878E-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	7.99E-03	6.63E-01	6.30E-01	5.97E-01	5.67E-01	5.12E-01	4.40E-01	3.77E-01	3.23E-01	2.77E-01	2.38E-01
AG109M	4.61E-05	6.63E-01	6.30E-01	5.98E-01	5.68E-01	5.13E-01	4.40E-01	3.77E-01	3.23E-01	2.77E-01	2.38E-01
PD111M	9.65E-01	8.50E-01	7.49E-01	6.62E-01	5.83E-01	4.54E-01	3.10E-01	2.13E-01	1.46E-01	9.97E-02	6.84E-02
PD111	3.43E-01	6.19E-01	5.94E-01	5.29E-01	4.68E-01	3.64E-01	2.49E-01	1.71E-01	1.17E-01	8.03E-02	5.51E-02
AG111M	2.73E-03	8.35E-01	7.85E-01	7.02E-01	6.19E-01	4.79E-01	3.27E-01	2.24E-01	1.54E-01	1.05E-01	7.20E-02
AG111	9.72E-10	2.88E-03	6.05E-03	8.89E-03	1.14E-02	1.56E-02	2.00E-02	2.29E-02	2.48E-02	2.60E-02	2.67E-02
PD112	1.84E-01	1.78E-01	1.72E-01	1.66E-01	1.61E-01	1.51E-01	1.37E-01	1.24E-01	1.12E-01	1.01E-01	9.19E-02
AG112	5.53E-06	3.52E-02	6.22E-02	8.35E-02	9.92E-02	1.19E-01	1.31E-01	1.30E-01	1.24E-01	1.15E-01	1.06E-01
AG113	1.65E-03	3.52E-01	3.09E-01	2.71E-01	2.38E-01	1.83E-01	1.24E-01	8.37E-02	5.65E-02	3.81E-02	2.58E-02
AG115	5.67E-01	6.07E-01	7.55E-02	9.44E-03	1.18E-03	1.85E-05	3.61E-08	7.06E-11	1.37E-13	1.36E-12	1.26E-16
CD115M	4.63E-09	1.23E-04	1.38E-04	1.40E-04	1.40E-04	1.40E-04	1.40E-04	1.40E-04	1.39E-04	1.39E-04	1.39E-04
CD115	1.79E-06	3.37E-02	3.63E-02	3.62E-02	3.57E-02	3.48E-02	3.35E-02	3.22E-02	3.10E-02	2.99E-02	2.87E-02
IN115M	2.23E-11	3.72E-03	8.27E-03	1.23E-02	1.56E-02	2.09E-02	2.58E-02	2.84E-02	2.96E-02	2.99E-02	2.96E-02
CD117	3.97E-02	6.61E-01	4.98E-01	3.72E-01	2.79E-01	1.57E-01	6.57E-02	2.77E-02	1.16E-02	4.89E-03	2.06E-03
IN117M	1.91E-06	2.30E-01	3.33E-01	3.61E-01	3.49E-01	2.75E-01	1.57E-01	8.06E-02	3.87E-02	1.79E-02	8.11E-03
IN117	7.69E-11	4.20E-02	1.02E-01	1.41E-01	1.57E-01	1.45E-01	9.22E-02	4.94E-02	2.45E-02	1.16E-02	5.31E-03
CD118	2.62E+00	1.12E+00	4.82E-01	2.06E-01	8.81E-02	1.61E-02	1.26E-03	9.88E-05	7.78E-06	6.09E-07	4.78E-08
IN118	1.74E-01	1.12E+00	4.82E-01	2.06E-01	8.81E-02	1.62E-02	1.26E-03	9.93E-05	7.78E-06	6.09E-07	4.78E-08
CD119	6.54E+00	1.02E-01	1.59E-03	2.49E-05	3.89E-07	9.52E-11	3.63E-16	1.39E-21	5.27E-27	2.02E-32	7.71E-38
IN119M	9.86E-03	1.10E+00	1.20E-01	1.21E-02	1.21E-03	1.19E-05	1.16E-08	1.13E-11	1.10E-14	1.08E-17	1.05E-20
IN119	4.86E-01	5.81E-02	6.74E-03	6.83E-04	6.83E-05	6.69E-07	6.54E-10	6.39E-13	6.25E-16	6.10E-19	5.96E-22
SN121	8.10E-04	8.34E-02	8.10E-02	7.91E-02	7.72E-02	7.34E-02	6.76E-02	6.29E-02	5.81E-02	5.38E-02	5.00E-02
SN123M	4.64E-01	8.68E-01	3.08E-01	1.09E-01	3.85E-02	4.80E-03	2.13E-04	9.40E-06	4.16E-07	1.84E-08	8.12E-10
SN123	4.36E-06	4.56E-04									
SN125	1.24E-02	1.24E-02	1.23E-02	1.23E-02	1.22E-02	1.22E-02	1.21E-02	1.19E-02	1.18E-02	1.17E-02	1.16E-02
SB125	7.44E-05	7.47E-05	7.50E-05	7.54E-05	7.57E-05	7.63E-05	7.76E-05	7.86E-05	7.96E-05	8.05E-05	8.15E-05
SB126	2.31E-03	2.30E-03	2.30E-03	2.29E-03	2.29E-03	2.28E-03	2.26E-03	2.25E-03	2.23E-03	2.21E-03	2.20E-03
SN127	3.24E+00	2.32E+00	1.67E+00	1.20E+00	8.66E-01	4.46E-01	1.66E-01	6.17E-02	2.29E-02	8.50E-03	3.16E-03
SB127	3.77E-02	1.30E-01	1.44E-01	1.53E-01	1.60E-01	1.67E-01	1.70E-01	1.68E-01	1.65E-01	1.62E-01	1.59E-01
TE127	2.13E-02	2.65E-02	3.23E-02	3.83E-02	4.42E-02	5.55E-02	7.10E-02	8.30E-02	9.23E-02	9.96E-02	1.04E-01
SN128	2.18E+01	1.07E+01	5.32E+00	2.63E+00	1.30E+00	3.17E-01	3.83E-02	4.62E-03	5.57E-04	6.75E-05	8.14E-06
SB128M	1.11E-02	1.22E+01	6.35E+00	3.13E+00	1.55E+00	3.79E-01	4.56E-02	5.51E-03	6.64E-04	8.02E-05	9.70E-06
SB128	9.18E-01	8.83E-01	8.31E-01	7.79E-01	7.27E-01	6.23E-01	4.98E-01	3.95E-01	3.13E-01	2.49E-01	1.97E-01
SN129M	1.39E+01	6.92E+00	3.47E+00	1.74E+00	8.68E-01	2.17E-01	2.72E-02	3.40E-03	4.24E-04	5.30E-05	6.63E-06
SN129	9.27E+01	9.09E-01	8.97E-03	8.85E-05	8.68E-07	8.44E-11	8.03E-17	7.68E-23	7.33E-29	5.98E-35	6.68E-41
SB129	5.21E+00	8.74E+00	8.21E+00	7.33E+00	6.45E+00	4.79E+00	2.98E+00	1.85E+00	1.14E+00	7.04E-01	4.33E-01
TE129M	9.85E-08	1.09E-03	2.25E-03	3.30E-03	4.24E-03	5.75E-03	7.27E-03	8.21E-03	8.80E-03	9.15E-03	9.38E-03
TE129	3.75E+00	5.16E+00	6.04E+00	6.27E+00	6.04E+00	5.00E+00	3.33E+00	2.10E+00	1.31E+00	8.09E-01	5.02E-01
SB130M	5.28E-01	9.96E-01	2.62E-03	6.87E-06	1.81E-08	1.25E-13	2.27E-21	4.13E-29	7.50E-37	1.36E-44	2.48E-52
SB130	9.04E+01	2.74E+01	7.78E+00	2.20E+00	6.24E-01	5.02E-02	1.14E-03	2.61E-05	5.95E-07	1.36E-08	3.10E-10

TSGEORGE 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 = 3.878E-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	2.52E-02	2.38E-02	2.25E-02	2.13E-02	2.01E-02	1.80E-02	1.52E-02	1.29E-02	1.09E-02	9.21E-03	7.78E-03
SB131	2.09E+02	5.46E+01	8.91E+00	1.46E+00	2.40E-01	6.47E-03	2.85E-05	1.26E-07	5.54E-10	2.44E-12	1.22E-14
TE131M	1.00E-04	5.26E-01	5.99E-01	6.00E-01	5.89E-01	5.63E-01	5.25E-01	4.90E-01	4.57E-01	4.26E-01	3.98E-01
TE131	9.25E+01	1.00E+02	3.27E+01	8.52E+00	2.07E+00	1.94E-01	9.65E-02	8.91E-02	8.32E-02	7.78E-02	7.25E-02
I131	1.34E-02	4.66E-01	6.85E-01	7.52E-01	7.65E-01	7.72E-01	7.72E-01	7.65E-01	7.65E-01	7.58E-01	7.58E-01
TE132	1.06E+00	2.58E+00	2.55E+00	2.53E+00	2.51E+00	2.46E+00	2.40E+00	2.33E+00	2.28E+00	2.21E+00	2.15E+00
I132	2.60E+00	2.60E+00	2.59E+00	2.58E+00	2.56E+00	2.53E+00	2.47E+00	2.40E+00	2.34E+00	2.28E+00	2.22E+00
TE133M	1.28E-01	4.45E+01	1.94E+01	8.43E+00	3.66E+00	6.96E-01	5.73E-02	4.73E-03	3.90E-04	3.21E-05	2.65E-06
TE133	7.21E+02	4.09E+01	4.54E+00	1.50E+00	6.35E-01	1.20E-01	9.96E-03	8.18E-04	6.78E-05	5.58E-06	4.60E-07
I133	1.12E+00	1.20E+01	1.30E+01	1.30E+01	1.28E+01	1.21E+01	1.10E+01	9.96E+00	8.98E+00	8.18E+00	7.39E+00
XE133M	4.76E-08	2.71E-03	6.54E-03	1.04E-02	1.42E-02	2.14E-02	3.10E-02	3.93E-02	4.63E-02	5.23E-02	5.74E-02
XE133	8.31E-07	4.73E-02	1.15E-01	1.83E-01	2.52E-01	3.81E-01	5.59E-01	7.15E-01	8.55E-01	9.77E-01	1.09E+00
TE134	2.28E+02	1.06E+02	3.93E+01	1.46E+01	5.42E+00	7.51E-01	3.84E-02	1.97E-03	1.01E-04	5.18E-06	2.65E-07
I134	1.04E+02	1.40E+02	9.78E+01	5.73E+01	3.08E+01	7.81E+00	8.59E-01	8.77E-02	8.59E-03	8.23E-04	7.81E-05
I135	1.89E+01	3.34E+01	3.01E+01	2.71E+01	2.45E+01	1.99E+01	1.46E+01	1.07E+01	7.84E+00	5.77E+00	4.21E+00
XE135M	2.10E-03	9.63E+00	9.36E+00	8.49E+00	7.62E+00	6.21E+00	4.56E+00	3.34E+00	2.45E+00	1.80E+00	1.32E+00
XE135	2.18E+00	4.32E+00	6.31E+00	7.95E+00	9.25E+00	1.11E+01	1.23E+01	1.24E+01	1.18E+01	1.07E+01	9.58E+00
CS136	6.95E-03	6.93E-03	6.92E-03	6.91E-03	6.88E-03	6.85E-03	6.81E-03	6.76E-03	6.72E-03	6.67E-03	6.63E-03
CS137	9.31E-05	1.00E-03									
BA137M	1.96E-07	9.37E-04									
XE138	7.13E+02	6.13E+01	5.33E+00	4.62E-01	4.00E-02	3.00E-04	1.95E-07	1.27E-10	8.23E-14	5.35E-17	3.48E-20
CS138	1.06E+02	1.78E+02	6.19E+01	1.82E+01	5.09E+00	3.88E-01	8.07E-03	1.67E-04	3.48E-06	7.24E-08	1.50E-09
CS139	6.85E+02	2.19E+01	2.74E-01	3.44E-03	4.32E-05	6.78E-09	1.35E-14	2.67E-20	5.28E-26	1.05E-31	2.07E-37
BA139	1.26E+01	1.41E+02	8.69E+01	5.28E+01	3.19E+01	1.17E+01	2.60E+00	5.78E-01	1.28E-01	2.85E-02	6.32E-03
BA140	1.11E-01	6.90E-01	6.90E-01	6.85E-01	6.85E-01	6.79E-01	6.79E-01	6.74E-01	6.69E-01	6.64E-01	6.58E-01
LA140	2.63E-07	1.18E-02	2.34E-02	3.47E-02	4.58E-02	6.74E-02	9.85E-02	1.27E-01	1.55E-01	1.81E-01	2.05E-01
BA141	1.65E+02	5.00E+01	4.96E+00	4.92E-01	4.88E-02	4.85E-04	4.73E-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	7.41E-02	9.49E-02	1.27E-01	1.58E-01	1.76E-01	1.86E-01	1.92E-01	1.95E-01
BA142	3.32E+02	1.32E+01	3.01E-01	6.86E-03	1.56E-04	8.12E-08	9.64E-13	1.14E-17	1.36E-22	1.61E-27	1.91E-32
LA142	7.62E+00	5.28E+01	3.48E+01	2.22E+01	1.41E+01	5.70E+00	1.47E+00	3.79E-01	9.78E-02	2.52E-02	6.49E-03
LA143	1.25E+02	2.43E+01	1.25E+00	6.40E-02	3.29E-03	8.61E-06	1.16E-09	1.57E-13	2.11E-17	2.85E-21	3.84E-25
CE143	4.98E-02	3.17E+00	3.29E+00	3.20E+00	3.14E+00	3.03E+00	2.83E+00	2.66E+00	2.50E+00	2.35E+00	2.20E+00
PR143	1.46E-08	4.86E-03	1.17E-02	1.85E-02	2.52E-02	3.81E-02	5.62E-02	7.33E-02	8.90E-02	1.04E-01	1.18E-01
CE144	1.99E-03	1.42E-02									
PR144	5.45E-07	1.30E-02	1.41E-02	1.42E-02							
PR145	8.01E-02	1.18E+01	1.05E+01	9.31E+00	8.31E+00	6.58E+00	4.64E+00	3.28E+00	2.32E+00	1.64E+00	1.16E+00
CE146	2.36E+02	1.21E+01	6.19E-01	3.17E-02	1.63E-03	4.29E-06	5.78E-10	7.79E-14	1.05E-17	1.41E-21	1.91E-25
PR146	4.87E+00	4.24E+01	9.61E+00	1.81E+00	3.25E-01	1.02E-02	5.64E-05	3.11E-07	1.72E-09	9.52E-12	5.20E-14
PR147	2.73E+01	7.91E+00	2.47E-01	7.71E-03	2.41E-04	2.36E-07	7.19E-12	2.20E-16	6.70E-21	2.05E-25	6.23E-30

TSGEORGE                   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 = 3.878E-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	9.76E-06	1.84E-01	1.89E-01	1.88E-01	1.88E-01	1.87E-01	1.86E-01	1.84E-01	1.83E-01	1.81E-01	1.80E-01
ND149	1.42E+01	9.64E+00	6.56E+00	4.47E+00	3.03E+00	1.41E+00	4.42E-01	1.39E-01	4.39E-02	1.38E-02	4.36E-03
PM149	1.97E-03	1.54E-01	2.56E-01	3.24E-01	3.67E-01	4.12E-01	4.28E-01	4.20E-01	4.10E-01	3.94E-01	3.80E-01
PM150	1.63E-01	1.26E-01	9.78E-02	7.55E-02	5.84E-02	3.50E-02	1.62E-02	7.50E-03	3.48E-03	1.61E-03	7.45E-04
ND151	5.61E+01	1.75E+00	5.48E-02	1.71E-03	5.36E-05	5.23E-08	1.60E-12	4.88E-17	1.49E-21	4.53E-26	1.39E-30
PM151	3.55E-02	4.16E-01	4.18E-01	4.08E-01	3.98E-01	3.78E-01	3.50E-01	3.25E-01	3.03E-01	2.80E-01	2.60E-01
PM152	9.04E+01	8.85E-02	8.63E-05	8.43E-08	8.23E-11	7.86E-17	7.32E-26	6.83E-35	6.36E-44	5.94E-53	5.52E-62
SM153	1.21E-01	1.19E-01	1.18E-01	1.16E-01	1.14E-01	1.11E-01	1.06E-01	1.02E-01	9.72E-02	9.32E-02	8.91E-02
SM155	6.78E+00	1.11E+00	1.83E-01	2.99E-02	4.90E-03	1.32E-04	5.82E-07	2.56E-09	1.13E-11	5.03E-14	1.24E-16
EU155	4.99E-06	1.42E-04	1.65E-04	1.68E-04	1.69E-04						
SM156	1.18E-01	1.10E-01	1.02E-01	9.48E-02	8.81E-02	7.60E-02	6.09E-02	4.89E-02	3.92E-02	3.14E-02	2.51E-02
EU156	3.46E-04	5.65E-04	7.67E-04	9.55E-04	1.13E-03	1.44E-03	1.83E-03	2.12E-03	2.38E-03	2.56E-03	2.70E-03
EU157	1.93E-02	6.38E-02	6.09E-02	5.82E-02	5.55E-02	5.07E-02	4.43E-02	3.87E-02	3.37E-02	2.93E-02	2.56E-02
EU158	7.10E-01	2.88E-01	1.16E-01	4.71E-02	1.91E-02	3.12E-03	2.08E-04	1.38E-05	9.16E-07	6.08E-08	4.04E-09
EU159	8.59E-01	8.53E-02	8.46E-03	8.40E-04	8.32E-05	8.21E-07	8.02E-10	7.83E-13	7.64E-16	7.47E-19	7.30E-22
GD159	3.68E-03	1.61E-02	1.68E-02	1.62E-02	1.56E-02	1.45E-02	1.29E-02	1.15E-02	1.02E-02	9.12E-03	8.13E-03
TB161	4.68E-05	3.37E-04	3.34E-04	3.33E-04	3.32E-04	3.29E-04	3.26E-04	3.21E-04	3.17E-04	3.13E-04	3.09E-04
TOTAL	1.21E+04	2.50E+03	9.29E+02	5.47E+02	3.95E+02	2.63E+02	1.81E+02	1.39E+02	1.12E+02	9.37E+01	8.02E+01

TSGEORGE                   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 = 3.878E-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	1.54E-06	1.52E-06	1.50E-06	1.44E-06	1.35E-06	1.18E-06	1.04E-06	8.00E-07	4.19E-07	1.14E-07	3.09E-08
NA 24	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
MN 54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 55	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CO 57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CO 58	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CO 60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
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.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	1.08E-07	1.07E-07	1.05E-07	1.03E-07	9.87E-08	8.98E-08	8.19E-08	6.81E-08	4.29E-08	1.71E-08	6.78E-09
W187	1.41E-02	7.03E-03	3.48E-03	4.35E-04	1.33E-05	1.27E-08	1.20E-11	1.09E-19	0.	0.	0.
W188	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	1.34E-01	1.21E-01	1.09E-01	8.03E-02	4.80E-02	1.72E-02	6.17E-03	7.88E-04	4.65E-06	5.00E-10	3.37E-10
U240	3.85E-01	1.19E-01	3.64E-02	1.05E-03	2.89E-06	2.17E-11	1.64E-16	9.23E-27	0.	0.	0.
NP237	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
NP239	7.94E-03	1.21E+01	9.03E+00	3.73E+00	8.53E-01	4.46E-02	2.33E-03	6.40E-06	2.52E-12	6.01E-22	6.01E-22
NP240M	6.09E-04	1.19E-01	3.66E-02	1.06E-03	2.92E-06	2.20E-11	1.65E-16	9.31E-27	0.	0.	0.
* AM241	6.17E-09										
* CM242	2.25E-07	2.23E-07	2.22E-07	2.20E-07	2.15E-07	2.06E-07	1.98E-07	1.81E-07	1.48E-07	9.61E-08	6.28E-08
GE 77	5.20E-03	3.28E-03	7.50E-04	9.06E-06	5.76E-09	2.33E-15	9.41E-22	1.54E-34	0.	0.	0.
AS 77	5.38E-05	7.94E-03	5.74E-03	1.66E-03	1.95E-04	2.64E-06	3.59E-08	6.61E-12	3.06E-21	6.57E-40	1.41E-58
SE 77M	2.12E-09	2.39E-05	1.72E-05	4.99E-03	5.82E-07	7.92E-09	1.08E-10	1.99E-14	9.19E-24	1.97E-42	4.24E-61
AS 78	1.46E-02	1.30E-04	3.79E-09	3.20E-23	0.	0.	0.	0.	0.	0.	0.
BR 82	4.80E-04	3.00E-04	1.87E-04	4.55E-05	4.31E-06	3.88E-08	3.48E-10	2.81E-14	1.64E-24	5.63E-45	1.92E-65
BR 83	3.65E-01	9.61E-03	9.66E-06	9.81E-15	1.00E-29	0.	0.	0.	0.	0.	0.
KR 83M	1.89E-05	4.20E-02	4.77E-05	4.29E-14	4.40E-29	0.	0.	0.	0.	0.	0.
KR 85M	4.32E-03	2.47E-01	5.62E-03	6.67E-08	4.11E-16	1.56E-32	5.92E-49	0.	0.	0.	0.
KR 85	4.47E-06	1.17E-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	7.20E+01	1.42E-04	2.81E-10	2.18E-27	0.	0.	0.	0.	0.	0.	0.
KR 88	4.09E+01	1.08E-01	2.82E-04	5.13E-12	6.46E-25	0.	0.	0.	0.	0.	0.
RB 88	1.04E+01	1.20E-01	3.16E-04	5.74E-12	7.19E-25	0.	0.	0.	0.	0.	0.
SR 89	3.83E-06	1.15E-01	1.13E-01	1.09E-01	1.02E-01	8.89E-02	7.77E-02	5.98E-02	3.06E-02	8.05E-03	2.13E-03
SR 90	7.69E-06	7.90E-04	7.83E-04	7.83E-04	7.76E-04						
Y 90	1.14E-11	1.81E-04	3.20E-04	5.75E-04	7.34E-04	7.83E-04	7.90E-04	7.90E-04	7.83E-04	7.83E-04	7.76E-04
SR 91	9.09E-01	3.25E+00	5.83E-01	3.34E-03	6.11E-07	2.07E-14	7.03E-22	8.00E-37	0.	0.	0.

TSGEORGE                   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 = 3.878E-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	6.11E-05	2.10E+00	3.76E-01	2.16E-03	3.97E-07	1.34E-14	4.53E-22	5.17E-37	0.	0.	0.
Y 91	2.50E-08	1.00E-01	1.18E-01	1.18E-01	1.11E-01	9.89E-02	8.80E-02	6.97E-02	3.86E-02	1.19E-02	3.65E-03
SR 92	6.66E+00	8.30E-02	1.79E-04	1.80E-12	8.42E-26	0.	0.	0.	0.	0.	0.
Y 92	3.07E-01	8.70E-01	9.66E-03	7.43E-09	4.33E-19	1.48E-39	5.08E-60	0.	0.	0.	0.
Y 93	3.30E-01	2.23E+00	4.35E-01	3.27E-03	9.40E-07	7.77E-14	6.41E-21	4.38E-35	0.	0.	0.
ZR 95	6.42E-04	8.03E-02	7.94E-02	7.69E-02	7.29E-02	6.53E-02	5.89E-02	4.76E-02	2.79E-02	9.60E-03	3.29E-03
NB 95M	1.37E-11	2.72E-04	4.96E-04	9.46E-04	1.28E-03	1.35E-03	1.24E-03	1.01E-03	5.91E-04	2.04E-04	7.01E-05
NB 95	7.15E-11	1.55E-03	3.07E-03	7.35E-03	1.37E-02	2.36E-02	3.04E-02	3.77E-02	3.63E-02	1.75E-02	6.70E-03
ZR 97	1.56E+00	2.66E+00	9.99E-01	5.29E-02	3.97E-04	2.24E-08	1.26E-12	3.97E-21	2.24E-42	0.	0.
NB 97M	8.03E-03	2.55E+00	9.59E-01	5.10E-02	3.81E-04	2.15E-08	1.21E-12	3.81E-21	2.16E-42	0.	0.
NB 97	7.82E-01	2.67E+00	1.00E+00	5.32E-02	4.00E-04	2.41E-08	1.35E-12	4.30E-21	2.42E-42	0.	0.
M0 99	4.73E-03	1.54E+00	1.20E+00	5.69E-01	1.65E-01	1.38E-02	1.15E-03	8.01E-06	3.25E-11	5.36E-22	8.83E-33
TC 99M	4.40E-08	1.35E+00	1.14E+00	5.45E-01	1.57E-01	1.31E-02	1.10E-03	7.65E-06	3.10E-11	5.12E-22	8.44E-33
RU103	8.49E-05	1.94E-01	1.90E-01	1.80E-01	1.66E-01	1.39E-01	1.17E-01	8.22E-02	3.42E-02	5.94E-03	1.03E-03
RH103M	5.66E-09	1.94E-01	1.91E-01	1.81E-01	1.66E-01	1.39E-01	1.17E-01	8.22E-02	3.42E-02	5.94E-03	1.03E-03
RU105	6.14E-01	5.87E-01	1.38E-02	1.82E-07	1.33E-15	7.08E-32	3.80E-48	0.	0.	0.	0.
RH105M	4.04E-03	5.87E-01	1.39E-02	1.82E-07	1.33E-15	7.13E-32	3.81E-48	0.	0.	0.	0.
RH105	6.64E-09	2.12E+00	1.39E+00	3.45E-01	3.40E-02	3.31E-04	3.21E-06	3.04E-10	2.63E-20	1.98E-40	1.48E-60
RU106	5.38E-04	1.02E-02	1.01E-02	1.01E-02	1.00E-02	9.83E-03	9.60E-03	9.25E-03	8.42E-03	6.96E-03	5.77E-03
RH106	5.82E-06	1.02E-02	1.01E-02	1.01E-02	1.00E-02	9.83E-03	9.60E-03	9.25E-03	8.42E-03	6.96E-03	5.77E-03
PD109	7.99E-03	2.03E-01	5.92E-02	1.47E-03	3.10E-06	1.38E-11	6.15E-17	1.22E-27	0.	0.	0.
AG109M	4.61E-05	2.03E-01	5.94E-02	1.47E-03	3.11E-06	1.38E-11	6.15E-17	1.22E-27	0.	0.	0.
PD111M	9.65E-01	4.68E-02	2.28E-03	2.61E-07	7.06E-14	5.15E-27	3.78E-40	0.	0.	0.	0.
PD111	3.43E-01	3.78E-02	1.83E-03	2.10E-07	5.69E-14	4.14E-27	3.03E-40	0.	0.	0.	0.
AG111M	2.73E-03	4.93E-02	2.40E-03	2.76E-07	7.45E-14	5.47E-27	4.00E-40	0.	0.	0.	0.
AG111	9.72E-10	2.68E-02	2.58E-02	1.96E-02	1.23E-02	4.90E-03	1.94E-03	3.06E-04	3.01E-06	2.92E-10	2.83E-14
PD112	1.84E-01	8.35E-02	3.78E-02	3.51E-03	6.67E-05	2.42E-08	8.80E-12	1.15E-18	7.28E-36	0.	0.
AG112	5.53E-06	9.69E-02	4.45E-02	4.13E-03	7.90E-05	2.86E-08	1.04E-11	1.37E-18	8.57E-36	0.	0.
AG113	1.65E-03	1.74E-02	7.53E-04	6.12E-08	9.36E-15	2.19E-28	5.12E-42	0.	0.	0.	0.
CD115M	4.63E-09	1.34E-04	1.32E-04	1.25E-04	1.16E-04	9.85E-05	8.41E-05	6.07E-05	2.72E-05	5.40E-06	1.08E-06
CD115	1.79E-06	2.69E-02	1.97E-02	7.78E-03	1.64E-03	7.33E-05	3.27E-06	6.52E-09	1.15E-15	3.61E-29	1.13E-42
IN115M	2.23E-11	2.84E-02	2.15E-02	8.50E-03	1.79E-03	8.00E-05	3.57E-06	7.10E-09	1.26E-15	3.94E-29	1.23E-42
CD117	3.97E-02	8.66E-04	8.43E-07	7.87E-16	6.99E-31	0.	0.	0.	0.	0.	0.
IN117M	1.91E-06	3.60E-03	4.16E-06	4.02E-15	3.57E-30	0.	0.	0.	0.	0.	0.
IN117	7.69E-11	2.37E-03	2.81E-06	2.72E-15	2.41E-30	0.	0.	0.	0.	0.	0.
SN121	8.10E-04	4.62E-02	2.49E-02	3.92E-03	1.80E-04	3.80E-07	8.00E-10	3.57E-15	1.49E-28	0.	0.
SN123	4.36E-06	4.56E-04	4.52E-04	4.44E-04	4.32E-04	4.08E-04	3.87E-04	3.47E-04	2.63E-04	1.51E-04	8.68E-05
SN125	1.24E-02	1.15E-02	1.07E-02	8.57E-03	5.92E-03	2.84E-03	1.36E-03	3.10E-04	7.76E-06	4.88E-09	3.06E-12
SB125	7.44E-05	8.25E-05	9.02E-05	1.10E-04	1.35E-04	1.64E-04	1.76E-04	1.84E-04	1.80E-04	1.68E-04	1.57E-04
SB126	2.31E-03	2.18E-03	2.07E-03	1.75E-03	1.33E-03	7.60E-04	4.38E-04	1.44E-04	9.02E-06	4.38E-08	8.80E-09

TSGEORGE  
MR/HR AT H+12 HOURS = 1.000  
FRACTION OF REFRACTORIES PRESENT = 0.500  
RELAXATION LENGTH = 0.16 GM/SQCM  
BOMB FRACTION LENGTH PER SQ. METER = 3.878E-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
SB127	3.24E+00	1.17E-03	4.26E-07	2.03E-17	1.28E-34	0.18E-03	0.66E-03	0.16E-05	0.39E-17	0.18E-25
TE127M	3.77E-02	1.15E-01	4.30E-01	7.57E-02	3.10E-02	5.16E-03	0.64E-04	0.42E-05	0.92E-03	0.23E-04
TE127	3.05E-02	2.36E-04	4.33E-04	8.40E-02	2.16E-02	5.76E-03	1.97E-03	1.10E-03	7.88E-04	4.17E-04
SB128	9.19E-02	1.13E-01	6.64E-05	9.64E-02	2.81E-02	5.35E-09	8.77E-17	8.25E-25	7.27E-41	0.
SB129	5.21E+00	1.16E-01	2.47E-02	5.07E-03	9.79E-03	6.79E-03	1.8E-33	0.3E-50	0.	0.
TE129M	9.93E-02	2.00E-02	6.04E-02	1.30E-02	6.27E-03	8.85E-03	4.56E-03	7.21E-03	3.91E-03	1.41E-03
TE129	2.100E-02	6.58E-04	3.13E-03	2.72E-03	3.08E-02	3.76E-08	4.56E-03	3.76E-03	2.50E-03	9.03E-04
TE130	6.88E-02	6.41E-02	6.51E-02	6.99E-01	6.99E-03	3.92E-04	3.66E-04	1.70E-06	6.65E-08	5.06E-25
TE131	9.25E+00	1.01E-01	6.41E-01	5.33E-01	6.33E-03	3.19E-03	1.53E-01	6.48E-03	5.16E-02	9.25E-12
TE131M	1.34E-02	7.23E-01	3.21E-01	0.						
XE131	3.65E-01	6.66E-00	8.93E-00	0.						
TE132	2.60E-02	2.12E-00	6.06E+00	0.						
TE133	1.476E-02	1.06E-00	5.08E-00	0.						
XE133M	8.31E-01	8.07E-01	5.12E-01	0.						
XE1335M	8.189E-01	8.07E-01	5.119E-01	0.						
XE135	2.210E-02	1.18E-00	6.95E-03	0.						
CS136	2.626E-02	1.03E-00	6.508E-03	0.						
BA137M	9.931E-07	9.316E-07	0.							
BA137	1.112E-01	6.07E-01	6.353E-01	0.						
LA140	2.63E-07	6.07E-01	6.228E-01	0.						
LA141	1.539E-07	8.07E-01	2.193E-01	0.						
CE141	1.899E-07	8.07E-01	2.107E-01	0.						
LA142	7.62E-02	4.98E-02	2.08E-02	0.						
CE143	4.46E-08	1.99E-03	4.46E-08	1.99E-03	4.46E-08	1.99E-03	4.46E-08	1.99E-03	4.46E-08	0.
CE144	5.45E-07	8.02E-02	1.41E-02	0.						
PR144	8.01E-02	8.01E-02	1.42E-02	0.						
PR145	5.45E-07	8.02E-02	1.41E-02	0.						
ND147	9.76E-02	9.76E-02	5.45E-04	0.						
PM149	1.42E-03	1.42E-03	2.19E-19	0.						
PM150	1.97E-01	1.97E-01	3.64E-04	0.						

TSGEORGE                   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 = 3.878E-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
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PM151	3.55E-02	2.42E-01	1.34E-01	2.25E-02	1.15E-03	3.03E-06	7.99E-09	5.51E-14	6.91E-27	0.	0.
SM153	1.21E-01	8.52E-02	5.98E-02	2.07E-02	3.51E-03	1.02E-04	2.97E-06	2.49E-09	5.15E-17	2.19E-32	9.32E-48
SM156	1.18E-01	2.02E-02	3.44E-03	1.70E-05	2.44E-09	5.02E-17	1.04E-24	4.41E-40	0.	0.	0.
EU155	4.99E-06	1.69E-04	1.69E-04	1.69E-04	1.68E-04	1.68E-04	1.67E-04	1.66E-04	1.62E-04	1.56E-04	1.50E-04
EU156	3.46E-04	2.82E-03	3.12E-03	2.80E-03	2.22E-03	1.40E-03	8.81E-04	3.50E-04	3.46E-05	3.41E-07	3.36E-09
EU157	1.93E-02	2.22E-02	7.48E-03	2.81E-04	1.18E-06	2.08E-11	3.68E-16	1.15E-25	0.	0.	0.
GD159	3.68E-03	7.24E-03	2.88E-03	1.80E-04	1.77E-06	1.71E-10	1.66E-14	1.56E-22	1.33E-42	0.	0.
TB161	4.68E-05	3.06E-04	2.76E-04	2.04E-04	1.24E-04	4.52E-05	1.66E-05	2.22E-06	1.47E-08	6.35E-13	2.76E-17
TOTAL	3.05E+02	6.91E+01	3.32E+01	1.25E+01	5.19E+00	2.00E+00	1.22E+00	6.69E-01	2.87E-01	1.01E-01	4.96E-02

TSGEORGE                    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 = 3.878E-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
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*BE 7	1.54E-06	1.33E-08	1.23E-09	1.14E-10	9.21E-14	7.38E-17	5.51E-21	3.54E-27	0.	0.	0.
MN 54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 59	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 58	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	1.08E-07	3.72E-09	6.88E-10	1.27E-10	8.11E-13	5.18E-15	6.10E-18	2.47E-22	0.	0.	0.
W188	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U234	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
U237	1.34E-01	3.34E-10	3.26E-10	3.17E-10	2.97E-10	2.75E-10	2.50E-10	2.17E-10	1.35E-10	6.63E-11	3.26E-11
*AM241	6.17E-09	6.17E-09	6.17E-09	6.17E-09	6.20E-09	6.22E-09	6.22E-09	6.25E-09	6.28E-09	6.22E-09	6.14E-09
*CM242	2.25E-07	4.76E-08	2.19E-08	1.01E-08	9.81E-10	9.55E-11	4.28E-12	4.05E-14	1.16E-18	1.08E-18	1.01E-18
KR 85	4.47E-06	1.11E-04	1.08E-04	1.04E-04	9.49E-05	8.57E-05	7.53E-05	6.21E-05	3.28E-05	1.25E-05	4.79E-06
SR 89	3.83E-06	8.95E-04	7.83E-05	6.88E-06	4.63E-09	3.13E-12	1.85E-16	8.39E-23	6.10E-44	0.	0.
SR 90	7.69E-06	7.69E-04	7.62E-04	7.55E-04	7.27E-04	6.99E-04	6.65E-04	6.18E-04	4.83E-04	3.33E-04	2.31E-04
Y 90	1.14E-11	7.69E-04	7.62E-04	7.55E-04	7.27E-04	6.99E-04	6.65E-04	6.18E-04	4.83E-04	3.33E-04	2.31E-04
Y 91	2.50E-08	1.69E-03	1.97E-04	2.29E-05	3.58E-08	5.62E-11	1.03E-14	2.53E-20	5.10E-39	0.	0.
ZR 95	6.42E-04	1.65E-03	2.35E-04	3.35E-05	9.77E-08	2.84E-10	1.18E-13	9.94E-19	1.22E-35	0.	0.
NB 95M	1.37E-11	3.49E-05	4.98E-06	7.12E-07	2.07E-09	6.03E-12	2.50E-15	2.11E-20	2.58E-37	0.	0.
NB 95	7.15E-11	3.55E-03	5.10E-04	7.27E-05	2.11E-07	6.11E-10	2.55E-13	2.15E-18	2.64E-35	0.	0.
RU103	8.49E-05	3.30E-04	1.35E-05	5.55E-07	3.79E-11	2.60E-15	7.30E-21	3.43E-29	0.	0.	0.
RH103M	5.66E-09	3.31E-04	1.35E-05	5.55E-07	3.80E-11	2.60E-15	7.30E-21	3.44E-29	0.	0.	0.
RU106	5.38E-04	5.11E-03	3.62E-03	2.56E-03	9.12E-04	3.24E-04	8.15E-05	1.03E-05	1.04E-08	3.34E-13	1.08E-17
RH106	5.82E-06	5.11E-03	3.62E-03	2.56E-03	9.12E-04	3.24E-04	8.15E-05	1.03E-05	1.04E-08	3.34E-13	1.08E-17
SN123	4.36E-06	6.04E-05	2.19E-05	7.96E-06	3.82E-07	1.83E-08	3.19E-10	7.36E-13	1.18E-21	7.60E-35	4.88E-48
SB125	7.44E-05	1.50E-04	1.32E-04	1.16E-04	7.89E-05	5.37E-05	3.21E-05	1.48E-05	1.14E-06	2.43E-08	5.17E-10
TE125M	2.00E-12	6.11E-05	5.43E-05	4.79E-05	3.27E-05	2.22E-05	1.33E-05	6.15E-06	4.72E-07	1.01E-08	2.14E-10
TE127M	3.05E-10	1.46E-04	4.57E-05	1.43E-05	4.40E-07	1.35E-08	1.30E-10	1.22E-13	1.01E-23	7.52E-39	5.60E-54
TE127	2.13E-02	1.45E-04	4.52E-05	1.42E-05	4.35E-07	1.34E-08	1.29E-10	1.21E-13	9.96E-24	7.41E-39	5.55E-54
CS137	9.31E-05	9.81E-04	9.70E-04	9.59E-04	9.26E-04	8.92E-04	8.53E-04	7.97E-04	6.30E-04	4.48E-04	3.16E-04
BA137M	1.96E-07	9.20E-04	9.09E-04	8.98E-04	8.64E-04	8.36E-04	7.97E-04	7.47E-04	5.91E-04	4.18E-04	2.96E-04
CE141	1.89E-07	8.15E-05	1.64E-06	3.29E-08	2.68E-13	2.18E-18	3.58E-25	2.38E-35	0.	0.	0.
CE144	1.99E-03	5.84E-03	3.75E-03	2.40E-03	6.29E-04	1.65E-04	2.78E-05	1.92E-06	2.58E-10	4.05E-16	6.32E-22
PR144	5.45E-07	5.84E-03	3.75E-03	2.40E-03	6.29E-04	1.65E-04	2.78E-05	1.92E-06	2.58E-10	4.05E-16	6.32E-22
PM147	2.71E-14	1.57E-03	1.38E-03	1.21E-03	8.11E-04	5.46E-04	3.20E-04	1.45E-04	1.03E-05	1.95E-07	3.69E-09
EU155	4.99E-06	1.46E-04	1.36E-04	1.26E-04	1.02E-04	8.15E-05	6.09E-05	3.93E-05	9.19E-06	1.03E-06	1.16E-07

TOTAL	1.59E-01	3.63E-02	2.11E-02	1.51E-02	7.45E-03	4.89E-03	3.70E-03	3.07E-03	2.24E-03	1.55E-03	1.08E-03
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**APPENDIX H**  
**DETAILED RESULTS FOR EVENT HOW**

TSHOW  
 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 = 4.297E-13

TIME	MR/HR	MICROCURIES/SQ METER
ZERO TIME HOURS	1.12E+02	1.01E+04
1.00E+00	3.54E+01	2.17E+03
2.00E+00	1.40E+01	8.79E+02
3.00E+00	7.48E+00	5.40E+02
4.00E+00	4.62E+00	3.92E+02
6.00E+00	2.39E+00	2.57E+02
9.00E+00	1.39E+00	1.72E+02
1.20E+01	1.00E+00	1.29E+02
1.50E+01	7.78E-01	1.02E+02
1.80E+01	6.30E-01	8.33E+01
2.10E+01	5.23E-01	6.98E+01
1.00E+00 DAYS	4.37E-01	5.88E+01
2.00E+00	1.89E-01	2.49E+01
5.00E+00	7.42E-02	9.05E+00
1.00E+01	3.64E-02	4.45E+00
2.00E+01	1.52E-02	2.00E+00
3.00E+01	8.69E-03	1.25E+00
5.00E+01	3.93E-03	6.88E-01
1.00E+02	1.30E-03	2.95E-01
2.00E+02	4.36E-04	1.04E-01
3.00E+02	1.71E-04	5.11E-02
1.00E+00 YEARS	1.01E-04	3.74E-02
1.50E+00	3.52E-05	2.17E-02
2.00E+00	2.21E-05	1.55E-02
3.50E+00	1.32E-05	7.69E-03
5.00E+00	1.03E-05	5.07E-03
7.00E+00	8.82E-06	3.84E-03
1.00E+01	7.88E-06	3.19E-03
2.00E+01	6.10E-06	2.33E-03
3.50E+01	4.32E-06	1.61E-03
5.00E+01	3.05E-06	1.12E-03

	MICROCURIES/SQ METER
AT H+12 HOURS	1,000
AT HMR/HR	0.500
RELAXATION LENGTH	0.16 GM/SQCM
REFRACTION OF REFRACTORY BOMB	4.297E-13
FRACTION PER SQ.	METER

DEBBIE DECAY EBON 1 TO 21 HENIBS

\* BE 7  
 NA 24  
 MN 54  
 FE 59  
 CO 58  
 CO 60  
 CU 64  
 CU 67  
 W185  
 W187  
 W188  
 AU198  
 AU199  
 PB203  
 PU237  
 U239  
 U240  
 NP239  
 NP240M  
 NP240  
 AM241  
 CM242  
 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  
 SE 83M  
 KR

TSHOW MICRORCURIOS/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 = 4.297E-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	9.49E-02	1.64E+01	4.42E+00	1.20E+00	3.24E-01	2.37E-02	4.68E-04	9.24E-06	1.83E-07	3.62E-09	7.14E-11
KR 85M	4.46E-03	9.57E+00	8.14E+00	6.95E+00	5.94E+00	4.34E+00	2.70E+00	1.69E+00	1.05E+00	6.54E-01	4.08E-01
KR 87	7.54E+01	4.35E+01	2.52E+01	1.46E+01	8.40E+00	2.82E+00	5.46E-01	1.06E-01	2.05E-02	3.97E-03	7.67E-04
KR 88	4.26E+01	3.32E+01	2.59E+01	2.02E+01	1.58E+01	9.61E+00	4.59E+00	2.18E+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	5.20E+01	4.89E+01	3.28E+00	2.21E-01	1.48E-02	6.70E-05	2.03E-08	6.12E-12	1.86E-15	5.64E-19	1.71E-22
SR 89	3.98E-06	1.40E-01	1.49E-01	1.48E-01	1.48E-01						
SR 90	8.01E-06	8.23E-04	8.23E-04								
SR 91	9.47E-01	1.76E+01	1.64E+01	1.53E+01	1.42E+01	1.23E+01	9.95E+00	8.04E+00	6.49E+00	5.21E+00	4.20E+00
Y 91M	6.37E-05	6.08E+00	8.28E+00	8.87E+00	8.76E+00	7.86E+00	6.43E+00	5.18E+00	4.18E+00	3.37E+00	2.72E+00
Y 91	2.61E-08	5.40E-03	1.24E-02	1.99E-02	2.72E-02	4.07E-02	5.78E-02	7.15E-02	8.28E-02	9.17E-02	9.89E-02
SR 92	6.93E+00	3.10E+01	2.40E+01	1.86E+01	1.44E+01	8.61E+00	4.00E+00	1.86E+00	8.61E-01	4.00E-01	1.86E-01
Y 92	3.20E-01	6.51E+00	1.02E+01	1.22E+01	1.29E+01	1.23E+01	9.42E+00	6.42E+00	4.13E+00	2.54E+00	1.53E+00
SR 93	2.80E+02	4.83E+00	2.67E-02	1.47E-04	8.12E-07	2.48E-11	4.19E-18	7.06E-25	1.19E-31	2.01E-38	3.39E-45
Y 93	3.42E-01	1.11E+01	1.04E+01	9.72E+00	9.08E+00	7.93E+00	6.46E+00	5.27E+00	4.28E+00	3.52E+00	2.86E+00
Y 94	4.08E+01	5.58E+01	7.17E+00	9.25E-01	1.19E-01	1.98E-03	4.25E-06	9.11E-09	1.95E-11	4.25E-14	2.36E-15
Y 95	1.77E+02	1.67E+01	3.67E-01	8.10E-03	1.78E-04	8.65E-08	9.27E-13	9.91E-18	1.06E-22	1.13E-27	1.21E-32
ZR 95	6.64E-04	8.68E-02	8.86E-02	8.86E-02							
NB 95	7.40E-11	5.36E-05	1.25E-04	1.96E-04	2.68E-04	4.11E-04	6.24E-04	8.39E-04	1.05E-03	1.26E-03	1.47E-03
ZR 97	1.61E+00	7.00E+00	6.70E+00	6.45E+00	6.17E+00	5.70E+00	5.04E+00	4.45E+00	3.96E+00	3.49E+00	3.10E+00
NB 97M	8.27E-03	6.72E+00	6.45E+00	6.20E+00	5.95E+00	5.48E+00	4.84E+00	4.29E+00	3.79E+00	3.35E+00	2.96E+00
NB 97	8.05E-01	3.51E+00	4.95E+00	5.64E+00	5.92E+00	5.89E+00	5.37E+00	4.79E+00	4.23E+00	3.73E+00	3.32E+00
NB 98	9.16E+00	4.05E+00	1.79E+00	7.93E-01	3.51E-01	6.88E-02	5.95E-03	5.14E-04	4.47E-05	3.87E-06	3.33E-07
M0 99	4.88E-03	2.01E+00	1.99E+00	1.97E+00	1.95E+00	1.91E+00	1.86E+00	1.80E+00	1.74E+00	1.69E+00	1.64E+00
TC 99M	4.54E-08	1.92E-01	3.61E-01	5.10E-01	6.40E-01	8.55E-01	1.08E+00	1.23E+00	1.32E+00	1.37E+00	1.39E+00
M0101	1.42E+02	6.40E+01	3.72E+00	2.15E-01	1.25E-02	4.19E-05	8.14E-09	1.59E-12	3.08E-16	5.98E-20	1.17E-23
TC101	5.98E+00	1.80E+02	1.96E+01	1.61E+00	1.17E-01	5.29E-04	1.32E-07	2.96E-11	6.28E-15	1.29E-18	2.62E-22
M0102	1.19E+03	2.70E+01	6.15E-01	1.41E-02	3.21E-04	1.66E-07	1.98E-12	2.35E-17	2.78E-22	3.30E-27	3.92E-32
TC102M	7.62E-01	2.29E+01	5.24E-01	1.20E-02	2.73E-04	1.41E-07	1.68E-12	1.99E-17	2.35E-22	2.79E-27	3.32E-32
TC102	3.57E+03	1.36E+01	3.10E-01	7.05E-03	1.61E-04	8.41E-08	9.99E-13	1.19E-17	1.41E-22	1.66E-27	1.98E-32
RU103	8.60E-05	1.99E-01	1.99E-01	1.99E-01	1.99E-01	1.98E-01	1.98E-01	1.98E-01	1.97E-01	1.97E-01	1.96E-01
RH103M	5.73E-09	1.03E-01	1.53E-01	1.77E-01	1.88E-01	1.96E-01	1.98E-01	1.98E-01	1.97E-01	1.97E-01	1.97E-01
TC104	7.58E+01	5.45E+01	5.45E+00	5.39E-01	5.34E-02	5.26E-04	5.13E-07	5.02E-10	4.90E-13	4.79E-16	4.67E-19
RU105	6.31E-01	2.18E+01	1.87E+01	1.60E+01	1.37E+01	1.00E+01	6.26E+00	3.92E+00	2.45E+00	1.53E+00	9.63E-01
RH105M	4.15E-03	2.19E+01	1.87E+01	1.60E+01	1.37E+01	1.00E+01	6.26E+00	3.93E+00	2.46E+00	1.54E+00	9.63E-01
RH105	6.82E-09	4.44E-01	8.25E-01	1.14E+00	1.40E+00	1.79E+00	2.14E+00	2.30E+00	2.35E+00	2.33E+00	2.27E+00
RU106	5.50E-04	1.04E-02	1.04E-02								
RH106	5.95E-06	1.04E-02	1.04E-02								
RH107	1.43E-01	1.94E+01	2.94E+00	4.42E-01	6.67E-02	1.52E-03	5.24E-06	1.81E-08	6.22E-11	2.13E-146	2.12E-17
PD107M	2.97E-04	3.95E+00	5.96E-01	9.00E-02	1.36E-02	3.10E-04	1.07E-06	3.68E-09	1.27E-11	4.37E-14	1.49E-16

TSHOW 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 = 4.297E-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	8.26E-03	6.86E-01	6.52E-01	6.17E-01	5.87E-01	5.29E-01	4.55E-01	3.90E-01	3.34E-01	2.86E-01	2.46E-01
AG109M	4.77E-05	6.86E-01	6.52E-01	6.19E-01	5.88E-01	5.31E-01	4.55E-01	3.90E-01	3.34E-01	2.86E-01	2.46E-01
PD111M	1.03E+00	9.05E-01	7.97E-01	7.05E-01	6.21E-01	4.83E-01	3.30E-01	2.27E-01	1.55E-01	1.06E-01	7.28E-02
PD111	3.66E-01	6.59E-01	6.32E-01	5.63E-01	4.98E-01	3.87E-01	2.66E-01	1.82E-01	1.25E-01	8.55E-02	5.86E-02
AG111M	2.91E-03	8.89E-01	8.36E-01	7.47E-01	6.59E-01	5.10E-01	3.48E-01	2.39E-01	1.64E-01	1.12E-01	7.67E-02
AG111	1.03E-09	3.07E-03	6.44E-03	9.47E-03	1.21E-02	1.66E-02	2.13E-02	2.44E-02	2.64E-02	2.77E-02	2.84E-02
PD112	1.92E-01	1.86E-01	1.80E-01	1.74E-01	1.69E-01	1.58E-01	1.43E-01	1.30E-01	1.17E-01	1.06E-01	9.61E-02
AG112	5.79E-06	3.69E-02	6.51E-02	8.73E-02	1.04E-01	1.24E-01	1.37E-01	1.36E-01	1.30E-01	1.21E-01	1.11E-01
AG113	1.73E-03	3.69E-01	3.24E-01	2.84E-01	2.49E-01	1.92E-01	1.30E-01	8.77E-02	5.92E-02	3.99E-02	2.70E-02
AG115	5.97E-01	6.40E-01	7.96E-02	9.95E-03	1.25E-03	1.95E-05	3.81E-08	7.44E-11	1.44E-13	1.43E-16	1.33E-16
CD115M	4.88E-09	1.30E-04	1.46E-04	1.48E-04	1.48E-04	1.48E-04	1.47E-04	1.47E-04	1.47E-04	1.46E-04	1.46E-04
CD115	1.89E-06	3.55E-02	3.82E-02	3.81E-02	3.77E-02	3.67E-02	3.54E-02	3.40E-02	3.27E-02	3.15E-02	3.02E-02
IN115M	2.35E-11	3.92E-03	8.72E-03	1.29E-02	1.65E-02	2.20E-02	2.72E-02	2.99E-02	3.12E-02	3.15E-02	3.12E-02
CD117	4.19E-02	6.97E-01	5.25E-01	3.92E-01	2.94E-01	1.65E-01	6.92E-02	2.91E-02	1.23E-02	5.15E-03	2.17E-03
IN117M	2.01E-06	2.42E-01	3.51E-01	3.81E-01	3.68E-01	2.90E-01	1.66E-01	8.49E-02	4.08E-02	1.89E-02	8.54E-03
IN117	8.10E-11	4.42E-02	1.07E-01	1.49E-01	1.66E-01	1.53E-01	9.72E-02	5.20E-02	2.59E-02	1.22E-02	5.59E-03
CD118	2.76E+00	1.18E+00	5.08E-01	2.17E-01	9.27E-02	1.70E-02	1.33E-03	1.04E-04	8.19E-06	6.41E-07	5.03E-08
IN118	1.83E-01	1.18E+00	5.08E-01	2.17E-01	9.27E-02	1.70E-02	1.33E-03	1.05E-04	8.19E-06	6.41E-07	5.03E-08
CD119	6.89E+00	1.08E-01	1.68E-03	2.62E-05	4.10E-07	1.00E-10	3.82E-16	1.46E-21	5.56E-27	2.12E-32	8.13E-38
IN119M	1.04E-02	1.16E+00	1.27E-01	1.28E-02	1.27E-03	1.25E-05	1.22E-08	1.19E-11	1.16E-14	1.14E-17	1.11E-20
IN119	5.12E-01	6.12E-02	7.10E-03	7.20E-04	7.20E-05	7.05E-07	6.89E-10	6.74E-13	6.58E-16	6.43E-19	6.28E-22
SN121	8.54E-04	8.79E-02	8.54E-02	8.34E-02	8.14E-02	7.74E-02	7.14E-02	6.63E-02	6.13E-02	5.68E-02	5.28E-02
SN123M	4.91E-01	9.19E-01	3.26E-01	1.15E-01	4.07E-02	5.08E-03	2.25E-04	9.95E-06	4.40E-07	1.94E-08	8.60E-10
SN123	4.62E-06	4.83E-04									
SN125	1.32E-02	1.31E-02	1.31E-02	1.31E-02	1.30E-02	1.29E-02	1.28E-02	1.27E-02	1.26E-02	1.25E-02	1.24E-02
SB125	7.91E-05	7.95E-05	7.98E-05	8.02E-05	8.05E-05	8.12E-05	8.26E-05	8.36E-05	8.46E-05	8.57E-05	8.67E-05
SB126	2.48E-03	2.47E-03	2.47E-03	2.46E-03	2.45E-03	2.44E-03	2.43E-03	2.41E-03	2.39E-03	2.38E-03	2.36E-03
SN127	3.48E+00	2.50E+00	1.80E+00	1.30E+00	9.33E-01	4.81E-01	1.79E-01	6.64E-02	2.46E-02	9.16E-03	3.40E-03
SB127	4.07E-02	1.40E-01	1.55E-01	1.65E-01	1.73E-01	1.80E-01	1.83E-01	1.81E-01	1.78E-01	1.74E-01	1.71E-01
TE127	2.29E-02	2.86E-02	3.47E-02	4.12E-02	4.76E-02	5.97E-02	7.65E-02	8.93E-02	9.94E-02	1.07E-01	1.12E-01
SN128	2.34E+01	1.15E+01	5.71E+00	2.82E+00	1.40E+00	3.41E-01	4.11E-02	4.96E-03	5.99E-04	7.26E-05	8.75E-06
SB128M	1.19E-02	1.32E+01	6.83E+00	3.37E+00	1.66E+00	4.07E-01	4.90E-02	5.92E-03	7.14E-04	8.62E-05	1.04E-05
SB128	9.87E-01	9.49E-01	8.93E-01	8.38E-01	7.82E-01	6.70E-01	5.35E-01	4.24E-01	3.37E-01	2.67E-01	2.12E-01
SN129M	1.48E+01	7.39E+00	3.71E+00	1.85E+00	9.26E-01	2.32E-01	2.90E-02	3.62E-03	4.53E-04	5.66E-05	7.07E-06
SN129	9.89E+01	9.70E-01	9.58E-03	9.45E-05	9.26E-07	9.01E-11	8.57E-17	8.20E-23	7.82E-29	7.45E-35	7.14E-41
SB129	5.56E+00	9.33E+00	8.76E+00	7.82E+00	6.88E+00	5.11E+00	3.19E+00	1.97E+00	1.21E+00	7.51E-01	4.62E-01
TE129M	1.05E-07	1.16E-03	2.40E-03	3.52E-03	4.53E-03	6.13E-03	7.76E-03	8.76E-03	9.39E-03	9.76E-03	1.00E-02
TE129	4.01E+00	5.51E+00	6.45E+00	6.70E+00	6.45E+00	5.34E+00	3.56E+00	2.24E+00	1.40E+00	8.64E-01	5.36E-01
SB130M	5.56E-01	1.05E+00	2.76E-03	7.24E-06	1.91E-08	1.31E-13	2.39E-21	4.35E-29	7.90E-37	1.44E-44	2.61E-52
SB130	9.53E+01	2.88E+01	8.20E+00	2.32E+00	6.57E-01	5.29E-02	1.21E-03	2.75E-05	6.27E-07	1.43E-08	3.26E-10

TSHOW 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 = 4.297E-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	2.65E-02	2.51E-02	2.38E-02	2.24E-02	2.12E-02	1.90E-02	1.60E-02	1.36E-02	1.15E-02	9.71E-03	8.20E-03
SB131	2.17E+02	5.68E+01	9.28E+00	1.52E+00	2.50E-01	6.73E-03	2.96E-05	1.31E-07	5.76E-10	2.54E-12	1.27E-14
TE131M	1.05E-04	5.47E-01	6.24E-01	6.24E-01	6.13E-01	5.86E-01	5.46E-01	5.10E-01	4.76E-01	4.44E-01	4.14E-01
TE131	9.62E+01	1.05E+02	3.41E+01	8.86E+00	2.15E+00	2.02E-01	1.00E-01	9.28E-02	8.65E-02	8.10E-02	7.55E-02
I131	1.40E-02	4.85E-01	7.13E-01	7.82E-01	7.96E-01	8.03E-01	8.03E-01	7.96E-01	7.96E-01	7.89E-01	7.89E-01
TE132	1.10E+00	2.66E+00	2.64E+00	2.62E+00	2.59E+00	2.54E+00	2.48E+00	2.41E+00	2.35E+00	2.28E+00	2.22E+00
I132	2.69E+00	2.68E+00	2.68E+00	2.66E+00	2.64E+00	2.61E+00	2.55E+00	2.48E+00	2.42E+00	2.36E+00	2.30E+00
TE133M	1.33E-01	4.62E+01	2.01E+01	8.76E+00	3.81E+00	7.23E-01	5.95E-02	4.91E-03	4.05E-04	3.34E-05	2.75E-06
TE133	7.49E+02	4.24E+01	4.72E+00	1.56E+00	6.60E-01	1.25E-01	1.03E-02	8.50E-04	7.04E-05	5.79E-06	4.78E-07
I133	1.16E+00	1.25E+01	1.35E+01	1.33E+01	1.26E+01	1.14E+01	1.03E+01	9.33E+00	8.50E+00	7.68E+00	
XE133M	4.94E-08	2.81E-03	6.79E-03	1.08E-02	1.48E-02	2.22E-02	3.22E-02	4.08E-02	4.81E-02	5.44E-02	5.96E-02
XE133	8.63E-07	4.91E-02	1.19E-01	1.90E-01	2.61E-01	3.96E-01	5.81E-01	7.42E-01	8.88E-01	1.02E+00	1.13E+00
TE134	2.36E+02	1.09E+02	4.06E+01	1.51E+01	5.61E+00	7.77E-01	3.97E-02	2.04E-03	1.04E-04	5.35E-06	2.74E-07
I134	1.08E+02	1.44E+02	1.01E+02	5.93E+01	3.18E+01	8.08E+00	8.88E-01	9.07E-02	8.88E-03	8.51E-04	8.08E-05
I135	1.96E+01	3.45E+01	3.12E+01	2.81E+01	2.54E+01	2.06E+01	1.51E+01	1.10E+01	8.12E+00	5.97E+00	4.36E+00
XE135M	2.17E-03	9.97E+00	9.69E+00	8.79E+00	7.89E+00	6.42E+00	4.72E+00	3.45E+00	2.54E+00	1.86E+00	1.36E+00
XE135	2.26E+00	4.47E+00	6.54E+00	8.23E+00	9.58E+00	1.15E+01	1.27E+01	1.28E+01	1.22E+01	1.11E+01	9.92E+00
CS136	7.66E-03	7.64E-03	7.63E-03	7.61E-03	7.59E-03	7.55E-03	7.50E-03	7.45E-03	7.41E-03	7.36E-03	7.31E-03
CS137	9.68E-05	1.04E-03									
BA137M	2.04E-07	9.74E-04									
XE138	7.35E+02	6.32E+01	5.49E+00	4.76E-01	4.12E-02	3.09E-04	2.01E-07	1.30E-10	8.48E-14	5.51E-17	3.58E-20
CS138	1.09E+02	1.84E+02	6.38E+01	1.87E+01	5.25E+00	4.00E-01	8.31E-03	1.73E-04	3.58E-06	7.46E-08	1.54E-09
CS139	7.15E+02	2.28E+01	2.86E-01	3.60E-03	4.51E-05	7.09E-09	1.41E-14	2.79E-20	5.52E-26	1.09E-31	2.16E-37
BA139	1.32E+01	1.47E+02	9.08E+01	5.52E+01	3.34E+01	1.22E+01	2.72E+00	6.03E-01	1.34E-01	2.97E-02	6.60E-03
BA140	1.14E-01	7.09E-01	7.09E-01	7.04E-01	7.04E-01	6.98E-01	6.98E-01	6.93E-01	6.88E-01	6.82E-01	6.77E-01
LA140	2.70E-07	1.21E-02	2.40E-02	3.57E-02	4.71E-02	6.93E-02	1.01E-01	1.31E-01	1.59E-01	1.86E-01	2.11E-01
BA141	1.72E+02	5.19E+01	5.15E+00	5.10E-01	5.06E-02	5.02E-04	4.90E-07	4.78E-10	4.66E-13	4.57E-16	4.45E-19
LA141	1.58E+00	3.36E+01	3.13E+01	2.65E+01	2.23E+01	1.56E+01	9.15E+00	5.35E+00	3.15E+00	1.85E+00	1.08E+00
CE141	1.96E-07	2.18E-02	5.10E-02	7.68E-02	9.84E-02	1.32E-01	1.64E-01	1.82E-01	1.93E-01	1.99E-01	2.02E-01
BA142	3.44E+02	1.37E+01	3.12E-01	7.11E-03	1.62E-04	8.42E-08	1.00E-12	1.19E-17	1.41E-22	1.67E-27	1.98E-32
LA142	7.90E+00	5.48E+01	3.61E+01	2.30E+01	1.46E+01	5.92E+00	1.53E+00	3.93E-01	1.01E-01	2.61E-02	6.73E-03
LA143	1.29E+02	2.52E+01	1.29E+00	6.63E-02	3.41E-03	8.93E-06	1.20E-09	1.62E-13	2.19E-17	2.95E-21	3.98E-25
CE143	5.16E-02	3.29E+00	3.41E+00	3.32E+00	3.26E+00	3.14E+00	2.94E+00	2.76E+00	2.59E+00	2.43E+00	2.28E+00
PR143	1.51E-08	5.04E-03	1.22E-02	1.92E-02	2.61E-02	3.95E-02	5.82E-02	7.60E-02	9.23E-02	1.08E-01	1.22E-01
CE144	2.04E-03	1.46E-02									
PR144	5.60E-07	1.33E-02	1.45E-02	1.46E-02							
PR145	8.23E-02	1.21E+01	1.08E+01	9.57E+00	8.54E+00	6.77E+00	4.77E+00	3.37E+00	2.39E+00	1.68E+00	1.19E+00
CE146	2.41E+02	1.23E+01	6.33E-01	3.23E-02	1.67E-03	4.39E-06	5.91E-10	7.96E-14	1.07E-17	1.45E-21	1.95E-25
PR146	4.98E+00	4.33E+01	9.82E+00	1.85E+00	3.32E-01	1.04E-02	5.77E-05	3.18E-07	1.76E-09	9.73E-12	5.32E-14
PR147	2.79E+01	8.08E+00	2.52E-01	7.87E-03	2.46E-04	2.41E-07	7.34E-12	2.24E-16	6.84E-21	2.09E-25	6.37E-30

TSHOW 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 = 4.297E-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	9.97E-06	1.88E-01	1.93E-01	1.93E-01	1.92E-01	1.91E-01	1.90E-01	1.88E-01	1.87E-01	1.85E-01	1.84E-01
ND149	1.43E+01	9.71E+00	6.61E+00	4.51E+00	3.05E+00	1.42E+00	4.45E-01	1.41E-01	4.42E-02	1.39E-02	4.40E-03
PM149	1.99E-03	1.55E-01	2.58E-01	3.26E-01	3.70E-01	4.15E-01	4.32E-01	4.24E-01	4.13E-01	3.97E-01	3.83E-01
PM150	1.65E-01	1.28E-01	9.90E-02	7.64E-02	5.91E-02	3.55E-02	1.64E-02	7.59E-03	3.52E-03	1.63E-03	7.54E-04
ND151	5.64E+01	1.76E+00	5.52E-02	1.72E-03	5.39E-05	5.27E-08	1.61E-12	4.91E-17	1.50E-21	4.56E-26	1.40E-30
PM151	3.58E-02	4.18E-01	4.21E-01	4.11E-01	4.01E-01	3.80E-01	3.53E-01	3.27E-01	3.05E-01	2.82E-01	2.62E-01
PM152	9.12E+01	8.92E-02	8.70E-05	8.50E-08	8.30E-11	7.93E-17	7.38E-26	6.88E-35	6.41E-44	5.99E-53	5.57E-62
SM153	1.22E-01	1.20E-01	1.18E-01	1.17E-01	1.15E-01	1.12E-01	1.07E-01	1.02E-01	9.76E-02	9.36E-02	8.95E-02
SM155	7.03E+00	1.15E+00	1.89E-01	3.09E-02	5.07E-03	1.37E-04	6.03E-07	2.65E-09	1.17E-11	5.21E-14	1.28E-16
EU155	5.16E-06	1.47E-04	1.71E-04	1.74E-04	1.75E-04						
SM156	1.22E-01	1.14E-01	1.06E-01	9.80E-02	9.10E-02	7.86E-02	6.29E-02	5.05E-02	4.05E-02	3.24E-02	2.60E-02
EU156	3.58E-04	5.84E-04	7.93E-04	9.87E-04	1.17E-03	1.49E-03	1.89E-03	2.19E-03	2.45E-03	2.65E-03	2.79E-03
EU157	2.03E-02	6.74E-02	6.43E-02	6.14E-02	5.86E-02	5.35E-02	4.67E-02	4.08E-02	3.56E-02	3.09E-02	2.70E-02
EU158	7.63E-01	3.09E-01	1.25E-01	5.07E-02	2.05E-02	3.36E-03	2.24E-04	1.48E-05	9.85E-07	6.54E-08	4.34E-09
EU159	9.20E-01	9.14E-02	9.06E-03	9.00E-04	8.92E-05	8.80E-07	8.59E-10	8.39E-13	8.19E-16	8.01E-19	7.82E-22
GD159	3.94E-03	1.73E-02	1.80E-02	1.74E-02	1.68E-02	1.55E-02	1.38E-02	1.23E-02	1.10E-02	9.77E-03	8.72E-03
TB161	5.07E-05	3.65E-04	3.63E-04	3.61E-04	3.60E-04	3.57E-04	3.53E-04	3.48E-04	3.43E-04	3.40E-04	3.35E-04
TOTAL	1.01E+04	2.17E+03	8.79E+02	5.40E+02	3.92E+02	2.57E+02	1.72E+02	1.29E+02	1.02E+02	8.33E+01	6.98E+01

TSHOW  
 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 = 4.297E-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	1.59E-06	1.57E-06	1.55E-06	1.49E-06	1.40E-06	1.22E-06	1.08E-06	8.28E-07	4.33E-07	1.18E-07	3.20E-08
NA 24	0	0	0	0	0	0	0	0	0	0	0
MN 54	0	0	0	0	0	0	0	0	0	0	0
FE 55	0	0	0	0	0	0	0	0	0	0	0
FE 59	0	0	0	0	0	0	0	0	0	0	0
CG 57	0	0	0	0	0	0	0	0	0	0	0
CG 58	0	0	0	0	0	0	0	0	0	0	0
CG 60	0	0	0	0	0	0	0	0	0	0	0
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
W181	0	0	0	0	0	0	0	0	0	0	0
W185	0	0	0	0	0	0	0	0	0	0	0
W187	0	0	0	0	0	0	0	0	0	0	0
W188	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	1.39E-02	1.25E-02	1.13E-02	8.30E-03	4.96E-03	1.78E-03	6.38E-04	8.15E-05	4.81E-07	5.17E-11	3.49E-11
U240	7.00E-03	2.16E-03	6.62E-04	1.92E-05	5.27E-08	3.96E-13	2.98E-18	1.68E-28	0	0	0
NP237	0	0	0	0	0	0	0	0	0	0	0
NP239	1.13E-04	1.73E-01	1.29E-01	5.32E-02	1.22E-02	6.37E-04	3.33E-05	9.14E-08	3.59E-14	8.58E-24	8.58E-24
NP240M	1.11E-05	2.17E-03	6.67E-04	1.93E-05	5.31E-08	4.00E-13	3.00E-18	1.69E-28	0	0	0
*AM241	1.66E-08										
*CM242	2.50E-07	2.48E-07	2.47E-07	2.44E-07	2.39E-07	2.29E-07	2.20E-07	2.02E-07	1.64E-07	1.07E-07	6.98E-08
GE 77	5.53E-03	3.48E-03	7.96E-04	9.62E-06	6.12E-09	2.48E-15	9.99E-22	1.63E-34	0	0	0
AS 77	5.71E-05	8.43E-03	6.10E-03	1.76E-03	2.07E-04	2.80E-06	3.81E-08	7.02E-12	3.25E-21	6.98E-40	1.50E-58
SE 77M	2.25E-09	2.54E-05	1.83E-05	5.30E-06	6.18E-07	8.41E-09	1.14E-10	2.11E-14	9.76E-24	2.09E-42	4.50E-61
AS 78	1.55E-02	1.38E-04	4.05E-09	3.42E-23	0	0	0	0	0	0	0
BR 82	5.00E-04	3.12E-04	1.95E-04	4.74E-05	4.49E-06	4.03E-08	3.62E-10	2.92E-14	1.71E-24	5.86E-45	1.99E-65
BR 83	3.77E-01	9.92E-03	9.98E-06	1.01E-14	1.03E-29	0	0	0	0	0	0
KR 83M	1.95E-05	4.34E-02	4.93E-05	4.43E-14	4.55E-29	0	0	0	0	0	0
KR 85M	4.46E-03	2.55E-01	5.81E-03	6.89E-08	4.25E-16	1.62E-32	6.12E-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	1.19E-04	1.18E-04
KR 87	7.54E+01	1.49E-04	2.94E-10	2.28E-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	3.98E-06	1.19E-01	1.18E-01	1.13E-01	1.06E-01	9.26E-02	8.10E-02	6.23E-02	3.19E-02	8.39E-03	2.21E-03
SR 90	8.01E-06	8.23E-04	8.16E-04	8.16E-04	8.08E-04						
Y 90	1.19E-11	1.89E-04	3.34E-04	5.99E-04	7.65E-04	8.16E-04	8.23E-04	8.23E-04	8.16E-04	8.16E-04	8.08E-04
SR 91	9.47E-01	3.39E+00	6.08E-01	3.48E-03	6.37E-07	2.16E-14	7.33E-22	8.34E-37	0	0	0

TSHOW 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 = 4.297E-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	6.37E-05	2.19E+00	3.92E-01	2.25E-03	4.13E-07	1.39E-14	4.72E-22	5.38E-37	0.	0.	0.
Y 91	2.61E-08	1.04E-01	1.23E-01	1.23E-01	1.16E-01	1.03E-01	9.17E-02	7.27E-02	4.02E-02	1.24E-02	3.81E-03
SR 92	6.93E+00	8.64E-02	1.86E-04	1.87E-12	8.77E-26	0.	0.	0.	0.	0.	0.
Y 92	3.20E-01	9.06E-01	1.01E-02	7.74E-09	4.51E-19	1.54E-39	5.29E-60	0.	0.	0.	0.
Y 93	3.42E-01	2.31E+00	4.51E-01	3.39E-03	9.75E-07	8.05E-14	6.65E-21	4.54E-35	0.	0.	0.
ZR 95	6.64E-04	8.31E-02	8.22E-02	7.96E-02	7.55E-02	6.76E-02	6.09E-02	4.92E-02	2.88E-02	9.94E-03	3.41E-03
NB 95M	1.41E-11	2.81E-04	5.13E-04	9.79E-04	1.32E-03	1.39E-03	1.29E-03	1.04E-03	6.12E-04	2.11E-04	7.26E-05
NB 95	7.40E-11	1.61E-03	3.18E-03	7.61E-03	1.41E-02	2.44E-02	3.15E-02	3.90E-02	3.76E-02	1.81E-02	6.94E-03
ZR 97	1.61E+00	2.74E+00	1.03E+00	5.45E-02	4.09E-04	2.30E-08	1.29E-12	4.09E-21	2.31E-42	0.	0.
NB 97M	8.27E-03	2.63E+00	9.88E-01	5.26E-02	3.93E-04	2.21E-08	1.24E-12	3.93E-21	2.22E-42	0.	0.
NB 97	8.05E-01	2.75E+00	1.03E+00	5.48E-02	4.12E-04	2.48E-08	1.39E-12	4.43E-21	2.49E-42	0.	0.
MO 99	4.88E-03	1.59E+00	1.24E+00	5.88E-01	1.70E-01	1.42E-02	1.18E-03	8.27E-06	3.36E-11	5.53E-22	9.11E-33
TC 99M	4.54E-08	1.40E+00	1.18E+00	5.63E-01	1.62E-01	1.36E-02	1.13E-03	7.90E-06	3.20E-11	5.28E-22	8.70E-33
RU103	8.60E-05	1.96E-01	1.92E-01	1.82E-01	1.68E-01	1.41E-01	1.18E-01	8.32E-02	3.46E-02	6.01E-03	1.05E-03
RH103M	5.73E-09	1.96E-01	1.93E-01	1.83E-01	1.68E-01	1.41E-01	1.18E-01	8.32E-02	3.47E-02	6.01E-03	1.05E-03
RU105	6.31E-01	6.03E-01	1.42E-02	1.87E-07	1.36E-15	7.28E-32	3.90E-48	0.	0.	0.	0.
RH105M	4.15E-03	6.03E-01	1.42E-02	1.87E-07	1.37E-15	7.32E-32	3.91E-48	0.	0.	0.	0.
RU105	6.82E-09	2.18E+00	1.42E+00	3.55E-01	3.50E-02	3.40E-04	3.30E-06	3.12E-10	2.70E-20	2.03E-40	1.52E-60
RU106	5.50E-04	1.04E-02	1.04E-02	1.03E-02	1.02E-02	1.01E-02	9.83E-03	9.47E-03	8.61E-03	7.12E-03	5.90E-03
RH106	5.95E-06	1.04E-02	1.04E-02	1.03E-02	1.02E-02	1.01E-02	9.83E-03	9.47E-03	8.61E-03	7.12E-03	5.90E-03
PD109	8.26E-03	2.10E-01	6.13E-02	1.52E-03	3.20E-06	1.43E-11	6.36E-17	1.26E-27	0.	0.	0.
AG109M	4.77E-05	2.10E-01	6.14E-02	1.52E-03	3.22E-06	1.43E-11	6.36E-17	1.26E-27	0.	0.	0.
PD111M	1.03E+00	4.98E-02	2.42E-03	2.78E-07	7.51E-14	5.48E-27	4.02E-40	0.	0.	0.	0.
PD111	3.66E-01	4.02E-02	1.95E-03	2.23E-07	6.06E-14	4.41E-27	3.23E-40	0.	0.	0.	0.
AG111M	2.91E-03	5.25E-02	2.56E-03	2.94E-07	7.93E-14	5.83E-27	4.25E-40	0.	0.	0.	0.
AG111	1.03E-09	2.86E-02	2.74E-02	2.09E-02	1.31E-02	5.21E-03	2.07E-03	3.26E-04	3.21E-06	3.11E-10	3.01E-14
PD112	1.92E-01	8.73E-02	3.95E-02	3.67E-03	6.98E-05	2.53E-08	9.20E-12	1.21E-18	7.62E-36	0.	0.
AG112	5.79E-06	1.01E-01	4.66E-02	4.33E-03	8.27E-05	2.99E-08	1.08E-11	1.43E-18	8.97E-36	0.	0.
AG113	1.73E-03	1.82E-02	7.89E-04	6.41E-08	9.81E-15	2.30E-28	5.36E-42	0.	0.	0.	0.
CD115M	4.88E-09	1.41E-04	1.39E-04	1.32E-04	1.22E-04	1.04E-04	8.86E-05	6.40E-05	2.86E-05	5.69E-06	1.14E-06
CD115	1.89E-06	2.84E-02	2.08E-02	8.20E-03	1.73E-03	7.72E-05	3.45E-06	6.87E-09	1.21E-15	3.80E-29	1.19E-42
IN115M	2.35E-11	3.00E-02	2.27E-02	8.96E-03	1.89E-03	8.44E-05	3.76E-06	7.49E-09	1.33E-15	4.15E-29	1.30E-42
CD117	4.19E-02	9.13E-04	8.88E-07	8.29E-16	7.36E-31	0.	0.	0.	0.	0.	0.
IN117M	2.01E-06	3.79E-03	4.39E-06	4.23E-15	3.76E-30	0.	0.	0.	0.	0.	0.
IN117	8.10E-11	2.50E-03	2.96E-06	2.87E-15	2.54E-30	0.	0.	0.	0.	0.	0.
SN121	8.54E-04	4.87E-02	2.63E-02	4.14E-03	1.90E-04	4.01E-07	8.44E-10	3.76E-15	1.57E-28	0.	0.
SN123	4.62E-06	4.83E-04	4.79E-04	4.70E-04	4.57E-04	4.32E-04	4.10E-04	3.67E-04	2.78E-04	1.60E-04	9.19E-05
SN125	1.32E-02	1.22E-02	1.14E-02	9.12E-03	6.30E-03	3.02E-03	1.44E-03	3.30E-04	8.26E-06	5.20E-09	3.25E-12
SB125	7.91E-05	8.77E-05	9.60E-05	1.17E-04	1.44E-04	1.74E-04	1.88E-04	1.95E-04	1.92E-04	1.79E-04	1.67E-04
SB126	2.48E-03	2.34E-03	2.22E-03	1.88E-03	1.42E-03	8.15E-04	4.70E-04	1.55E-04	9.68E-06	4.70E-08	9.45E-09

TSHOW 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 = 4.297E-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	3.48E+00	1.26E-03	4.58E-07	2.19E-17	1.37E-34	0.	0.	0.	0.	0.
SB127	4.07E-02	1.67E-01	1.40E-01	8.15E-02	3.34E-02	5.58E-03	9.33E-04	2.61E-05	3.40E-09	5.81E-17
TE127M	3.29E-10	2.55E-04	4.66E-04	9.05E-04	1.25E-03	1.38E-03	1.33E-03	1.18E-03	8.60E-04	4.54E-04
TE127	2.29E-02	1.19E-01	1.17E-01	7.15E-02	3.02E-02	6.20E-03	2.12E-03	1.19E-03	8.49E-04	4.49E-04
SB128	9.87E-01	1.68E-01	2.66E-02	1.04E-04	1.01E-08	9.43E-17	8.87E-25	7.82E-41	0.	0.
SB129	5.56E+00	2.85E-01	5.95E-03	5.41E-08	2.15E-16	3.40E-33	5.36E-50	0.	0.	0.
TE129M	1.05E-07	1.11E-02	1.11E-02	1.05E-02	9.45E-03	7.70E-03	6.26E-03	4.17E-03	1.50E-03	1.96E-04
TE129	4.01E+00	3.34E-01	1.39E-02	6.70E-03	6.04E-03	4.93E-03	4.02E-03	2.67E-03	9.64E-04	1.26E-04
I130	2.65E-02	6.93E-03	1.82E-03	3.24E-05	3.96E-08	5.90E-14	8.80E-20	1.96E-31	0.	0.
TE131M	1.05E-04	3.66E-01	2.10E-01	3.97E-02	2.49E-03	9.69E-06	3.79E-08	5.79E-13	5.26E-25	0.
TE131	9.62E+01	6.67E-02	3.83E-02	7.27E-03	4.53E-04	1.77E-06	6.92E-09	1.06E-13	9.62E-26	0.
I131	1.40E-02	7.55E-01	7.13E-01	5.73E-01	3.77E-01	1.59E-01	6.74E-02	1.20E-02	1.63E-04	2.96E-08
XE131M	3.79E-11	3.50E-04	6.64E-04	1.38E-03	1.98E-03	1.96E-03	1.45E-03	6.00E-04	4.00E-05	1.20E-07
TE132	1.10E+00	2.17E+00	1.75E+00	9.23E-01	3.18E-01	3.77E-02	4.47E-03	6.27E-05	1.47E-09	8.03E-19
I132	2.69E+00	2.24E+00	1.81E+00	9.49E-01	3.28E-01	3.88E-02	4.60E-03	6.47E-05	1.51E-09	8.23E-19
I133	1.16E+00	6.47E+00	2.92E+00	2.71E-01	5.16E-03	1.87E-06	6.79E-10	8.95E-17	5.62E-34	0.
XE133M	4.94E-08	6.11E-02	7.23E-02	4.24E-02	9.96E-03	4.68E-04	2.18E-05	4.72E-08	1.03E-14	4.94E-28
XE133	8.63E-07	1.17E+00	1.57E+00	1.41E+00	7.68E-01	2.07E-01	5.58E-02	4.02E-03	5.60E-06	1.08E-11
I135	1.96E+01	3.20E+00	2.67E-01	1.56E-04	6.31E-10	1.04E-20	1.71E-31	4.65E-53	0.	0.
XE135M	2.17E-03	9.97E-01	8.34E-02	4.85E-05	1.97E-10	3.25E-21	5.35E-32	1.45E-53	0.	0.
XE135	2.26E+00	8.62E+00	2.11E+00	1.21E-02	1.48E-06	2.07E-14	2.91E-22	5.75E-38	0.	0.
CS136	7.66E-03	7.26E-03	6.88E-03	5.87E-03	4.50E-03	2.64E-03	1.55E-03	5.33E-04	3.70E-05	1.78E-07
CS137	9.68E-05	1.04E-03	1.03E-03							
BA137M	2.04E-07	9.74E-04	9.68E-04	9.63E-04						
BA139	1.32E+01	1.41E-03	8.32E-09	1.71E-24	0.	0.	0.	0.	0.	0.
BA140	1.14E-01	6.71E-01	6.39E-01	5.41E-01	4.13E-01	2.40E-01	1.40E-01	4.74E-02	3.16E-03	1.41E-05
LA140	2.70E-07	2.34E-01	3.76E-01	5.20E-01	4.62E-01	2.77E-01	1.61E-01	5.47E-02	3.63E-03	1.62E-05
LA141	1.58E+00	6.29E-01	8.82E-03	2.44E-08	1.34E-17	3.99E-36	1.19E-54	0.	0.	0.
CE141	1.96E-07	2.17E-01	2.16E-01	2.03E-01	1.82E-01	1.47E-01	1.18E-01	7.72E-02	2.65E-02	3.12E-03
LA142	7.90E+00	1.73E-03	3.35E-08	2.47E-22	0.	0.	0.	0.	0.	0.
CE143	5.16E-02	2.12E+00	1.28E+00	2.82E-01	2.27E-02	1.47E-04	9.50E-07	3.98E-11	4.49E-22	0.
PR143	1.51E-08	1.36E-01	2.11E-01	2.73E-01	2.34E-01	1.42E-01	8.59E-02	3.11E-02	2.48E-03	1.58E-05
CE144	2.04E-03	1.46E-02	1.45E-02	1.45E-02	1.43E-02	1.39E-02	1.36E-02	1.30E-02	1.15E-02	8.97E-03
PR144	5.60E-07	1.46E-02	1.45E-02	1.45E-02	1.43E-02	1.39E-02	1.36E-02	1.30E-02	1.15E-02	8.97E-03
PR145	8.23E-02	8.42E-01	5.21E-02	1.23E-05	1.13E-11	9.32E-24	7.73E-36	0.	0.	0.
ND147	9.97E-06	1.67E-01	1.57E-01	1.31E-01	9.55E-02	5.13E-02	2.74E-02	7.87E-03	3.45E-04	6.72E-07
PM147	2.77E-14	1.25E-04	2.43E-04	5.54E-04	9.58E-04	1.46E-03	1.73E-03	1.93E-03	1.94E-03	1.81E-03
ND149	1.43E+01	1.38E-03	1.34E-07	1.22E-19	1.04E-39	0.	0.	0.	0.	0.
PM149	1.99E-03	3.67E-01	2.69E-01	1.05E-01	2.19E-02	9.55E-04	4.15E-05	7.90E-08	1.25E-14	3.08E-28
PM150	1.65E-01	3.49E-04	7.36E-07	6.91E-15	2.89E-28	0.	0.	0.	0.	0.

TSHOW 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 = 4.297E-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
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PM151	3.58E-02	2.44E-01	1.35E-01	2.26E-02	1.16E-03	3.05E-06	8.04E-09	5.54E-14	6.95E-27	0.	0.
SM153	1.22E-01	8.56E-02	6.01E-02	2.08E-02	3.53E-03	1.03E-04	2.98E-06	2.50E-09	5.17E-17	2.20E-32	9.36E-48
SM156	1.22E-01	2.09E-02	3.56E-03	1.75E-05	2.53E-09	5.19E-17	1.07E-24	4.56E-40	0.	0.	0.
EU155	5.16E-06	1.75E-04	1.75E-04	1.75E-04	1.74E-04	1.74E-04	1.73E-04	1.71E-04	1.68E-04	1.61E-04	1.55E-04
EU156	3.58E-04	2.91E-03	3.23E-03	2.89E-03	2.30E-03	1.44E-03	9.10E-04	3.61E-04	3.58E-05	3.52E-07	3.47E-09
EU157	2.03E-02	2.35E-02	7.90E-03	2.96E-04	1.24E-06	2.19E-11	3.88E-16	1.21E-25	0.	0.	0.
GD159	3.94E-03	7.76E-03	3.09E-03	1.93E-04	1.90E-06	1.84E-10	1.78E-14	1.67E-22	1.43E-42	0.	0.
TB161	5.07E-05	3.31E-04	2.99E-04	2.21E-04	1.34E-04	4.91E-05	1.80E-05	2.41E-06	1.59E-08	6.88E-13	2.99E-17
<b>TOTAL</b>	<b>3.17E+02</b>	<b>5.88E+01</b>	<b>2.49E+01</b>	<b>9.05E+00</b>	<b>4.45E+00</b>	<b>2.00E+00</b>	<b>1.25E+00</b>	<b>6.88E-01</b>	<b>2.95E-01</b>	<b>1.04E-01</b>	<b>5.11E-02</b>

TSHOW 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 = 4.297E-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
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* BE 7	1.59E-06	1.37E-08	1.28E-09	1.18E-10	9.53E-14	7.63E-17	5.70E-21	3.66E-27	0.	0.	0.
MN 54	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
FE 57	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 58	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
CD 60	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W181	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W185	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.	0.
W188	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	1.39E-02	3.46E-11	3.37E-11	3.28E-11	3.07E-11	2.85E-11	2.59E-11	2.25E-11	1.40E-11	6.86E-12	3.37E-12
* CM242	1.66E-08	1.66E-08	1.66E-08	1.66E-08	1.67E-08	1.67E-08	1.67E-08	1.68E-08	1.69E-08	1.67E-08	1.65E-08
KR 85	2.50E-07	5.29E-08	2.43E-08	1.12E-08	1.09E-09	1.06E-10	4.76E-12	4.50E-14	1.29E-18	1.21E-18	1.13E-18
SR 89	4.62E-06	1.15E-04	1.11E-04	1.08E-04	9.81E-05	8.85E-05	7.79E-05	6.42E-05	3.39E-05	1.30E-05	4.95E-06
SR 90	3.98E-06	9.32E-04	8.15E-05	7.16E-06	4.82E-09	3.26E-12	1.92E-16	8.74E-23	6.35E-44	0.	0.
YY 91	8.01E-06	8.01E-04	7.94E-04	7.87E-04	7.57E-04	7.28E-04	6.93E-04	6.44E-04	6.03E-04	3.47E-04	2.40E-04
ZR 95M	2.61E-08	1.76E-03	2.05E-04	2.38E-05	3.73E-08	5.86E-11	1.07E-14	2.63E-20	5.32E-39	0.	0.
NB 95M	6.64E-04	1.71E-03	2.44E-04	3.47E-05	1.01E-07	2.94E-10	1.22E-13	1.03E-18	1.26E-35	0.	0.
NB 95	1.41E-11	3.61E-05	5.16E-06	7.37E-07	2.14E-09	6.24E-12	2.58E-15	2.18E-20	6.67E-37	0.	0.
RU103M	7.40E-11	3.67E-03	5.27E-04	7.52E-05	2.18E-07	6.32E-10	2.64E-13	2.23E-18	2.73E-35	0.	0.
RH103M	8.60E-05	3.34E-04	1.37E-05	5.62E-07	3.84E-11	2.63E-15	7.38E-21	3.47E-29	0.	0.	0.
RU106	5.73E-09	3.34E-04	1.37E-05	5.62E-07	3.84E-11	2.63E-15	7.38E-21	3.48E-29	0.	0.	0.
RH106	5.50E-04	5.23E-03	3.70E-03	6.22E-03	9.33E-04	3.31E-04	8.34E-05	1.05E-05	1.06E-08	3.42E-13	1.10E-17
SN123	5.95E-06	5.23E-03	3.70E-03	6.22E-03	9.33E-04	3.31E-04	8.34E-05	1.05E-05	1.06E-08	3.42E-13	1.10E-17
SB125	4.62E-06	6.40E-05	2.32E-05	8.43E-06	4.04E-07	1.94E-08	3.38E-10	7.79E-13	1.25E-21	8.05E-35	1.17E-48
TE125M	7.91E-06	1.59E-04	1.40E-04	1.23E-04	8.39E-05	5.71E-05	3.41E-05	1.58E-05	1.21E-06	2.58E-08	5.50E-10
TE127M	2.13E-12	6.50E-05	5.78E-05	5.09E-05	3.47E-05	2.36E-05	1.41E-05	6.54E-06	5.02E-07	1.07E-08	2.28E-10
CS137	3.29E-10	1.57E-04	4.92E-05	1.54E-05	4.74E-07	1.46E-08	1.40E-10	1.32E-13	1.08E-23	8.10E-39	6.03E-54
BA137M	2.29E-02	1.56E-04	4.87E-05	1.52E-05	4.68E-07	1.44E-08	1.38E-10	1.31E-13	1.07E-23	7.98E-39	5.97E-54
CE141	9.68E-05	1.02E-03	1.01E-03	9.97E-04	9.63E-04	9.28E-04	8.87E-04	8.29E-04	6.55E-04	4.66E-04	3.29E-04
CE144	2.04E-07	9.57E-04	9.45E-04	9.34E-04	8.99E-04	8.70E-04	8.29E-04	7.77E-04	6.15E-04	4.35E-04	3.08E-04
PR144	2.04E-03	6.00E-03	3.86E-03	2.46E-03	6.46E-04	1.70E-04	2.86E-05	1.97E-06	2.66E-10	4.17E-16	6.49E-22
PM147	5.60E-07	6.00E-03	3.86E-03	2.46E-03	6.46E-04	1.70E-04	2.86E-05	1.97E-06	2.66E-10	4.17E-16	6.49E-22
EU155	2.77E-14	1.61E-03	1.41E-03	1.23E-03	8.28E-04	5.57E-04	3.27E-04	1.49E-04	1.06E-05	2.00E-07	3.77E-09
	5.16E-06	1.51E-04	1.41E-04	1.31E-04	1.05E-04	8.44E-05	6.30E-05	4.07E-05	9.52E-06	1.07E-06	1.21E-07
TOTAL	4.04E-02	3.74E-02	2.17E-02	1.55E-02	7.69E-03	5.07E-03	3.84E-03	3.19E-03	2.33E-03	1.61E-03	1.12E-03