

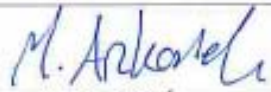
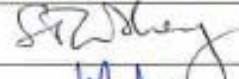



# ASSESSMENT REPORT

## Generic Design Assessment: Disposability Assessment for Wastes and Spent Fuel arising from Operation of the UK EPR

### Part 2: Data Sheets and Inventory Tables

Prepared by:	 Mehdi Askarieh  Matt White	 22/01/10
Checked by:	Simon Wisbey	 22/1/10
Approved by:	Steve Barlow	 22/1/10

DOCUMENT INFORMATION	
Document Reference:	NXA/10777960
Issue Date:	22 January 2010
File Reference	TPC 60 020



Nuclear  
Decommissioning  
Authority

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## DOCUMENT HISTORY

<b>STATUS</b>	<b>REVISION</b>	<b>DATE</b>	<b>COMMENTS</b>
Draft 1	1	11 September 2009	Draft 1 is the first full draft, and is issued for accuracy check by EdF/Areva.
Issue 1	2	23 September 2009	Issue 1 incorporates changes in response to comments from EdF/Areva. Issue 1 has been issued as final version of this report.
Issue 2	3	22 January 2010	Issue 2 removes protective marking from the report. This was undertaken after confirmation from EdF/Areva that the information contained in the report is not considered to be commercially confidential.

## 1 INTRODUCTION

The 2008 White Paper on Nuclear Power [1], together with the preceding consultation [2], established the process of Generic Design Assessment (GDA), whereby industry-preferred designs of new nuclear power stations would be assessed by regulators in a pre-licensing process. Amongst the parties requesting assessment under the GDA process is a collaborative venture between Electricité de France (EdF) and Areva NP (EdF/Areva), which is seeking an initial endorsement of the UK EPR design.

An important aspect of the GDA process is the consideration of the disposability of the higher-activity solid radioactive wastes and spent fuel that would be generated through reactor operation. Consequently, regulators have indicated that requesting parties should obtain and provide a view from the Nuclear Decommissioning Authority (NDA) (as the authoritative source in the UK in providing such advice) on the disposability in a Geological Disposal Facility of any proposed arisings of higher-activity wastes or spent fuel [3].

In accordance with regulatory guidance, EdF/Areva has requested that the Radioactive Waste Management Directorate (RWMD) of NDA provides advice on the disposability of the higher-activity wastes and spent fuel expected to arise from the operation of an EPR. The reported assessment of the disposability of the higher-activity wastes and spent fuel from the EPR is based on information on wastes and proposals for waste packaging supplied by EdF/Areva, supplemented as necessary by relevant information available to RWMD.

Comprehensive details of the information supplied to RWMD by EdF/Areva, measures taken by RWMD to supplement this information, assessment methods and the detailed conclusions of this GDA Disposability Assessment are presented in the Assessment Report for wastes and spent fuel arising from operation of the EdF/Areva EPR. The report is presented in two parts. Part 1 is the Main Report. Part 2 provides data summary sheets and inventory data for waste packages.

This document is Part 2. It provides data summary sheets for the different waste packages advised by EdF/Areva and detailed inventory tables which were developed for the purposes of the GDA Disposability Assessment.

Section 2 of this document provides datasheets and inventory tables for ILW packages.

Section 3 of this document provides datasheets and inventory tables for spent fuel packages.



## 2 DATASHEETS FOR ILW PACKAGES

Data summary sheets and package inventory data for the ILW packages proposed by EdF/Areva are presented in this section. For each waste package, we present a summary data sheet that provides information on waste package characteristics, and a table providing average and maximum waste package inventory data.

The tables presented are:

- Table 1 and Table 2 present the data sheet and inventory for EPR01;
- Table 3 and Table 4 present the data sheet and inventory for EPR02;
- Table 5 and Table 6 present the data sheet and inventory for EPR03;
- Table 7 and Table 8 present the data sheet and inventory for EPR04;
- Table 9 and Table 10 present the data sheet and inventory for EPR05;
- Table 11 and Table 12 present the data sheet and inventory for EPR11;
- Table 13 and Table 14 present the data sheet and inventory for EPR12;
- Table 15 and Table 16 present the data sheet and inventory for EPR13;
- Table 17 and Table 18 present the data sheet and inventory for EPR14;
- Table 19 and Table 20 present the data sheet and inventory for EPR15;
- Table 21 and Table 22 present the data sheet and inventory for EPR16;
- Table 23 and Table 24 present the data sheet and inventory for EPR21;
- Table 25 and Table 26 present the data sheet and inventory for EPR22;
- Table 27 and Table 28 present the data sheet and inventory for EPR23;
- Table 29 and Table 30 present the data sheet and inventory for EPR24;
- Table 31 and Table 32 present the data sheet and inventory for EPR25;
- Table 33 and Table 34 present the data sheet and inventory for EPR26;
- Table 35 and Table 36 present the data sheet and inventory for EPR06;
- Table 37 and Table 38 present the data sheet and inventory for EPR07;
- Table 39 and Table 40 present the data sheet and inventory for EPR08.

**Table 1 EPR01 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	4.00E-04	4.70E-03
	beta/gamma	1.48E-01	1.73E+00
<b>Classification (GBq/te)</b>			
	alpha	1.00E+00	1.18E+01
	beta/gamma	3.70E+02	4.32E+03
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	3.92E-01	4.61E+00
	A <sub>2</sub> per gram (raw)	9.81E-07	1.15E-05
	A <sub>2</sub> per gram (conditioned)	7.69E-08	9.05E-07
	LSA criteria	LSA-II	LSA-II
<b>Heat output (W)</b>			
		2.71E-02	3.19E-01
<b>Soluble radionuclides (TBq)</b>			
	Sr90	5.82E-05	6.84E-04
	Cs134	9.91E-03	1.17E-01
	Cs137	2.53E-02	2.98E-01
<b>Radiotoxicity (Sv/yr)</b>		2.59E+01	3.05E+02
<b>Lifetime requirement (years)</b>		78	188
<b>Fissile content (g)</b>			
	U233	6.90E-10	8.12E-09
	U235	1.71E-03	2.01E-02
	U238	2.71E-01	3.18E+00
	Pu239	2.09E-03	2.46E-02
	Pu240	1.03E-03	1.21E-02
	Pu241	4.47E-04	5.25E-03
	Pu242	2.29E-04	2.69E-03
Total Fissile	U233+U235+Pu239+Pu241	4.25E-03	4.99E-02
Total U	U233+U235+U238	2.72E-01	3.20E+00
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	3.65E-03	4.29E-02
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	9.50E-10	1.12E-08
Total U	U232+U233+U234+U235+U236+U238	2.74E-01	3.22E+00
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	3.94E-03	4.64E-02
<b>Corrected Dose rates for C1 Container (mSv/hr)</b>			
	3m from C1 Concrete Package	7.41E-02	8.72E-01
	1m from C1 Concrete Package	3.94E-01	4.64E+00
	0m from C1 Concrete Package	1.37E+00	1.61E+01
	3m from unshielded waste - approx value	8.38E-01	9.86E+00

**Table 2 EPR01 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	1.00E-03	9.10E-07	2.50E-05	1.00E-03	9.10E-07	2.50E-05
Be10	7.18E-09	2.90E-10	1.20E-08	8.44E-08	3.41E-09	1.41E-07
C14	6.46E-04	5.12E-06	2.15E-04	7.60E-03	6.03E-05	2.53E-03
Cl36	3.59E-07	1.58E-08	5.98E-07	4.22E-06	1.85E-07	7.04E-06
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	1.79E-07	9.21E-11	0.00E+00	2.11E-06	1.08E-09	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	7.86E-03	1.05E-03	7.86E-03	9.25E-02	1.24E-02	9.25E-02
Fe55	5.02E-03	4.74E-06	1.26E-04	5.91E-02	5.58E-05	1.48E-03
Co60	3.59E-02	1.49E-02	8.97E-02	4.22E-01	1.76E-01	1.06E+00
Ni59	3.95E-05	4.38E-08	0.00E+00	4.64E-04	5.16E-07	0.00E+00
Ni63	5.02E-02	1.38E-04	1.67E-03	5.91E-01	1.62E-03	1.97E-02
Zn65	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Se79	1.01E-07	1.65E-09	5.06E-08	1.19E-06	1.94E-08	5.95E-07
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	5.82E-05	1.05E-05	1.94E-04	6.84E-04	1.24E-04	2.28E-03
Zr93	1.79E-08	5.63E-11	0.00E+00	2.11E-07	6.63E-10	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	4.31E-06	1.20E-06	6.15E-06	5.07E-05	1.41E-05	7.24E-05
Mo93	3.59E-08	9.47E-11	1.79E-09	4.22E-07	1.11E-09	2.11E-08
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	2.53E-07	4.10E-09	2.81E-07	2.98E-06	4.82E-08	3.31E-06
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	2.53E-09	3.77E-12	0.00E+00	2.98E-08	4.43E-11	0.00E+00
Ag108m	3.59E-05	9.73E-06	5.13E-05	4.22E-04	1.14E-04	6.03E-04
Ag110m	1.01E-02	4.59E-03	2.53E-02	1.19E-01	5.40E-02	2.98E-01



Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	5.06E-07	1.04E-08	5.62E-07	5.95E-06	1.23E-07	6.61E-06
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	2.28E-07	1.02E-07	5.69E-07	2.68E-06	1.20E-06	6.70E-06
Sb125	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	2.53E-08	3.16E-10	0.00E+00	2.98E-07	3.72E-09	0.00E+00
Cs134	9.91E-03	2.72E-03	1.42E-02	1.17E-01	3.20E-02	1.67E-01
Cs135	1.26E-07	1.14E-09	1.26E-07	1.49E-06	1.34E-08	1.49E-06
Cs137	2.53E-02	3.29E-03	4.22E-02	2.98E-01	3.87E-02	4.96E-01
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	1.77E-05	5.59E-08	1.77E-06	2.08E-04	6.58E-07	2.08E-05
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	8.19E-16	3.55E-15	2.73E-13	9.63E-15	4.17E-14	3.21E-12
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	7.28E-15	6.01E-15	1.46E-11	8.56E-14	7.07E-14	1.71E-10
Th230	5.81E-13	4.43E-13	5.81E-10	6.83E-12	5.21E-12	6.83E-09
Th232	7.58E-19	4.97E-19	0.00E+00	8.92E-18	5.84E-18	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	3.61E-13	2.97E-13	9.01E-10	4.24E-12	3.50E-12	1.06E-08
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	2.46E-13	1.93E-13	4.10E-11	2.89E-12	2.27E-12	4.82E-10
U234	1.24E-08	9.66E-09	2.07E-06	1.46E-07	1.14E-07	2.43E-05
U235	1.36E-10	1.06E-10	0.00E+00	1.60E-09	1.25E-09	0.00E+00
U236	3.90E-09	2.87E-09	6.50E-07	4.59E-08	3.38E-08	7.64E-06
U238	3.37E-09	2.34E-09	0.00E+00	3.96E-08	2.75E-08	0.00E+00
Np237	7.69E-09	6.64E-09	3.84E-06	9.04E-08	7.80E-08	4.52E-05
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	8.85E-05	7.93E-05	8.85E-02	1.04E-03	9.32E-04	1.04E+00
Pu239	4.81E-06	4.03E-06	4.81E-03	5.65E-05	4.74E-05	5.65E-02
Pu240	8.67E-06	7.30E-06	8.67E-03	1.02E-04	8.58E-05	1.02E-01
Pu241	1.70E-03	1.46E-06	2.84E-02	2.00E-02	1.72E-05	3.34E-01

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	3.35E-08	2.67E-08	3.35E-05	3.94E-07	3.14E-07	3.94E-04
Am241	5.12E-06	4.64E-06	5.12E-03	6.02E-05	5.45E-05	6.02E-02
Am242m	3.36E-07	1.48E-08	3.36E-04	3.95E-06	1.74E-07	3.95E-03
Am243	5.26E-07	4.94E-07	5.26E-04	6.18E-06	5.81E-06	6.18E-03
Cm242	1.80E-04	1.79E-04	1.80E-02	2.12E-03	2.11E-03	2.12E-01
Cm243	5.80E-07	5.71E-07	5.80E-04	6.82E-06	6.71E-06	6.82E-03
Cm244	1.11E-04	1.05E-04	5.57E-02	1.31E-03	1.24E-03	6.55E-01
Cm245	1.34E-08	1.21E-08	1.49E-05	1.58E-07	1.42E-07	1.75E-04
Cm246	4.16E-09	3.65E-09	4.62E-06	4.89E-08	4.29E-08	5.43E-05
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>1.48E-01</b>	<b>2.71E-02</b>	<b>3.92E-01</b>	<b>1.73E+00</b>	<b>3.19E-01</b>	<b>4.61E+00</b>

**Table 3 EPR02 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	1.23E-03	1.49E-02
	beta/gamma	4.81E-01	5.84E+00
<b>Classification (GBq/te)</b>			
	alpha	2.94E+00	3.58E+01
	beta/gamma	1.16E+03	1.40E+04
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	1.12E+00	1.36E+01
	A <sub>2</sub> per gram (raw)	2.68E-06	3.26E-05
	A <sub>2</sub> per gram (conditioned)	1.34E-07	1.62E-06
	LSA criteria	LSA-II	LSA-II
<b>Heat output (W)</b>			
		7.87E-02	9.55E-01
<b>Soluble radionuclides (TBq)</b>			
	Sr90	1.25E-04	1.51E-03
	Cs134	1.88E-03	2.28E-02
	Cs137	4.79E-03	5.82E-02
<b>Radiotoxicity (Sv/yr)</b>		6.24E+01	7.58E+02
<b>Lifetime requirement (years)</b>		36	120
<b>Fissile content (g)</b>			
	U233	2.12E-09	2.58E-08
	U235	5.23E-03	6.37E-02
	U238	8.30E-01	1.01E+01
	Pu239	6.42E-03	7.82E-02
	Pu240	3.16E-03	3.86E-02
	Pu241	1.37E-03	1.67E-02
	Pu242	7.02E-04	8.55E-03
Total Fissile	U233+U235+Pu239+Pu241	1.30E-02	1.59E-01
Total U	U233+U235+U238	8.35E-01	1.02E+01
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	1.12E-02	1.36E-01
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	2.91E-09	3.55E-08
Total U	U232+U233+U234+U235+U236+U238	8.40E-01	1.02E+01
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	1.21E-02	1.47E-01
<b>Corrected Dose rates for C1 Container (mSv/hr)</b>			
	3m from C1 Concrete Package	1.52E-01	1.85E+00
	1m from C1 Concrete Package	8.27E-01	1.00E+01
	0m from C1 Concrete Package	2.74E+00	3.33E+01
	3m from unshielded waste - approx value	1.67E+00	2.03E+01

**Table 4 EPR02 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A2 per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Be10	2.21E-08	8.91E-10	3.68E-08	2.68E-07	1.08E-08	4.46E-07
C14	1.21E-03	9.62E-06	4.04E-04	1.47E-02	1.17E-04	4.91E-03
Cl36	1.10E-07	4.84E-09	1.84E-07	1.34E-06	5.88E-08	2.23E-06
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	5.51E-07	2.83E-10	0.00E+00	6.69E-06	3.43E-09	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	4.32E-02	5.78E-03	4.32E-02	5.24E-01	7.02E-02	5.24E-01
Fe55	2.32E-01	2.19E-04	5.79E-03	2.81E+00	2.65E-03	7.03E-02
Co60	1.10E-01	4.59E-02	2.76E-01	1.34E+00	5.57E-01	3.35E+00
Ni59	5.85E-05	6.49E-08	0.00E+00	7.10E-04	7.88E-07	0.00E+00
Ni63	2.54E-02	6.95E-05	8.46E-04	3.08E-01	8.44E-04	1.03E-02
Zn65	4.79E-03	4.54E-04	2.40E-03	5.82E-02	5.51E-03	2.91E-02
Se79	4.41E-07	7.19E-09	2.21E-07	5.36E-06	8.73E-08	2.68E-06
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	1.25E-04	2.26E-05	4.16E-04	1.51E-03	2.74E-04	5.05E-03
Zr93	5.51E-06	1.73E-08	0.00E+00	6.69E-05	2.10E-07	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	1.43E-05	4.00E-06	2.05E-05	1.74E-04	4.86E-05	2.49E-04
Mo93	1.10E-07	2.91E-10	5.51E-09	1.34E-06	3.53E-09	6.69E-08
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	2.01E-06	3.26E-08	2.24E-06	2.45E-05	3.96E-07	2.72E-05
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	4.79E-08	7.14E-11	0.00E+00	5.82E-07	8.67E-10	0.00E+00
Ag108m	1.10E-04	2.99E-05	1.58E-04	1.34E-03	3.63E-04	1.91E-03
Ag110m	5.27E-02	2.39E-02	1.32E-01	6.40E-01	2.90E-01	1.60E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	9.59E-08	1.98E-09	1.07E-07	1.16E-06	2.40E-08	1.29E-06
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	4.32E-08	1.94E-08	1.08E-07	5.24E-07	2.35E-07	1.31E-06
Sb125	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	4.79E-09	5.99E-11	0.00E+00	5.82E-08	7.28E-10	0.00E+00
Cs134	1.88E-03	5.15E-04	2.68E-03	2.28E-02	6.25E-03	3.26E-02
Cs135	1.44E-08	1.30E-10	1.44E-08	1.75E-07	1.58E-09	1.75E-07
Cs137	4.79E-03	6.23E-04	7.99E-03	5.82E-02	7.57E-03	9.70E-02
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	1.92E-05	6.06E-08	1.92E-06	2.33E-04	7.36E-07	2.33E-05
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	2.51E-15	1.09E-14	8.37E-13	3.06E-14	1.32E-13	1.02E-11
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	2.23E-14	1.84E-14	4.46E-11	2.72E-13	2.24E-13	5.43E-10
Th230	1.78E-12	1.36E-12	1.78E-09	2.17E-11	1.65E-11	2.17E-08
Th232	2.32E-18	1.52E-18	0.00E+00	2.83E-17	1.85E-17	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	1.10E-12	9.11E-13	2.76E-09	1.35E-11	1.11E-11	3.36E-08
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	7.54E-13	5.92E-13	1.26E-10	9.19E-12	7.21E-12	1.53E-09
U234	3.81E-08	2.96E-08	6.34E-06	4.64E-07	3.61E-07	7.73E-05
U235	4.18E-10	3.26E-10	0.00E+00	5.09E-09	3.97E-09	0.00E+00
U236	1.20E-08	8.80E-09	1.99E-06	1.46E-07	1.07E-07	2.43E-05
U238	1.03E-08	7.17E-09	0.00E+00	1.26E-07	8.74E-08	0.00E+00
Np237	2.36E-08	2.03E-08	1.18E-05	2.87E-07	2.48E-07	1.44E-04
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	2.71E-04	2.43E-04	2.71E-01	3.30E-03	2.96E-03	3.30E+00
Pu239	1.47E-05	1.24E-05	1.47E-02	1.79E-04	1.51E-04	1.79E-01
Pu240	2.66E-05	2.24E-05	2.66E-02	3.24E-04	2.73E-04	3.24E-01
Pu241	5.22E-03	4.48E-06	8.70E-02	6.36E-02	5.46E-05	1.06E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	1.03E-07	8.19E-08	1.03E-04	1.25E-06	9.98E-07	1.25E-03
Am241	1.57E-05	1.42E-05	1.57E-02	1.91E-04	1.73E-04	1.91E-01
Am242m	1.03E-06	4.53E-08	1.03E-03	1.25E-05	5.52E-07	1.25E-02
Am243	1.61E-06	1.51E-06	1.61E-03	1.96E-05	1.85E-05	1.96E-02
Cm242	5.52E-04	5.49E-04	5.52E-02	6.72E-03	6.69E-03	6.72E-01
Cm243	1.78E-06	1.75E-06	1.78E-03	2.16E-05	2.13E-05	2.16E-02
Cm244	3.42E-04	3.23E-04	1.71E-01	4.16E-03	3.94E-03	2.08E+00
Cm245	4.11E-08	3.69E-08	4.57E-05	5.01E-07	4.50E-07	5.57E-04
Cm246	1.27E-08	1.12E-08	1.42E-05	1.55E-07	1.36E-07	1.73E-04
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>4.83E-01</b>	<b>7.87E-02</b>	<b>1.12E+00</b>	<b>5.86E+00</b>	<b>9.55E-01</b>	<b>1.36E+01</b>



**Table 5 EPR03 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	2.40E-04	2.52E-03
	beta/gamma	9.39E-02	9.85E-01
<b>Classification (GBq/te)</b>			
	alpha	9.58E-01	1.01E+01
	beta/gamma	3.76E+02	3.94E+03
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	2.18E-01	2.29E+00
	A <sub>2</sub> per gram (raw)	8.73E-07	9.16E-06
	A <sub>2</sub> per gram (conditioned)	2.74E-08	2.88E-07
	LSA criteria	LSA-II	LSA-II
<b>Heat output (W)</b>			
		1.54E-02	1.61E-01
<b>Soluble radionuclides (TBq)</b>			
	Sr90	2.43E-05	2.55E-04
	Cs134	3.67E-04	3.84E-03
	Cs137	9.36E-04	9.81E-03
<b>Radiotoxicity (Sv/yr)</b>		1.22E+01	1.28E+02
<b>Lifetime requirement (years)</b>		19	49
<b>Fissile content (g)</b>			
	U233	4.13E-10	4.35E-09
	U235	1.02E-03	1.07E-02
	U238	1.62E-01	1.70E+00
	Pu239	1.25E-03	1.32E-02
	Pu240	6.19E-04	6.50E-03
	Pu241	2.68E-04	2.81E-03
	Pu242	1.37E-04	1.44E-03
Total Fissile	U233+U235+Pu239+Pu241	2.54E-03	2.67E-02
Total U	U233+U235+U238	1.63E-01	1.72E+00
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	2.19E-03	2.30E-02
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	5.69E-10	5.98E-09
Total U	U232+U233+U234+U235+U236+U238	1.64E-01	1.73E+00
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	2.36E-03	2.48E-02
<b>Corrected Dose rates for C4 Container (mSv/hr)*</b>			
	3m from C4 Concrete Package	3.06E-02	3.21E-01
	1m from C4 Concrete Package	1.66E-01	1.74E+00
	0m from C4 Concrete Package	5.52E-01	5.79E+00
	3m from unshielded waste - approx value	3.36E-01	3.52E+00

\* The dose rates for C4 container were conservatively derived using results applicable to the larger C1 container. At this initial stage of evaluation, it was judged unnecessary to perform separate detailed dose-rate calculations for the EPR03 waste stream and its associated C4 container.

**Table 6 EPR03 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Be10	4.30E-09	1.74E-10	7.17E-09	4.51E-08	1.82E-09	7.52E-08
C14	2.37E-04	1.88E-06	7.89E-05	2.48E-03	1.97E-05	8.27E-04
Cl36	2.15E-08	9.45E-10	3.59E-08	2.26E-07	9.91E-09	3.76E-07
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	1.08E-07	5.52E-11	0.00E+00	1.13E-06	5.79E-10	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	8.42E-03	1.13E-03	8.42E-03	8.83E-02	1.18E-02	8.83E-02
Fe55	4.52E-02	4.27E-05	1.13E-03	4.74E-01	4.47E-04	1.18E-02
Co60	2.15E-02	8.95E-03	5.38E-02	2.26E-01	9.39E-02	5.64E-01
Ni59	1.14E-05	1.27E-08	0.00E+00	1.20E-04	1.33E-07	0.00E+00
Ni63	4.95E-03	1.36E-05	1.65E-04	5.19E-02	1.42E-04	1.73E-03
Zn65	9.36E-04	8.86E-05	4.68E-04	9.81E-03	9.29E-04	4.91E-03
Se79	8.61E-08	1.40E-09	4.30E-08	9.03E-07	1.47E-08	4.51E-07
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	2.43E-05	4.40E-06	8.11E-05	2.55E-04	4.62E-05	8.50E-04
Zr93	1.08E-06	3.38E-09	0.00E+00	1.13E-05	3.54E-08	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	2.80E-06	7.80E-07	4.00E-06	2.93E-05	8.18E-06	4.19E-05
Mo93	2.15E-08	5.68E-11	1.08E-09	2.26E-07	5.96E-10	1.13E-08
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	3.93E-07	6.37E-09	4.37E-07	4.12E-06	6.68E-08	4.58E-06
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	9.36E-09	1.39E-11	0.00E+00	9.81E-08	1.46E-10	0.00E+00
Ag108m	2.15E-05	5.83E-06	3.07E-05	2.26E-04	6.12E-05	3.22E-04
Ag110m	1.03E-02	4.66E-03	2.57E-02	1.08E-01	4.89E-02	2.70E-01

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	1.87E-08	3.85E-10	2.08E-08	1.96E-07	4.04E-09	2.18E-07
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	8.42E-09	3.78E-09	2.11E-08	8.83E-08	3.96E-08	2.21E-07
Sb125	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	9.36E-10	1.17E-11	0.00E+00	9.81E-09	1.23E-10	0.00E+00
Cs134	3.67E-04	1.00E-04	5.24E-04	3.84E-03	1.05E-03	5.49E-03
Cs135	2.81E-09	2.53E-11	2.81E-09	2.94E-08	2.65E-10	2.94E-08
Cs137	9.36E-04	1.22E-04	1.56E-03	9.81E-03	1.28E-03	1.64E-02
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	3.74E-06	1.18E-08	3.74E-07	3.92E-05	1.24E-07	3.92E-06
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	4.91E-16	2.12E-15	1.64E-13	5.16E-15	2.23E-14	1.72E-12
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	4.36E-15	3.60E-15	8.72E-12	4.58E-14	3.79E-14	9.16E-11
Th230	3.48E-13	2.66E-13	3.48E-10	3.66E-12	2.79E-12	3.66E-09
Th232	4.54E-19	2.98E-19	0.00E+00	4.77E-18	3.13E-18	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	2.16E-13	1.78E-13	5.40E-10	2.27E-12	1.87E-12	5.67E-09
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	1.47E-13	1.16E-13	2.46E-11	1.55E-12	1.22E-12	2.58E-10
U234	7.44E-09	5.79E-09	1.24E-06	7.82E-08	6.08E-08	1.30E-05
U235	8.17E-11	6.37E-11	0.00E+00	8.59E-10	6.69E-10	0.00E+00
U236	2.34E-09	1.72E-09	3.89E-07	2.46E-08	1.81E-08	4.09E-06
U238	2.02E-09	1.40E-09	0.00E+00	2.12E-08	1.47E-08	0.00E+00
Np237	4.60E-09	3.97E-09	2.30E-06	4.84E-08	4.18E-08	2.42E-05
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	5.30E-05	4.75E-05	5.30E-02	5.57E-04	4.99E-04	5.57E-01
Pu239	2.88E-06	2.42E-06	2.88E-03	3.03E-05	2.54E-05	3.03E-02
Pu240	5.19E-06	4.37E-06	5.19E-03	5.46E-05	4.60E-05	5.46E-02
Pu241	1.02E-03	8.76E-07	1.70E-02	1.07E-02	9.21E-06	1.79E-01

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	2.01E-08	1.60E-08	2.01E-05	2.11E-07	1.68E-07	2.11E-04
Am241	3.07E-06	2.78E-06	3.07E-03	3.23E-05	2.92E-05	3.23E-02
Am242m	2.01E-07	8.85E-09	2.01E-04	2.11E-06	9.31E-08	2.11E-03
Am243	3.15E-07	2.96E-07	3.15E-04	3.31E-06	3.11E-06	3.31E-03
Cm242	1.08E-04	1.07E-04	1.08E-02	1.13E-03	1.13E-03	1.13E-01
Cm243	3.47E-07	3.42E-07	3.47E-04	3.65E-06	3.60E-06	3.65E-03
Cm244	6.68E-05	6.32E-05	3.34E-02	7.02E-04	6.64E-04	3.51E-01
Cm245	8.04E-09	7.22E-09	8.93E-06	8.45E-08	7.59E-08	9.39E-05
Cm246	2.49E-09	2.19E-09	2.77E-06	2.62E-08	2.30E-08	2.91E-05
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>9.42E-02</b>	<b>1.54E-02</b>	<b>2.18E-01</b>	<b>9.87E-01</b>	<b>1.61E-01</b>	<b>2.29E+00</b>

**Table 7 EPR04 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	5.87E-05	4.04E-04
	beta/gamma	2.07E-02	1.43E-01
<b>Classification (GBq/te)</b>			
	alpha	1.76E-01	1.21E+00
	beta/gamma	6.21E+01	4.28E+02
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	5.00E-02	3.44E-01
	A <sub>2</sub> per gram (raw)	1.50E-07	1.03E-06
	A <sub>2</sub> per gram (conditioned)	5.74E-09	3.95E-08
	LSA criteria	LSA-II	LSA-II
<b>Heat output (W)</b>			
		3.13E-03	2.16E-02
<b>Soluble radionuclides (TBq)</b>			
	Sr90	1.37E-04	9.43E-04
	Cs134	1.35E-04	9.30E-04
	Cs137	2.70E-04	1.86E-03
<b>Radiotoxicity (Sv/yr)</b>		3.09E+00	2.13E+01
<b>Lifetime requirement (years)</b>		8	28
<b>Fissile content (g)</b>			
	U233	1.01E-10	6.98E-10
	U235	2.51E-04	1.73E-03
	U238	3.97E-02	2.74E-01
	Pu239	3.08E-04	2.12E-03
	Pu240	1.52E-04	1.04E-03
	Pu241	6.56E-05	4.52E-04
	Pu242	3.36E-05	2.32E-04
Total Fissile	U233+U235+Pu239+Pu241	6.24E-04	4.30E-03
Total U	U233+U235+U238	4.00E-02	2.76E-01
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	5.36E-04	3.69E-03
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	1.39E-10	9.60E-10
Total U	U232+U233+U234+U235+U236+U238	4.02E-02	2.77E-01
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	5.79E-04	3.99E-03
<b>Corrected Dose rates for C1 Container (mSv/hr)</b>			
	3m from C1 Concrete Package	5.95E-03	4.09E-02
	1m from C1 Concrete Package	3.24E-02	2.23E-01
	0m from C1 Concrete Package	1.08E-01	7.44E-01
	3m from unshielded waste - approx value	6.32E-02	4.35E-01

**Table 8 EPR04 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Be10	1.05E-09	4.26E-11	1.76E-09	7.26E-09	2.93E-10	1.21E-08
C14	5.80E-05	4.60E-07	1.93E-05	3.99E-04	3.17E-06	1.33E-04
Cl36	5.27E-09	2.31E-10	8.78E-09	3.63E-08	1.59E-09	6.05E-08
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	2.64E-08	1.35E-11	0.00E+00	1.81E-07	9.31E-11	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	5.41E-04	7.24E-05	5.41E-04	3.72E-03	4.99E-04	3.72E-03
Fe55	1.11E-02	1.04E-05	2.77E-04	7.62E-02	7.19E-05	1.91E-03
Co60	5.27E-03	2.19E-03	1.32E-02	3.63E-02	1.51E-02	9.07E-02
Ni59	2.79E-06	3.10E-09	0.00E+00	1.92E-05	2.13E-08	0.00E+00
Ni63	1.21E-03	3.32E-06	4.04E-05	8.35E-03	2.29E-05	2.78E-04
Zn65	1.35E-04	1.28E-05	6.76E-05	9.30E-04	8.81E-05	4.65E-04
Se79	1.08E-09	1.76E-11	5.41E-10	7.44E-09	1.21E-10	3.72E-09
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	1.37E-04	2.48E-05	4.57E-04	9.43E-04	1.71E-04	3.14E-03
Zr93	2.64E-07	8.27E-10	0.00E+00	1.81E-06	5.70E-09	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	6.85E-07	1.91E-07	9.79E-07	4.72E-06	1.32E-06	6.74E-06
Mo93	5.27E-09	1.39E-11	2.64E-10	3.63E-08	9.58E-11	1.81E-09
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	1.14E-07	1.84E-09	1.26E-07	7.82E-07	1.27E-08	8.68E-07
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	2.70E-09	4.03E-12	0.00E+00	1.86E-08	2.77E-11	0.00E+00
Ag108m	5.27E-06	1.43E-06	7.53E-06	3.63E-05	9.83E-06	5.18E-05
Ag110m	1.49E-03	6.73E-04	3.72E-03	1.02E-02	4.64E-03	2.56E-02

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	5.41E-09	1.11E-10	6.01E-09	3.72E-08	7.67E-10	4.14E-08
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	2.43E-09	1.09E-09	6.08E-09	1.67E-08	7.52E-09	4.19E-08
Sb125	1.35E-04	1.15E-05	1.35E-04	9.30E-04	7.89E-05	9.30E-04
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	2.70E-10	3.38E-12	0.00E+00	1.86E-09	2.33E-11	0.00E+00
Cs134	1.35E-04	3.70E-05	1.93E-04	9.30E-04	2.55E-04	1.33E-03
Cs135	8.11E-10	7.31E-12	8.11E-10	5.58E-09	5.04E-11	5.58E-09
Cs137	2.70E-04	3.51E-05	4.50E-04	1.86E-03	2.42E-04	3.10E-03
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	1.08E-06	3.42E-09	1.08E-07	7.44E-06	2.35E-08	7.44E-07
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00



Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	1.20E-16	5.21E-16	4.01E-14	8.28E-16	3.59E-15	2.76E-13
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	1.07E-15	8.83E-16	2.14E-12	7.36E-15	6.08E-15	1.47E-11
Th230	8.53E-14	6.51E-14	8.53E-11	5.88E-13	4.48E-13	5.88E-10
Th232	1.11E-19	7.29E-20	0.00E+00	7.67E-19	5.02E-19	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	5.29E-14	4.37E-14	1.32E-10	3.65E-13	3.01E-13	9.11E-10
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	3.61E-14	2.84E-14	6.02E-12	2.49E-13	1.95E-13	4.15E-11
U234	1.82E-09	1.42E-09	3.04E-07	1.26E-08	9.77E-09	2.09E-06
U235	2.00E-11	1.56E-11	0.00E+00	1.38E-10	1.08E-10	0.00E+00
U236	5.73E-10	4.21E-10	9.54E-08	3.94E-09	2.90E-09	6.57E-07
U238	4.94E-10	3.44E-10	0.00E+00	3.40E-09	2.37E-09	0.00E+00
Np237	1.13E-09	9.74E-10	5.64E-07	7.77E-09	6.71E-09	3.89E-06
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	1.30E-05	1.16E-05	1.30E-02	8.95E-05	8.02E-05	8.95E-02
Pu239	7.06E-07	5.92E-07	7.06E-04	4.86E-06	4.08E-06	4.86E-03
Pu240	1.27E-06	1.07E-06	1.27E-03	8.77E-06	7.38E-06	8.77E-03
Pu241	2.50E-04	2.15E-07	4.17E-03	1.72E-03	1.48E-06	2.87E-02

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	4.92E-09	3.93E-09	4.92E-06	3.39E-08	2.70E-08	3.39E-05
Am241	7.52E-07	6.81E-07	7.52E-04	5.18E-06	4.69E-06	5.18E-03
Am242m	4.93E-08	2.17E-09	4.93E-05	3.40E-07	1.49E-08	3.40E-04
Am243	7.72E-08	7.26E-08	7.72E-05	5.32E-07	5.00E-07	5.32E-04
Cm242	2.64E-05	2.63E-05	2.64E-03	1.82E-04	1.81E-04	1.82E-02
Cm243	8.51E-08	8.38E-08	8.51E-05	5.86E-07	5.77E-07	5.86E-04
Cm244	1.64E-05	1.55E-05	8.18E-03	1.13E-04	1.07E-04	5.64E-02
Cm245	1.97E-09	1.77E-09	2.19E-06	1.36E-08	1.22E-08	1.51E-05
Cm246	6.11E-10	5.36E-10	6.79E-07	4.21E-09	3.69E-09	4.67E-06
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>2.08E-02</b>	<b>3.13E-03</b>	<b>5.00E-02</b>	<b>1.43E-01</b>	<b>2.16E-02</b>	<b>3.44E-01</b>

**Table 9 EPR05 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	1.19E-05	1.20E-04
	beta/gamma	4.62E-03	4.29E-02
<b>Classification (GBq/te)</b>			
	alpha	4.77E-02	4.81E-01
	beta/gamma	1.85E+01	1.72E+02
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	1.02E-02	1.03E-01
	A <sub>2</sub> per gram (raw)	4.07E-08	4.10E-07
	A <sub>2</sub> per gram (conditioned)	1.07E-09	1.08E-08
	LSA criteria	LSA-II	LSA-II
<b>Heat output (W)</b>			
		6.39E-04	6.43E-03
<b>Soluble radionuclides (TBq)</b>			
	Sr90	2.79E-05	2.81E-04
	Cs134	2.75E-05	2.78E-04
	Cs137	5.51E-05	5.55E-04
<b>Radiotoxicity (Sv/yr)</b>		6.31E-01	6.35E+00
<b>Lifetime requirement (years)</b>		0	15
<b>Fissile content (g)</b>			
	U233	2.06E-11	2.08E-10
	U235	5.09E-05	5.13E-04
	U238	8.07E-03	8.15E-02
	Pu239	6.24E-05	6.30E-04
	Pu240	3.08E-05	3.11E-04
	Pu241	1.33E-05	1.34E-04
	Pu242	6.83E-06	6.89E-05
Total Fissile	U233+U235+Pu239+Pu241	1.27E-04	1.28E-03
Total U	U233+U235+U238	8.12E-03	8.20E-02
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	1.09E-04	1.10E-03
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	2.83E-11	2.86E-10
Total U	U232+U233+U234+U235+U236+U238	8.17E-03	8.25E-02
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	1.18E-04	1.19E-03
<b>Corrected Dose rates for C1 Container (mSv/hr)</b>			
	3m from C1 Concrete Package	1.14E-03	1.14E-02
	1m from C1 Concrete Package	6.19E-03	6.24E-02
	0m from C1 Concrete Package	2.06E-02	2.08E-01
	3m from unshielded waste - approx value	1.20E-02	1.21E-01

**Table 10 EPR05 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	4.00E-04	3.64E-07	1.00E-05	4.00E-04	3.64E-07	1.00E-05
Be10	2.15E-10	8.68E-12	3.58E-10	2.16E-09	8.75E-11	3.61E-09
C14	1.18E-05	9.37E-08	3.94E-06	1.19E-04	9.44E-07	3.97E-05
Cl36	1.07E-09	4.72E-11	1.79E-09	1.08E-08	4.75E-10	1.80E-08
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	5.37E-09	2.76E-12	0.00E+00	5.41E-08	2.78E-11	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	1.10E-04	1.48E-05	1.10E-04	1.11E-03	1.49E-04	1.11E-03
Fe55	2.26E-03	2.13E-06	5.64E-05	2.27E-02	2.15E-05	5.68E-04
Co60	1.07E-03	4.47E-04	2.69E-03	1.08E-02	4.50E-03	2.71E-02
Ni59	5.69E-07	6.32E-10	0.00E+00	5.74E-06	6.37E-09	0.00E+00
Ni63	2.47E-04	6.77E-07	8.24E-06	2.49E-03	6.82E-06	8.30E-05
Zn65	2.75E-05	2.61E-06	1.38E-05	2.78E-04	2.63E-05	1.39E-04
Se79	2.20E-10	3.59E-12	1.10E-10	2.22E-09	3.62E-11	1.11E-09
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	2.79E-05	5.06E-06	9.31E-05	2.81E-04	5.09E-05	9.38E-04
Zr93	5.37E-08	1.69E-10	0.00E+00	5.41E-07	1.70E-09	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	1.40E-07	3.90E-08	2.00E-07	1.41E-06	3.93E-07	2.01E-06
Mo93	1.07E-09	2.84E-12	5.37E-11	1.08E-08	2.86E-11	5.41E-10
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	2.31E-08	3.75E-10	2.57E-08	2.33E-07	3.78E-09	2.59E-07
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	5.51E-10	8.21E-13	0.00E+00	5.55E-09	8.27E-12	0.00E+00
Ag108m	1.07E-06	2.91E-07	1.53E-06	1.08E-05	2.93E-06	1.55E-05
Ag110m	3.03E-04	1.37E-04	7.58E-04	3.05E-03	1.38E-03	7.63E-03

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	1.10E-09	2.27E-11	1.22E-09	1.11E-08	2.29E-10	1.23E-08
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	4.96E-10	2.23E-10	1.24E-09	5.00E-09	2.24E-09	1.25E-08
Sb125	2.75E-05	2.34E-06	2.75E-05	2.78E-04	2.35E-05	2.78E-04
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	5.51E-11	6.89E-13	0.00E+00	5.55E-10	6.94E-12	0.00E+00
Cs134	2.75E-05	7.55E-06	3.94E-05	2.78E-04	7.61E-05	3.97E-04
Cs135	1.65E-10	1.49E-12	1.65E-10	1.67E-09	1.50E-11	1.67E-09
Cs137	5.51E-05	7.16E-06	9.18E-05	5.55E-04	7.22E-05	9.25E-04
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	2.20E-07	6.96E-10	2.20E-08	2.22E-06	7.02E-09	2.22E-07
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	2.44E-17	1.06E-16	8.14E-15	2.46E-16	1.07E-15	8.22E-14
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	2.17E-16	1.79E-16	4.34E-13	2.19E-15	1.81E-15	4.38E-12
Th230	1.73E-14	1.32E-14	1.73E-11	1.75E-13	1.33E-13	1.75E-10
Th232	2.26E-20	1.48E-20	0.00E+00	2.28E-19	1.49E-19	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	1.07E-14	8.86E-15	2.69E-11	1.08E-13	8.95E-14	2.71E-10
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	7.33E-15	5.76E-15	1.22E-12	7.40E-14	5.81E-14	1.23E-11
U234	3.70E-10	2.88E-10	6.17E-08	3.74E-09	2.91E-09	6.23E-07
U235	4.07E-12	3.17E-12	0.00E+00	4.11E-11	3.20E-11	0.00E+00
U236	1.16E-10	8.56E-11	1.94E-08	1.17E-09	8.64E-10	1.96E-07
U238	1.00E-10	6.98E-11	0.00E+00	1.01E-09	7.04E-10	0.00E+00
Np237	2.29E-10	1.98E-10	1.15E-07	2.31E-09	2.00E-09	1.16E-06
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	2.64E-06	2.36E-06	2.64E-03	2.66E-05	2.39E-05	2.66E-02
Pu239	1.43E-07	1.20E-07	1.43E-04	1.45E-06	1.21E-06	1.45E-03
Pu240	2.58E-07	2.18E-07	2.58E-04	2.61E-06	2.20E-06	2.61E-03
Pu241	5.08E-05	4.36E-08	8.46E-04	5.12E-04	4.40E-07	8.54E-03

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	9.99E-10	7.97E-10	9.99E-07	1.01E-08	8.04E-09	1.01E-05
Am241	1.53E-07	1.38E-07	1.53E-04	1.54E-06	1.39E-06	1.54E-03
Am242m	1.00E-08	4.41E-10	1.00E-05	1.01E-07	4.45E-09	1.01E-04
Am243	1.57E-08	1.47E-08	1.57E-05	1.58E-07	1.49E-07	1.58E-04
Cm242	5.37E-06	5.34E-06	5.37E-04	5.42E-05	5.39E-05	5.42E-03
Cm243	1.73E-08	1.70E-08	1.73E-05	1.74E-07	1.72E-07	1.74E-04
Cm244	3.32E-06	3.14E-06	1.66E-03	3.35E-05	3.17E-05	1.68E-02
Cm245	4.00E-10	3.59E-10	4.45E-07	4.04E-09	3.63E-09	4.49E-06
Cm246	1.24E-10	1.09E-10	1.38E-07	1.25E-09	1.10E-09	1.39E-06
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>4.63E-03</b>	<b>6.39E-04</b>	<b>1.02E-02</b>	<b>4.31E-02</b>	<b>6.43E-03</b>	<b>1.03E-01</b>

**Table 11 EPR11 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	1.90E-04	2.23E-03
	beta/gamma	7.02E-02	8.21E-01
<b>Classification (GBq/te)</b>			
	alpha	1.00E+00	1.18E+01
	beta/gamma	3.70E+02	4.32E+03
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	1.86E-01	2.19E+00
	A <sub>2</sub> per gram (raw)	9.81E-07	1.15E-05
	A <sub>2</sub> per gram (conditioned)	2.40E-07	2.83E-06
	LSA criteria	N/A	N/A
<b>Heat output (W)</b>			
		1.29E-02	1.52E-01
<b>Soluble radionuclides (TBq)</b>			
	Sr90	2.76E-05	3.25E-04
	Cs134	4.71E-03	5.54E-02
	Cs137	1.20E-02	1.41E-01
<b>Radiotoxicity (Sv/yr)</b>		1.21E+02	1.42E+03
<b>Lifetime requirement (years)</b>		151	269
<b>Fissile content (g)</b>			
	U233	3.28E-10	3.86E-09
	U235	8.11E-04	9.53E-03
	U238	1.29E-01	1.51E+00
	Pu239	9.95E-04	1.17E-02
	Pu240	4.91E-04	5.77E-03
	Pu241	2.12E-04	2.50E-03
	Pu242	1.09E-04	1.28E-03
Total Fissile	U233+U235+Pu239+Pu241	2.02E-03	2.37E-02
Total U	U233+U235+U238	1.29E-01	1.52E+00
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	1.73E-03	2.04E-02
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	4.51E-10	5.30E-09
Total U	U232+U233+U234+U235+U236+U238	1.30E-01	1.53E+00
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	1.87E-03	2.20E-02
<b>Dose rates (mSv/hr)</b>			
	3m from 500-litre drum	3.41E-01	4.01E+00
	1m from SWTC-070	3.94E-01	4.63E+00
	0m from SWTC-070	7.63E-01	8.98E+00
	1m from SWTC-285	7.03E-05	8.27E-04
	0m from SWTC-285	9.91E-05	1.17E-03



**Table 12 EPR11 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	4.75E-04	4.32E-07	1.19E-05	4.75E-04	4.32E-07	1.19E-05
Be10	3.41E-09	1.38E-10	5.68E-09	4.01E-08	1.62E-09	6.68E-08
C14	3.07E-04	2.43E-06	1.02E-04	3.61E-03	2.86E-05	1.20E-03
Cl36	1.70E-07	7.48E-09	2.84E-07	2.01E-06	8.80E-08	3.34E-06
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	8.52E-08	4.37E-11	0.00E+00	1.00E-06	5.14E-10	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	3.73E-03	5.00E-04	3.73E-03	4.39E-02	5.89E-03	4.39E-02
Fe55	2.39E-03	2.25E-06	5.97E-05	2.81E-02	2.65E-05	7.02E-04
Co60	1.70E-02	7.09E-03	4.26E-02	2.01E-01	8.34E-02	5.01E-01
Ni59	1.88E-05	2.08E-08	0.00E+00	2.21E-04	2.45E-07	0.00E+00
Ni63	2.39E-02	6.54E-05	7.96E-04	2.81E-01	7.69E-04	9.36E-03
Zn65	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Se79	4.81E-08	7.83E-10	2.40E-08	5.65E-07	9.22E-09	2.83E-07
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	2.76E-05	5.00E-06	9.21E-05	3.25E-04	5.88E-05	1.08E-03
Zr93	8.52E-09	2.68E-11	0.00E+00	1.00E-07	3.15E-10	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	2.05E-06	5.71E-07	2.92E-06	2.41E-05	6.71E-06	3.44E-05
Mo93	1.70E-08	4.50E-11	8.52E-10	2.01E-07	5.29E-10	1.00E-08
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	1.20E-07	1.95E-09	1.33E-07	1.41E-06	2.29E-08	1.57E-06
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	1.20E-09	1.79E-12	0.00E+00	1.41E-08	2.11E-11	0.00E+00
Ag108m	1.70E-05	4.62E-06	2.44E-05	2.01E-04	5.43E-05	2.86E-04
Ag110m	4.82E-03	2.18E-03	1.20E-02	5.67E-02	2.57E-02	1.42E-01

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	2.40E-07	4.95E-09	2.67E-07	2.83E-06	5.82E-08	3.14E-06
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	1.08E-07	4.85E-08	2.70E-07	1.27E-06	5.71E-07	3.18E-06
Sb125	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	1.20E-08	1.50E-10	0.00E+00	1.41E-07	1.77E-09	0.00E+00
Cs134	4.71E-03	1.29E-03	6.73E-03	5.54E-02	1.52E-02	7.91E-02
Cs135	6.01E-08	5.42E-10	6.01E-08	7.07E-07	6.37E-09	7.07E-07
Cs137	1.20E-02	1.56E-03	2.00E-02	1.41E-01	1.84E-02	2.36E-01
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	8.41E-06	2.66E-08	8.41E-07	9.89E-05	3.13E-07	9.89E-06
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	3.89E-16	1.69E-15	1.30E-13	4.57E-15	1.98E-14	1.52E-12
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	3.46E-15	2.86E-15	6.92E-12	4.06E-14	3.36E-14	8.13E-11
Th230	2.76E-13	2.11E-13	2.76E-10	3.24E-12	2.48E-12	3.24E-09
Th232	3.60E-19	2.36E-19	0.00E+00	4.23E-18	2.77E-18	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	1.71E-13	1.41E-13	4.28E-10	2.01E-12	1.66E-12	5.03E-09
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	1.17E-13	9.18E-14	1.95E-11	1.37E-12	1.08E-12	2.29E-10
U234	5.90E-09	4.59E-09	9.83E-07	6.93E-08	5.40E-08	1.16E-05
U235	6.48E-11	5.05E-11	0.00E+00	7.62E-10	5.94E-10	0.00E+00
U236	1.85E-09	1.36E-09	3.09E-07	2.18E-08	1.60E-08	3.63E-06
U238	1.60E-09	1.11E-09	0.00E+00	1.88E-08	1.31E-08	0.00E+00
Np237	3.65E-09	3.15E-09	1.83E-06	4.29E-08	3.71E-08	2.15E-05
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	4.20E-05	3.77E-05	4.20E-02	4.94E-04	4.43E-04	4.94E-01
Pu239	2.28E-06	1.92E-06	2.28E-03	2.68E-05	2.25E-05	2.68E-02
Pu240	4.12E-06	3.47E-06	4.12E-03	4.84E-05	4.08E-05	4.84E-02
Pu241	8.09E-04	6.95E-07	1.35E-02	9.51E-03	8.17E-06	1.58E-01

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	1.59E-08	1.27E-08	1.59E-05	1.87E-07	1.49E-07	1.87E-04
Am241	2.43E-06	2.20E-06	2.43E-03	2.86E-05	2.59E-05	2.86E-02
Am242m	1.60E-07	7.02E-09	1.60E-04	1.88E-06	8.25E-08	1.88E-03
Am243	2.50E-07	2.35E-07	2.50E-04	2.94E-06	2.76E-06	2.94E-03
Cm242	8.56E-05	8.51E-05	8.56E-03	1.01E-03	1.00E-03	1.01E-01
Cm243	2.75E-07	2.71E-07	2.75E-04	3.24E-06	3.19E-06	3.24E-03
Cm244	5.30E-05	5.01E-05	2.65E-02	6.23E-04	5.89E-04	3.11E-01
Cm245	6.38E-09	5.73E-09	7.09E-06	7.50E-08	6.73E-08	8.33E-05
Cm246	1.98E-09	1.74E-09	2.20E-06	2.32E-08	2.04E-08	2.58E-05
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>7.04E-02</b>	<b>1.29E-02</b>	<b>1.86E-01</b>	<b>8.23E-01</b>	<b>1.52E-01</b>	<b>2.19E+00</b>

**Table 13 EPR12 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	1.23E-03	1.49E-02
	beta/gamma	4.81E-01	5.84E+00
<b>Classification (GBq/te)</b>			
	alpha	2.94E+00	3.58E+01
	beta/gamma	1.16E+03	1.40E+04
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	1.12E+00	1.36E+01
	A <sub>2</sub> per gram (raw)	2.68E-06	3.26E-05
	A <sub>2</sub> per gram (conditioned)	1.08E-06	1.31E-05
	LSA criteria	N/A	N/A
<b>Heat output (W)</b>			
		7.87E-02	9.55E-01
<b>Soluble radionuclides (TBq)</b>			
	Sr90	1.25E-04	1.51E-03
	Cs134	1.88E-03	2.28E-02
	Cs137	4.79E-03	5.82E-02
<b>Radiotoxicity (Sv/yr)</b>		5.79E+02	7.03E+03
<b>Lifetime requirement (years)</b>		115	239
<b>Fissile content (g)</b>			
	U233	2.12E-09	2.58E-08
	U235	5.23E-03	6.37E-02
	U238	8.30E-01	1.01E+01
	Pu239	6.42E-03	7.82E-02
	Pu240	3.16E-03	3.86E-02
	Pu241	1.37E-03	1.67E-02
	Pu242	7.02E-04	8.55E-03
Total Fissile	U233+U235+Pu239+Pu241	1.30E-02	1.59E-01
Total U	U233+U235+U238	8.35E-01	1.02E+01
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	1.12E-02	1.36E-01
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	2.91E-09	3.55E-08
Total U	U232+U233+U234+U235+U236+U238	8.40E-01	1.02E+01
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	1.21E-02	1.47E-01
<b>Dose rates (mSv/hr)</b>			
	3m from 500-litre drum	1.56E+00	1.89E+01
	1m from SWTC-070	1.95E+00	2.36E+01
	0m from SWTC-070	3.71E+00	4.50E+01
	1m from SWTC-285	3.60E-04	4.37E-03
	0m from SWTC-285	5.10E-04	6.19E-03

**Table 14 EPR12 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Be10	2.21E-08	8.91E-10	3.68E-08	2.68E-07	1.08E-08	4.46E-07
C14	1.21E-03	9.62E-06	4.04E-04	1.47E-02	1.17E-04	4.91E-03
Cl36	1.10E-07	4.84E-09	1.84E-07	1.34E-06	5.88E-08	2.23E-06
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	5.51E-07	2.83E-10	0.00E+00	6.69E-06	3.43E-09	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	4.32E-02	5.78E-03	4.32E-02	5.24E-01	7.02E-02	5.24E-01
Fe55	2.32E-01	2.19E-04	5.79E-03	2.81E+00	2.65E-03	7.03E-02
Co60	1.10E-01	4.59E-02	2.76E-01	1.34E+00	5.57E-01	3.35E+00
Ni59	5.85E-05	6.49E-08	0.00E+00	7.10E-04	7.88E-07	0.00E+00
Ni63	2.54E-02	6.95E-05	8.46E-04	3.08E-01	8.44E-04	1.03E-02
Zn65	4.79E-03	4.54E-04	2.40E-03	5.82E-02	5.51E-03	2.91E-02
Se79	4.41E-07	7.19E-09	2.21E-07	5.36E-06	8.73E-08	2.68E-06
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	1.25E-04	2.26E-05	4.16E-04	1.51E-03	2.74E-04	5.05E-03
Zr93	5.51E-06	1.73E-08	0.00E+00	6.69E-05	2.10E-07	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	1.43E-05	4.00E-06	2.05E-05	1.74E-04	4.86E-05	2.49E-04
Mo93	1.10E-07	2.91E-10	5.51E-09	1.34E-06	3.53E-09	6.69E-08
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	2.01E-06	3.26E-08	2.24E-06	2.45E-05	3.96E-07	2.72E-05
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	4.79E-08	7.14E-11	0.00E+00	5.82E-07	8.67E-10	0.00E+00
Ag108m	1.10E-04	2.99E-05	1.58E-04	1.34E-03	3.63E-04	1.91E-03
Ag110m	5.27E-02	2.39E-02	1.32E-01	6.40E-01	2.90E-01	1.60E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	9.59E-08	1.98E-09	1.07E-07	1.16E-06	2.40E-08	1.29E-06
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	4.32E-08	1.94E-08	1.08E-07	5.24E-07	2.35E-07	1.31E-06
Sb125	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	4.79E-09	5.99E-11	0.00E+00	5.82E-08	7.28E-10	0.00E+00
Cs134	1.88E-03	5.15E-04	2.68E-03	2.28E-02	6.25E-03	3.26E-02
Cs135	1.44E-08	1.30E-10	1.44E-08	1.75E-07	1.58E-09	1.75E-07
Cs137	4.79E-03	6.23E-04	7.99E-03	5.82E-02	7.57E-03	9.70E-02
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	1.92E-05	6.06E-08	1.92E-06	2.33E-04	7.36E-07	2.33E-05
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	2.51E-15	1.09E-14	8.37E-13	3.06E-14	1.32E-13	1.02E-11
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	2.23E-14	1.84E-14	4.46E-11	2.72E-13	2.24E-13	5.43E-10
Th230	1.78E-12	1.36E-12	1.78E-09	2.17E-11	1.65E-11	2.17E-08
Th232	2.32E-18	1.52E-18	0.00E+00	2.83E-17	1.85E-17	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	1.10E-12	9.11E-13	2.76E-09	1.35E-11	1.11E-11	3.36E-08
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	7.54E-13	5.92E-13	1.26E-10	9.19E-12	7.21E-12	1.53E-09
U234	3.81E-08	2.96E-08	6.34E-06	4.64E-07	3.61E-07	7.73E-05
U235	4.18E-10	3.26E-10	0.00E+00	5.09E-09	3.97E-09	0.00E+00
U236	1.20E-08	8.80E-09	1.99E-06	1.46E-07	1.07E-07	2.43E-05
U238	1.03E-08	7.17E-09	0.00E+00	1.26E-07	8.74E-08	0.00E+00
Np237	2.36E-08	2.03E-08	1.18E-05	2.87E-07	2.48E-07	1.44E-04
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	2.71E-04	2.43E-04	2.71E-01	3.30E-03	2.96E-03	3.30E+00
Pu239	1.47E-05	1.24E-05	1.47E-02	1.79E-04	1.51E-04	1.79E-01
Pu240	2.66E-05	2.24E-05	2.66E-02	3.24E-04	2.73E-04	3.24E-01
Pu241	5.22E-03	4.48E-06	8.70E-02	6.36E-02	5.46E-05	1.06E+00



Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	1.03E-07	8.19E-08	1.03E-04	1.25E-06	9.98E-07	1.25E-03
Am241	1.57E-05	1.42E-05	1.57E-02	1.91E-04	1.73E-04	1.91E-01
Am242m	1.03E-06	4.53E-08	1.03E-03	1.25E-05	5.52E-07	1.25E-02
Am243	1.61E-06	1.51E-06	1.61E-03	1.96E-05	1.85E-05	1.96E-02
Cm242	5.52E-04	5.49E-04	5.52E-02	6.72E-03	6.69E-03	6.72E-01
Cm243	1.78E-06	1.75E-06	1.78E-03	2.16E-05	2.13E-05	2.16E-02
Cm244	3.42E-04	3.23E-04	1.71E-01	4.16E-03	3.94E-03	2.08E+00
Cm245	4.11E-08	3.69E-08	4.57E-05	5.01E-07	4.50E-07	5.57E-04
Cm246	1.27E-08	1.12E-08	1.42E-05	1.55E-07	1.36E-07	1.73E-04
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>4.83E-01</b>	<b>7.87E-02</b>	<b>1.12E+00</b>	<b>5.86E+00</b>	<b>9.55E-01</b>	<b>1.36E+01</b>



**Table 16 EPR13 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Be10	4.30E-09	1.74E-10	7.17E-09	4.51E-08	1.82E-09	7.52E-08
C14	2.37E-04	1.88E-06	7.89E-05	2.48E-03	1.97E-05	8.27E-04
Cl36	2.15E-08	9.45E-10	3.59E-08	2.26E-07	9.91E-09	3.76E-07
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	1.08E-07	5.52E-11	0.00E+00	1.13E-06	5.79E-10	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	8.42E-03	1.13E-03	8.42E-03	8.83E-02	1.18E-02	8.83E-02
Fe55	4.52E-02	4.27E-05	1.13E-03	4.74E-01	4.47E-04	1.18E-02
Co60	2.15E-02	8.95E-03	5.38E-02	2.26E-01	9.39E-02	5.64E-01
Ni59	1.14E-05	1.27E-08	0.00E+00	1.20E-04	1.33E-07	0.00E+00
Ni63	4.95E-03	1.36E-05	1.65E-04	5.19E-02	1.42E-04	1.73E-03
Zn65	9.36E-04	8.86E-05	4.68E-04	9.81E-03	9.29E-04	4.91E-03
Se79	8.61E-08	1.40E-09	4.30E-08	9.03E-07	1.47E-08	4.51E-07
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	2.43E-05	4.40E-06	8.11E-05	2.55E-04	4.62E-05	8.50E-04
Zr93	1.08E-06	3.38E-09	0.00E+00	1.13E-05	3.54E-08	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	2.80E-06	7.80E-07	4.00E-06	2.93E-05	8.18E-06	4.19E-05
Mo93	2.15E-08	5.68E-11	1.08E-09	2.26E-07	5.96E-10	1.13E-08
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	3.93E-07	6.37E-09	4.37E-07	4.12E-06	6.68E-08	4.58E-06
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	9.36E-09	1.39E-11	0.00E+00	9.81E-08	1.46E-10	0.00E+00
Ag108m	2.15E-05	5.83E-06	3.07E-05	2.26E-04	6.12E-05	3.22E-04
Ag110m	1.03E-02	4.66E-03	2.57E-02	1.08E-01	4.89E-02	2.70E-01

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	1.87E-08	3.85E-10	2.08E-08	1.96E-07	4.04E-09	2.18E-07
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	8.42E-09	3.78E-09	2.11E-08	8.83E-08	3.96E-08	2.21E-07
Sb125	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	9.36E-10	1.17E-11	0.00E+00	9.81E-09	1.23E-10	0.00E+00
Cs134	3.67E-04	1.00E-04	5.24E-04	3.84E-03	1.05E-03	5.49E-03
Cs135	2.81E-09	2.53E-11	2.81E-09	2.94E-08	2.65E-10	2.94E-08
Cs137	9.36E-04	1.22E-04	1.56E-03	9.81E-03	1.28E-03	1.64E-02
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	3.74E-06	1.18E-08	3.74E-07	3.92E-05	1.24E-07	3.92E-06
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	4.91E-16	2.12E-15	1.64E-13	5.16E-15	2.23E-14	1.72E-12
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	4.36E-15	3.60E-15	8.72E-12	4.58E-14	3.79E-14	9.16E-11
Th230	3.48E-13	2.66E-13	3.48E-10	3.66E-12	2.79E-12	3.66E-09
Th232	4.54E-19	2.98E-19	0.00E+00	4.77E-18	3.13E-18	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	2.16E-13	1.78E-13	5.40E-10	2.27E-12	1.87E-12	5.67E-09
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	1.47E-13	1.16E-13	2.46E-11	1.55E-12	1.22E-12	2.58E-10
U234	7.44E-09	5.79E-09	1.24E-06	7.82E-08	6.08E-08	1.30E-05
U235	8.17E-11	6.37E-11	0.00E+00	8.59E-10	6.69E-10	0.00E+00
U236	2.34E-09	1.72E-09	3.89E-07	2.46E-08	1.81E-08	4.09E-06
U238	2.02E-09	1.40E-09	0.00E+00	2.12E-08	1.47E-08	0.00E+00
Np237	4.60E-09	3.97E-09	2.30E-06	4.84E-08	4.18E-08	2.42E-05
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	5.30E-05	4.75E-05	5.30E-02	5.57E-04	4.99E-04	5.57E-01
Pu239	2.88E-06	2.42E-06	2.88E-03	3.03E-05	2.54E-05	3.03E-02
Pu240	5.19E-06	4.37E-06	5.19E-03	5.46E-05	4.60E-05	5.46E-02
Pu241	1.02E-03	8.76E-07	1.70E-02	1.07E-02	9.21E-06	1.79E-01

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	2.01E-08	1.60E-08	2.01E-05	2.11E-07	1.68E-07	2.11E-04
Am241	3.07E-06	2.78E-06	3.07E-03	3.23E-05	2.92E-05	3.23E-02
Am242m	2.01E-07	8.85E-09	2.01E-04	2.11E-06	9.31E-08	2.11E-03
Am243	3.15E-07	2.96E-07	3.15E-04	3.31E-06	3.11E-06	3.31E-03
Cm242	1.08E-04	1.07E-04	1.08E-02	1.13E-03	1.13E-03	1.13E-01
Cm243	3.47E-07	3.42E-07	3.47E-04	3.65E-06	3.60E-06	3.65E-03
Cm244	6.68E-05	6.32E-05	3.34E-02	7.02E-04	6.64E-04	3.51E-01
Cm245	8.04E-09	7.22E-09	8.93E-06	8.45E-08	7.59E-08	9.39E-05
Cm246	2.49E-09	2.19E-09	2.77E-06	2.62E-08	2.30E-08	2.91E-05
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>9.42E-02</b>	<b>1.54E-02</b>	<b>2.18E-01</b>	<b>9.87E-01</b>	<b>1.61E-01</b>	<b>2.29E+00</b>

**Table 17 EPR14 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	3.52E-05	2.43E-04
	beta/gamma	1.24E-02	8.55E-02
<b>Classification (GBq/te)</b>			
	alpha	1.76E-01	1.21E+00
	beta/gamma	6.21E+01	4.28E+02
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	3.00E-02	2.07E-01
	A <sub>2</sub> per gram (raw)	1.50E-07	1.03E-06
	A <sub>2</sub> per gram (conditioned)	4.31E-08	2.97E-07
	LSA criteria	N/A	N/A
<b>Heat output (W)</b>			
		1.88E-03	1.29E-02
<b>Soluble radionuclides (TBq)</b>			
	Sr90	8.22E-05	5.66E-04
	Cs134	8.11E-05	5.58E-04
	Cs137	1.62E-04	1.12E-03
<b>Radiotoxicity (Sv/yr)</b>		1.73E+01	1.19E+02
<b>Lifetime requirement (years)</b>		26	81
<b>Fissile content (g)</b>			
	U233	6.08E-11	4.19E-10
	U235	1.50E-04	1.04E-03
	U238	2.38E-02	1.64E-01
	Pu239	1.85E-04	1.27E-03
	Pu240	9.10E-05	6.27E-04
	Pu241	3.94E-05	2.71E-04
	Pu242	2.02E-05	1.39E-04
Total Fissile	U233+U235+Pu239+Pu241	3.74E-04	2.58E-03
Total U	U233+U235+U238	2.40E-02	1.65E-01
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	3.22E-04	2.22E-03
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	8.37E-11	5.76E-10
Total U	U232+U233+U234+U235+U236+U238	2.41E-02	1.66E-01
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	3.47E-04	2.39E-03
<b>Dose rates (mSv/hr)</b>			
	3m from 500-litre drum	5.63E-02	3.87E-01
	1m from SWTC-070	7.20E-02	4.96E-01
	0m from SWTC-070	1.42E-01	9.75E-01
	1m from SWTC-285	1.43E-05	9.86E-05
	0m from SWTC-285	2.01E-05	1.39E-04

**Table 18 EPR14 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Be10	6.32E-10	2.56E-11	1.05E-09	4.35E-09	1.76E-10	7.26E-09
C14	3.48E-05	2.76E-07	1.16E-05	2.39E-04	1.90E-06	7.98E-05
Cl36	3.16E-09	1.39E-10	5.27E-09	2.18E-08	9.56E-10	3.63E-08
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	1.58E-08	8.11E-12	0.00E+00	1.09E-07	5.58E-11	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	3.24E-04	4.35E-05	3.24E-04	2.23E-03	2.99E-04	2.23E-03
Fe55	6.64E-03	6.27E-06	1.66E-04	4.57E-02	4.32E-05	1.14E-03
Co60	3.16E-03	1.32E-03	7.91E-03	2.18E-02	9.06E-03	5.44E-02
Ni59	1.68E-06	1.86E-09	0.00E+00	1.15E-05	1.28E-08	0.00E+00
Ni63	7.27E-04	1.99E-06	2.42E-05	5.01E-03	1.37E-05	1.67E-04
Zn65	8.11E-05	7.68E-06	4.05E-05	5.58E-04	5.29E-05	2.79E-04
Se79	6.49E-10	1.06E-11	3.24E-10	4.47E-09	7.28E-11	2.23E-09
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	8.22E-05	1.49E-05	2.74E-04	5.66E-04	1.02E-04	1.89E-03
Zr93	1.58E-07	4.96E-10	0.00E+00	1.09E-06	3.42E-09	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	4.11E-07	1.15E-07	5.87E-07	2.83E-06	7.90E-07	4.04E-06
Mo93	3.16E-09	8.35E-12	1.58E-10	2.18E-08	5.75E-11	1.09E-09
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	6.81E-08	1.10E-09	7.57E-08	4.69E-07	7.60E-09	5.21E-07
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	1.62E-09	2.42E-12	0.00E+00	1.12E-08	1.66E-11	0.00E+00
Ag108m	3.16E-06	8.57E-07	4.52E-06	2.18E-05	5.90E-06	3.11E-05
Ag110m	8.92E-04	4.04E-04	2.23E-03	6.14E-03	2.78E-03	1.54E-02



Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	3.24E-09	6.68E-11	3.60E-09	2.23E-08	4.60E-10	2.48E-08
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	1.46E-09	6.55E-10	3.65E-09	1.00E-08	4.51E-09	2.51E-08
Sb125	8.11E-05	6.88E-06	8.11E-05	5.58E-04	4.73E-05	5.58E-04
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	1.62E-10	2.03E-12	0.00E+00	1.12E-09	1.40E-11	0.00E+00
Cs134	8.11E-05	2.22E-05	1.16E-04	5.58E-04	1.53E-04	7.97E-04
Cs135	4.87E-10	4.39E-12	4.87E-10	3.35E-09	3.02E-11	3.35E-09
Cs137	1.62E-04	2.11E-05	2.70E-04	1.12E-03	1.45E-04	1.86E-03
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	6.49E-07	2.05E-09	6.49E-08	4.47E-06	1.41E-08	4.47E-07
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	7.22E-17	3.12E-16	2.41E-14	4.97E-16	2.15E-15	1.66E-13
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	6.41E-16	5.30E-16	1.28E-12	4.42E-15	3.65E-15	8.83E-12
Th230	5.12E-14	3.90E-14	5.12E-11	3.53E-13	2.69E-13	3.53E-10
Th232	6.68E-20	4.38E-20	0.00E+00	4.60E-19	3.01E-19	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	3.18E-14	2.62E-14	7.94E-11	2.19E-13	1.80E-13	5.47E-10
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	2.17E-14	1.70E-14	3.61E-12	1.49E-13	1.17E-13	2.49E-11
U234	1.09E-09	8.51E-10	1.82E-07	7.54E-09	5.86E-09	1.26E-06
U235	1.20E-11	9.36E-12	0.00E+00	8.28E-11	6.45E-11	0.00E+00
U236	3.44E-10	2.53E-10	5.73E-08	2.37E-09	1.74E-09	3.94E-07
U238	2.97E-10	2.06E-10	0.00E+00	2.04E-09	1.42E-09	0.00E+00
Np237	6.77E-10	5.84E-10	3.39E-07	4.66E-09	4.03E-09	2.33E-06
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	7.79E-06	6.98E-06	7.79E-03	5.37E-05	4.81E-05	5.37E-02
Pu239	4.23E-07	3.55E-07	4.23E-04	2.92E-06	2.45E-06	2.92E-03
Pu240	7.64E-07	6.43E-07	7.64E-04	5.26E-06	4.43E-06	5.26E-03
Pu241	1.50E-04	1.29E-07	2.50E-03	1.03E-03	8.87E-07	1.72E-02

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	2.95E-09	2.36E-09	2.95E-06	2.03E-08	1.62E-08	2.03E-05
Am241	4.51E-07	4.08E-07	4.51E-04	3.11E-06	2.81E-06	3.11E-03
Am242m	2.96E-08	1.30E-09	2.96E-05	2.04E-07	8.97E-09	2.04E-04
Am243	4.63E-08	4.35E-08	4.63E-05	3.19E-07	3.00E-07	3.19E-04
Cm242	1.59E-05	1.58E-05	1.59E-03	1.09E-04	1.09E-04	1.09E-02
Cm243	5.11E-08	5.03E-08	5.11E-05	3.52E-07	3.46E-07	3.52E-04
Cm244	9.82E-06	9.29E-06	4.91E-03	6.76E-05	6.40E-05	3.38E-02
Cm245	1.18E-09	1.06E-09	1.31E-06	8.15E-09	7.32E-09	9.05E-06
Cm246	3.66E-10	3.22E-10	4.07E-07	2.52E-09	2.22E-09	2.80E-06
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>1.25E-02</b>	<b>1.88E-03</b>	<b>3.00E-02</b>	<b>8.58E-02</b>	<b>1.29E-02</b>	<b>2.07E-01</b>

**Table 19 EPR15 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	9.06E-06	9.14E-05
	beta/gamma	3.51E-03	3.26E-02
<b>Classification (GBq/te)</b>			
	alpha	4.77E-02	4.81E-01
	beta/gamma	1.85E+01	1.72E+02
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	7.74E-03	7.80E-02
	A <sub>2</sub> per gram (raw)	4.07E-08	4.10E-07
	A <sub>2</sub> per gram (conditioned)	9.05E-09	9.12E-08
	LSA criteria	N/A	N/A
<b>Heat output (W)</b>			
		4.85E-04	4.89E-03
<b>Soluble radionuclides (TBq)</b>			
	Sr90	2.12E-05	2.14E-04
	Cs134	2.09E-05	2.11E-04
	Cs137	4.19E-05	4.22E-04
<b>Radiotoxicity (Sv/yr)</b>		4.47E+00	4.50E+01
<b>Lifetime requirement (years)</b>		12	45
<b>Fissile content (g)</b>			
	U233	1.56E-11	1.58E-10
	U235	3.87E-05	3.90E-04
	U238	6.13E-03	6.19E-02
	Pu239	4.75E-05	4.79E-04
	Pu240	2.34E-05	2.36E-04
	Pu241	1.01E-05	1.02E-04
	Pu242	5.19E-06	5.24E-05
Total Fissile	U233+U235+Pu239+Pu241	9.62E-05	9.71E-04
Total U	U233+U235+U238	6.17E-03	6.23E-02
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	8.27E-05	8.35E-04
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	2.15E-11	2.17E-10
Total U	U232+U233+U234+U235+U236+U238	6.21E-03	6.27E-02
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	8.93E-05	9.02E-04
<b>Dose rates (mSv/hr)</b>			
	3m from 500-litre drum	1.15E-02	1.16E-01
	1m from SWTC-070	1.49E-02	1.50E-01
	0m from SWTC-070	2.89E-02	2.91E-01
	1m from SWTC-285	2.93E-06	2.95E-05
	0m from SWTC-285	4.14E-06	4.17E-05

**Table 20 EPR15 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	3.04E-04	2.77E-07	7.60E-06	3.04E-04	2.77E-07	7.60E-06
Be10	1.63E-10	6.60E-12	2.72E-10	1.65E-09	6.65E-11	2.74E-09
C14	8.98E-06	7.12E-08	2.99E-06	9.05E-05	7.18E-07	3.02E-05
Cl36	8.17E-10	3.58E-11	1.36E-09	8.23E-09	3.61E-10	1.37E-08
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	4.08E-09	2.09E-12	0.00E+00	4.11E-08	2.11E-11	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	8.37E-05	1.12E-05	8.37E-05	8.44E-04	1.13E-04	8.44E-04
Fe55	1.71E-03	1.62E-06	4.29E-05	1.73E-02	1.63E-05	4.32E-04
Co60	8.17E-04	3.40E-04	2.04E-03	8.23E-03	3.42E-03	2.06E-02
Ni59	4.33E-07	4.80E-10	0.00E+00	4.36E-06	4.84E-09	0.00E+00
Ni63	1.88E-04	5.15E-07	6.26E-06	1.89E-03	5.18E-06	6.31E-05
Zn65	2.09E-05	1.98E-06	1.05E-05	2.11E-04	2.00E-05	1.05E-04
Se79	1.67E-10	2.73E-12	8.37E-11	1.69E-09	2.75E-11	8.44E-10
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	2.12E-05	3.84E-06	7.08E-05	2.14E-04	3.87E-05	7.13E-04
Zr93	4.08E-08	1.28E-10	0.00E+00	4.11E-07	1.29E-09	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	1.06E-07	2.96E-08	1.52E-07	1.07E-06	2.98E-07	1.53E-06
Mo93	8.17E-10	2.16E-12	4.08E-11	8.23E-09	2.17E-11	4.11E-10
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	1.76E-08	2.85E-10	1.95E-08	1.77E-07	2.87E-09	1.97E-07
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	4.19E-10	6.24E-13	0.00E+00	4.22E-09	6.29E-12	0.00E+00
Ag108m	8.17E-07	2.21E-07	1.17E-06	8.23E-06	2.23E-06	1.18E-05
Ag110m	2.30E-04	1.04E-04	5.76E-04	2.32E-03	1.05E-03	5.80E-03

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	8.37E-10	1.73E-11	9.31E-10	8.44E-09	1.74E-10	9.38E-09
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	3.77E-10	1.69E-10	9.42E-10	3.80E-09	1.70E-09	9.49E-09
Sb125	2.09E-05	1.78E-06	2.09E-05	2.11E-04	1.79E-05	2.11E-04
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	4.19E-11	5.23E-13	0.00E+00	4.22E-10	5.27E-12	0.00E+00
Cs134	2.09E-05	5.74E-06	2.99E-05	2.11E-04	5.78E-05	3.01E-04
Cs135	1.26E-10	1.13E-12	1.26E-10	1.27E-09	1.14E-11	1.27E-09
Cs137	4.19E-05	5.44E-06	6.98E-05	4.22E-04	5.48E-05	7.03E-04
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	1.67E-07	5.29E-10	1.67E-08	1.69E-06	5.33E-09	1.69E-07
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	1.86E-17	8.04E-17	6.19E-15	1.87E-16	8.11E-16	6.24E-14
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	1.65E-16	1.36E-16	3.30E-13	1.66E-15	1.37E-15	3.33E-12
Th230	1.32E-14	1.00E-14	1.32E-11	1.33E-13	1.01E-13	1.33E-10
Th232	1.72E-20	1.13E-20	0.00E+00	1.73E-19	1.14E-19	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	8.17E-15	6.74E-15	2.04E-11	8.24E-14	6.80E-14	2.06E-10
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	5.57E-15	4.38E-15	9.29E-13	5.63E-14	4.42E-14	9.38E-12
U234	2.81E-10	2.19E-10	4.69E-08	2.84E-09	2.21E-09	4.73E-07
U235	3.09E-12	2.41E-12	0.00E+00	3.12E-11	2.43E-11	0.00E+00
U236	8.84E-11	6.50E-11	1.47E-08	8.92E-10	6.56E-10	1.49E-07
U238	7.63E-11	5.30E-11	0.00E+00	7.70E-10	5.35E-10	0.00E+00
Np237	1.74E-10	1.50E-10	8.71E-08	1.76E-09	1.52E-09	8.79E-07
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	2.00E-06	1.80E-06	2.00E-03	2.02E-05	1.81E-05	2.02E-02
Pu239	1.09E-07	9.14E-08	1.09E-04	1.10E-06	9.22E-07	1.10E-03
Pu240	1.96E-07	1.65E-07	1.96E-04	1.98E-06	1.67E-06	1.98E-03
Pu241	3.86E-05	3.31E-08	6.43E-04	3.89E-04	3.34E-07	6.49E-03

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	7.59E-10	6.06E-10	7.59E-07	7.66E-09	6.11E-09	7.66E-06
Am241	1.16E-07	1.05E-07	1.16E-04	1.17E-06	1.06E-06	1.17E-03
Am242m	7.61E-09	3.35E-10	7.61E-06	7.68E-08	3.38E-09	7.68E-05
Am243	1.19E-08	1.12E-08	1.19E-05	1.20E-07	1.13E-07	1.20E-04
Cm242	4.08E-06	4.06E-06	4.08E-04	4.12E-05	4.10E-05	4.12E-03
Cm243	1.31E-08	1.29E-08	1.31E-05	1.33E-07	1.31E-07	1.33E-04
Cm244	2.53E-06	2.39E-06	1.26E-03	2.55E-05	2.41E-05	1.27E-02
Cm245	3.04E-10	2.73E-10	3.38E-07	3.07E-09	2.76E-09	3.41E-06
Cm246	9.42E-11	8.27E-11	1.05E-07	9.51E-10	8.35E-10	1.06E-06
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>3.52E-03</b>	<b>4.85E-04</b>	<b>7.74E-03</b>	<b>3.27E-02</b>	<b>4.89E-03</b>	<b>7.80E-02</b>



**Table 21 EPR16 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	9.06E-06	9.14E-05
	beta/gamma	3.51E-03	3.26E-02
<b>Classification (GBq/te)</b>			
	alpha	4.77E-02	4.81E-01
	beta/gamma	1.85E+01	1.72E+02
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	7.74E-03	7.80E-02
	A <sub>2</sub> per gram (raw)	4.07E-08	4.10E-07
	A <sub>2</sub> per gram (conditioned)	9.05E-09	9.12E-08
	LSA criteria	N/A	N/A
<b>Heat output (W)</b>			
		4.85E-04	4.89E-03
<b>Soluble radionuclides (TBq)</b>			
	Sr90	2.12E-05	2.14E-04
	Cs134	2.09E-05	2.11E-04
	Cs137	4.19E-05	4.22E-04
<b>Radiotoxicity (Sv/yr)</b>		4.47E+00	4.50E+01
<b>Lifetime requirement (years)</b>		12	45
<b>Fissile content (g)</b>			
	U233	1.56E-11	1.58E-10
	U235	3.87E-05	3.90E-04
	U238	6.13E-03	6.19E-02
	Pu239	4.75E-05	4.79E-04
	Pu240	2.34E-05	2.36E-04
	Pu241	1.01E-05	1.02E-04
	Pu242	5.19E-06	5.24E-05
Total Fissile	U233+U235+Pu239+Pu241	9.62E-05	9.71E-04
Total U	U233+U235+U238	6.17E-03	6.23E-02
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	8.27E-05	8.35E-04
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	2.15E-11	2.17E-10
Total U	U232+U233+U234+U235+U236+U238	6.21E-03	6.27E-02
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	8.93E-05	9.02E-04
<b>Dose rates (mSv/hr)</b>			
	3m from 500-litre drum	1.15E-02	1.16E-01
	1m from SWTC-070	1.49E-02	1.50E-01
	0m from SWTC-070	2.89E-02	2.91E-01
	1m from SWTC-285	2.93E-06	2.95E-05
	0m from SWTC-285	4.14E-06	4.17E-05

**Table 22 EPR16 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	3.04E-04	2.77E-07	7.60E-06	3.04E-04	2.77E-07	7.60E-06
Be10	1.63E-10	6.60E-12	2.72E-10	1.65E-09	6.65E-11	2.74E-09
C14	8.98E-06	7.12E-08	2.99E-06	9.05E-05	7.18E-07	3.02E-05
Cl36	8.17E-10	3.58E-11	1.36E-09	8.23E-09	3.61E-10	1.37E-08
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	4.08E-09	2.09E-12	0.00E+00	4.11E-08	2.11E-11	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	8.37E-05	1.12E-05	8.37E-05	8.44E-04	1.13E-04	8.44E-04
Fe55	1.71E-03	1.62E-06	4.29E-05	1.73E-02	1.63E-05	4.32E-04
Co60	8.17E-04	3.40E-04	2.04E-03	8.23E-03	3.42E-03	2.06E-02
Ni59	4.33E-07	4.80E-10	0.00E+00	4.36E-06	4.84E-09	0.00E+00
Ni63	1.88E-04	5.15E-07	6.26E-06	1.89E-03	5.18E-06	6.31E-05
Zn65	2.09E-05	1.98E-06	1.05E-05	2.11E-04	2.00E-05	1.05E-04
Se79	1.67E-10	2.73E-12	8.37E-11	1.69E-09	2.75E-11	8.44E-10
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	2.12E-05	3.84E-06	7.08E-05	2.14E-04	3.87E-05	7.13E-04
Zr93	4.08E-08	1.28E-10	0.00E+00	4.11E-07	1.29E-09	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	1.06E-07	2.96E-08	1.52E-07	1.07E-06	2.98E-07	1.53E-06
Mo93	8.17E-10	2.16E-12	4.08E-11	8.23E-09	2.17E-11	4.11E-10
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	1.76E-08	2.85E-10	1.95E-08	1.77E-07	2.87E-09	1.97E-07
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	4.19E-10	6.24E-13	0.00E+00	4.22E-09	6.29E-12	0.00E+00
Ag108m	8.17E-07	2.21E-07	1.17E-06	8.23E-06	2.23E-06	1.18E-05
Ag110m	2.30E-04	1.04E-04	5.76E-04	2.32E-03	1.05E-03	5.80E-03

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	8.37E-10	1.73E-11	9.31E-10	8.44E-09	1.74E-10	9.38E-09
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	3.77E-10	1.69E-10	9.42E-10	3.80E-09	1.70E-09	9.49E-09
Sb125	2.09E-05	1.78E-06	2.09E-05	2.11E-04	1.79E-05	2.11E-04
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	4.19E-11	5.23E-13	0.00E+00	4.22E-10	5.27E-12	0.00E+00
Cs134	2.09E-05	5.74E-06	2.99E-05	2.11E-04	5.78E-05	3.01E-04
Cs135	1.26E-10	1.13E-12	1.26E-10	1.27E-09	1.14E-11	1.27E-09
Cs137	4.19E-05	5.44E-06	6.98E-05	4.22E-04	5.48E-05	7.03E-04
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	1.67E-07	5.29E-10	1.67E-08	1.69E-06	5.33E-09	1.69E-07
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	1.86E-17	8.04E-17	6.19E-15	1.87E-16	8.11E-16	6.24E-14
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	1.65E-16	1.36E-16	3.30E-13	1.66E-15	1.37E-15	3.33E-12
Th230	1.32E-14	1.00E-14	1.32E-11	1.33E-13	1.01E-13	1.33E-10
Th232	1.72E-20	1.13E-20	0.00E+00	1.73E-19	1.14E-19	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	8.17E-15	6.74E-15	2.04E-11	8.24E-14	6.80E-14	2.06E-10
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	5.57E-15	4.38E-15	9.29E-13	5.63E-14	4.42E-14	9.38E-12
U234	2.81E-10	2.19E-10	4.69E-08	2.84E-09	2.21E-09	4.73E-07
U235	3.09E-12	2.41E-12	0.00E+00	3.12E-11	2.43E-11	0.00E+00
U236	8.84E-11	6.50E-11	1.47E-08	8.92E-10	6.56E-10	1.49E-07
U238	7.63E-11	5.30E-11	0.00E+00	7.70E-10	5.35E-10	0.00E+00
Np237	1.74E-10	1.50E-10	8.71E-08	1.76E-09	1.52E-09	8.79E-07
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	2.00E-06	1.80E-06	2.00E-03	2.02E-05	1.81E-05	2.02E-02
Pu239	1.09E-07	9.14E-08	1.09E-04	1.10E-06	9.22E-07	1.10E-03
Pu240	1.96E-07	1.65E-07	1.96E-04	1.98E-06	1.67E-06	1.98E-03
Pu241	3.86E-05	3.31E-08	6.43E-04	3.89E-04	3.34E-07	6.49E-03

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	7.59E-10	6.06E-10	7.59E-07	7.66E-09	6.11E-09	7.66E-06
Am241	1.16E-07	1.05E-07	1.16E-04	1.17E-06	1.06E-06	1.17E-03
Am242m	7.61E-09	3.35E-10	7.61E-06	7.68E-08	3.38E-09	7.68E-05
Am243	1.19E-08	1.12E-08	1.19E-05	1.20E-07	1.13E-07	1.20E-04
Cm242	4.08E-06	4.06E-06	4.08E-04	4.12E-05	4.10E-05	4.12E-03
Cm243	1.31E-08	1.29E-08	1.31E-05	1.33E-07	1.31E-07	1.33E-04
Cm244	2.53E-06	2.39E-06	1.26E-03	2.55E-05	2.41E-05	1.27E-02
Cm245	3.04E-10	2.73E-10	3.38E-07	3.07E-09	2.76E-09	3.41E-06
Cm246	9.42E-11	8.27E-11	1.05E-07	9.51E-10	8.35E-10	1.06E-06
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>3.52E-03</b>	<b>4.85E-04</b>	<b>7.74E-03</b>	<b>3.27E-02</b>	<b>4.89E-03</b>	<b>7.80E-02</b>

**Table 23 EPR21 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	4.70E-04	5.52E-03
	beta/gamma	1.74E-01	2.03E+00
<b>Classification (GBq/te)</b>			
	alpha	1.00E+00	1.18E+01
	beta/gamma	3.70E+02	4.32E+03
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	4.61E-01	5.42E+00
	A <sub>2</sub> per gram (raw)	9.81E-07	1.15E-05
	A <sub>2</sub> per gram (conditioned)	1.24E-07	1.46E-06
	LSA criteria	LSA-II	LSA-II
<b>Heat output (W)</b>			
		3.19E-02	3.75E-01
<b>Soluble radionuclides (TBq)</b>			
	Sr90	6.84E-05	8.04E-04
	Cs134	1.16E-02	1.37E-01
	Cs137	2.97E-02	3.50E-01
<b>Radiotoxicity (Sv/yr)</b>		3.04E+01	3.58E+02
<b>Lifetime requirement (years)</b>		85	195
<b>Fissile content (g)</b>			
	U233	8.11E-10	9.54E-09
	U235	2.01E-03	2.36E-02
	U238	3.18E-01	3.74E+00
	Pu239	2.46E-03	2.89E-02
	Pu240	1.21E-03	1.43E-02
	Pu241	5.25E-04	6.17E-03
	Pu242	2.69E-04	3.16E-03
Total Fissile	U233+U235+Pu239+Pu241	4.99E-03	5.87E-02
Total U	U233+U235+U238	3.20E-01	3.76E+00
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	4.29E-03	5.04E-02
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	1.12E-09	1.31E-08
Total U	U232+U233+U234+U235+U236+U238	3.22E-01	3.79E+00
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	4.63E-03	5.45E-02
<b>Corrected Dose rates for Cast Iron Container (mSv/hr)</b>			
	3m from Cast Iron Type II Container	1.38E-02	1.62E-01
	1m from Cast Iron Type II Container	7.02E-02	8.26E-01
	0m from Cast Iron Type II Container	2.23E-01	2.62E+00
	3m from unshielded waste - approx value	1.66E+00	1.95E+01

**Table 24 EPR21 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	1.18E-03	1.07E-06	2.94E-05	1.18E-03	1.07E-06	2.94E-05
Be10	8.43E-09	3.41E-10	1.41E-08	9.92E-08	4.01E-09	1.65E-07
C14	7.59E-04	6.02E-06	2.53E-04	8.93E-03	7.08E-05	2.98E-03
Cl36	4.22E-07	1.85E-08	7.03E-07	4.96E-06	2.18E-07	8.27E-06
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	2.11E-07	1.08E-10	0.00E+00	2.48E-06	1.27E-09	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	9.24E-03	1.24E-03	9.24E-03	1.09E-01	1.46E-02	1.09E-01
Fe55	5.90E-03	5.57E-06	1.48E-04	6.95E-02	6.56E-05	1.74E-03
Co60	4.22E-02	1.75E-02	1.05E-01	4.96E-01	2.06E-01	1.24E+00
Ni59	4.64E-05	5.15E-08	0.00E+00	5.46E-04	6.06E-07	0.00E+00
Ni63	5.90E-02	1.62E-04	1.97E-03	6.95E-01	1.90E-03	2.32E-02
Zn65	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Se79	1.19E-07	1.94E-09	5.94E-08	1.40E-06	2.28E-08	6.99E-07
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	6.84E-05	1.24E-05	2.28E-04	8.04E-04	1.46E-04	2.68E-03
Zr93	2.11E-08	6.62E-11	0.00E+00	2.48E-07	7.79E-10	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	5.06E-06	1.41E-06	7.23E-06	5.95E-05	1.66E-05	8.50E-05
Mo93	4.22E-08	1.11E-10	2.11E-09	4.96E-07	1.31E-09	2.48E-08
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	2.97E-07	4.81E-09	3.30E-07	3.50E-06	5.66E-08	3.88E-06
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	2.97E-09	4.43E-12	0.00E+00	3.50E-08	5.21E-11	0.00E+00
Ag108m	4.22E-05	1.14E-05	6.02E-05	4.96E-04	1.34E-04	7.09E-04
Ag110m	1.19E-02	5.40E-03	2.98E-02	1.40E-01	6.35E-02	3.50E-01

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	5.94E-07	1.22E-08	6.60E-07	6.99E-06	1.44E-07	7.77E-06
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	2.67E-07	1.20E-07	6.69E-07	3.15E-06	1.41E-06	7.87E-06
Sb125	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	2.97E-08	3.71E-10	0.00E+00	3.50E-07	4.37E-09	0.00E+00
Cs134	1.16E-02	3.19E-03	1.66E-02	1.37E-01	3.75E-02	1.96E-01
Cs135	1.49E-07	1.34E-09	1.49E-07	1.75E-06	1.58E-08	1.75E-06
Cs137	2.97E-02	3.86E-03	4.95E-02	3.50E-01	4.55E-02	5.83E-01
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	2.08E-05	6.57E-08	2.08E-06	2.45E-04	7.73E-07	2.45E-05
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00



Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	9.63E-16	4.17E-15	3.21E-13	1.13E-14	4.90E-14	3.77E-12
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	8.55E-15	7.06E-15	1.71E-11	1.01E-13	8.30E-14	2.01E-10
Th230	6.83E-13	5.21E-13	6.83E-10	8.03E-12	6.12E-12	8.03E-09
Th232	8.91E-19	5.84E-19	0.00E+00	1.05E-17	6.86E-18	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	4.24E-13	3.49E-13	1.06E-09	4.98E-12	4.11E-12	1.24E-08
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	2.89E-13	2.27E-13	4.82E-11	3.40E-12	2.67E-12	5.66E-10
U234	1.46E-08	1.14E-08	2.43E-06	1.72E-07	1.33E-07	2.86E-05
U235	1.60E-10	1.25E-10	0.00E+00	1.89E-09	1.47E-09	0.00E+00
U236	4.58E-09	3.37E-09	7.64E-07	5.39E-08	3.97E-08	8.98E-06
U238	3.96E-09	2.75E-09	0.00E+00	4.65E-08	3.23E-08	0.00E+00
Np237	9.03E-09	7.80E-09	4.52E-06	1.06E-07	9.17E-08	5.31E-05
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	1.04E-04	9.32E-05	1.04E-01	1.22E-03	1.10E-03	1.22E+00
Pu239	5.65E-06	4.74E-06	5.65E-03	6.64E-05	5.57E-05	6.64E-02
Pu240	1.02E-05	8.58E-06	1.02E-02	1.20E-04	1.01E-04	1.20E-01
Pu241	2.00E-03	1.72E-06	3.34E-02	2.35E-02	2.02E-05	3.92E-01

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	3.94E-08	3.14E-08	3.94E-05	4.63E-07	3.69E-07	4.63E-04
Am241	6.02E-06	5.45E-06	6.02E-03	7.08E-05	6.40E-05	7.08E-02
Am242m	3.95E-07	1.74E-08	3.95E-04	4.64E-06	2.04E-07	4.64E-03
Am243	6.18E-07	5.81E-07	6.18E-04	7.26E-06	6.83E-06	7.26E-03
Cm242	2.12E-04	2.11E-04	2.12E-02	2.49E-03	2.48E-03	2.49E-01
Cm243	6.81E-07	6.71E-07	6.81E-04	8.01E-06	7.89E-06	8.01E-03
Cm244	1.31E-04	1.24E-04	6.55E-02	1.54E-03	1.46E-03	7.70E-01
Cm245	1.58E-08	1.42E-08	1.75E-05	1.85E-07	1.67E-07	2.06E-04
Cm246	4.89E-09	4.29E-09	5.43E-06	5.75E-08	5.05E-08	6.38E-05
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>1.74E-01</b>	<b>3.19E-02</b>	<b>4.61E-01</b>	<b>2.04E+00</b>	<b>3.75E-01</b>	<b>5.42E+00</b>

**Table 25 EPR22 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	1.23E-03	1.49E-02
	beta/gamma	4.81E-01	5.84E+00
<b>Classification (GBq/te)</b>			
	alpha	2.94E+00	3.58E+01
	beta/gamma	1.16E+03	1.40E+04
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	1.12E+00	1.36E+01
	A <sub>2</sub> per gram (raw)	2.68E-06	3.26E-05
	A <sub>2</sub> per gram (conditioned)	1.34E-07	1.62E-06
	LSA criteria	LSA-II	LSA-II
<b>Heat output (W)</b>			
		7.87E-02	9.55E-01
<b>Soluble radionuclides (TBq)</b>			
	Sr90	1.25E-04	1.51E-03
	Cs134	1.88E-03	2.28E-02
	Cs137	4.79E-03	5.82E-02
<b>Radiotoxicity (Sv/yr)</b>		6.24E+01	7.58E+02
<b>Lifetime requirement (years)</b>		36	120
<b>Fissile content (g)</b>			
	U233	2.12E-09	2.58E-08
	U235	5.23E-03	6.37E-02
	U238	8.30E-01	1.01E+01
	Pu239	6.42E-03	7.82E-02
	Pu240	3.16E-03	3.86E-02
	Pu241	1.37E-03	1.67E-02
	Pu242	7.02E-04	8.55E-03
Total Fissile	U233+U235+Pu239+Pu241	1.30E-02	1.59E-01
Total U	U233+U235+U238	8.35E-01	1.02E+01
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	1.12E-02	1.36E-01
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	2.91E-09	3.55E-08
Total U	U232+U233+U234+U235+U236+U238	8.40E-01	1.02E+01
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	1.21E-02	1.47E-01
<b>Corrected Dose rates for Cast Iron Container (mSv/hr)</b>			
	3m from Cast Iron Type II Container	1.77E-02	2.15E-01
	1m from Cast Iron Type II Container	9.35E-02	1.14E+00
	0m from Cast Iron Type II Container	2.73E-01	3.31E+00
	3m from unshielded waste - approx value	2.09E+00	2.54E+01

**Table 26 EPR22 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Be10	2.21E-08	8.91E-10	3.68E-08	2.68E-07	1.08E-08	4.46E-07
C14	1.21E-03	9.62E-06	4.04E-04	1.47E-02	1.17E-04	4.91E-03
Cl36	1.10E-07	4.84E-09	1.84E-07	1.34E-06	5.88E-08	2.23E-06
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	5.51E-07	2.83E-10	0.00E+00	6.69E-06	3.43E-09	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	4.32E-02	5.78E-03	4.32E-02	5.24E-01	7.02E-02	5.24E-01
Fe55	2.32E-01	2.19E-04	5.79E-03	2.81E+00	2.65E-03	7.03E-02
Co60	1.10E-01	4.59E-02	2.76E-01	1.34E+00	5.57E-01	3.35E+00
Ni59	5.85E-05	6.49E-08	0.00E+00	7.10E-04	7.88E-07	0.00E+00
Ni63	2.54E-02	6.95E-05	8.46E-04	3.08E-01	8.44E-04	1.03E-02
Zn65	4.79E-03	4.54E-04	2.40E-03	5.82E-02	5.51E-03	2.91E-02
Se79	4.41E-07	7.19E-09	2.21E-07	5.36E-06	8.73E-08	2.68E-06
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	1.25E-04	2.26E-05	4.16E-04	1.51E-03	2.74E-04	5.05E-03
Zr93	5.51E-06	1.73E-08	0.00E+00	6.69E-05	2.10E-07	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	1.43E-05	4.00E-06	2.05E-05	1.74E-04	4.86E-05	2.49E-04
Mo93	1.10E-07	2.91E-10	5.51E-09	1.34E-06	3.53E-09	6.69E-08
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	2.01E-06	3.26E-08	2.24E-06	2.45E-05	3.96E-07	2.72E-05
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	4.79E-08	7.14E-11	0.00E+00	5.82E-07	8.67E-10	0.00E+00
Ag108m	1.10E-04	2.99E-05	1.58E-04	1.34E-03	3.63E-04	1.91E-03
Ag110m	5.27E-02	2.39E-02	1.32E-01	6.40E-01	2.90E-01	1.60E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	9.59E-08	1.98E-09	1.07E-07	1.16E-06	2.40E-08	1.29E-06
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	4.32E-08	1.94E-08	1.08E-07	5.24E-07	2.35E-07	1.31E-06
Sb125	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	4.79E-09	5.99E-11	0.00E+00	5.82E-08	7.28E-10	0.00E+00
Cs134	1.88E-03	5.15E-04	2.68E-03	2.28E-02	6.25E-03	3.26E-02
Cs135	1.44E-08	1.30E-10	1.44E-08	1.75E-07	1.58E-09	1.75E-07
Cs137	4.79E-03	6.23E-04	7.99E-03	5.82E-02	7.57E-03	9.70E-02
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	1.92E-05	6.06E-08	1.92E-06	2.33E-04	7.36E-07	2.33E-05
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	2.51E-15	1.09E-14	8.37E-13	3.06E-14	1.32E-13	1.02E-11
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	2.23E-14	1.84E-14	4.46E-11	2.72E-13	2.24E-13	5.43E-10
Th230	1.78E-12	1.36E-12	1.78E-09	2.17E-11	1.65E-11	2.17E-08
Th232	2.32E-18	1.52E-18	0.00E+00	2.83E-17	1.85E-17	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	1.10E-12	9.11E-13	2.76E-09	1.35E-11	1.11E-11	3.36E-08
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	7.54E-13	5.92E-13	1.26E-10	9.19E-12	7.21E-12	1.53E-09
U234	3.81E-08	2.96E-08	6.34E-06	4.64E-07	3.61E-07	7.73E-05
U235	4.18E-10	3.26E-10	0.00E+00	5.09E-09	3.97E-09	0.00E+00
U236	1.20E-08	8.80E-09	1.99E-06	1.46E-07	1.07E-07	2.43E-05
U238	1.03E-08	7.17E-09	0.00E+00	1.26E-07	8.74E-08	0.00E+00
Np237	2.36E-08	2.03E-08	1.18E-05	2.87E-07	2.48E-07	1.44E-04
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	2.71E-04	2.43E-04	2.71E-01	3.30E-03	2.96E-03	3.30E+00
Pu239	1.47E-05	1.24E-05	1.47E-02	1.79E-04	1.51E-04	1.79E-01
Pu240	2.66E-05	2.24E-05	2.66E-02	3.24E-04	2.73E-04	3.24E-01
Pu241	5.22E-03	4.48E-06	8.70E-02	6.36E-02	5.46E-05	1.06E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	1.03E-07	8.19E-08	1.03E-04	1.25E-06	9.98E-07	1.25E-03
Am241	1.57E-05	1.42E-05	1.57E-02	1.91E-04	1.73E-04	1.91E-01
Am242m	1.03E-06	4.53E-08	1.03E-03	1.25E-05	5.52E-07	1.25E-02
Am243	1.61E-06	1.51E-06	1.61E-03	1.96E-05	1.85E-05	1.96E-02
Cm242	5.52E-04	5.49E-04	5.52E-02	6.72E-03	6.69E-03	6.72E-01
Cm243	1.78E-06	1.75E-06	1.78E-03	2.16E-05	2.13E-05	2.16E-02
Cm244	3.42E-04	3.23E-04	1.71E-01	4.16E-03	3.94E-03	2.08E+00
Cm245	4.11E-08	3.69E-08	4.57E-05	5.01E-07	4.50E-07	5.57E-04
Cm246	1.27E-08	1.12E-08	1.42E-05	1.55E-07	1.36E-07	1.73E-04
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>4.83E-01</b>	<b>7.87E-02</b>	<b>1.12E+00</b>	<b>5.86E+00</b>	<b>9.55E-01</b>	<b>1.36E+01</b>

**Table 27 EPR23 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	2.40E-04	2.52E-03
	beta/gamma	9.39E-02	9.85E-01
<b>Classification (GBq/te)</b>			
	alpha	9.58E-01	1.01E+01
	beta/gamma	3.76E+02	3.94E+03
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	2.18E-01	2.29E+00
	A <sub>2</sub> per gram (raw)	8.73E-07	9.16E-06
	A <sub>2</sub> per gram (conditioned)	2.74E-08	2.88E-07
	LSA criteria	LSA-II	LSA-II
<b>Heat output (W)</b>			
		1.54E-02	1.61E-01
<b>Soluble radionuclides (TBq)</b>			
	Sr90	2.43E-05	2.55E-04
	Cs134	3.67E-04	3.84E-03
	Cs137	9.36E-04	9.81E-03
<b>Radiotoxicity (Sv/yr)</b>		1.22E+01	1.28E+02
<b>Lifetime requirement (years)</b>		19	49
<b>Fissile content (g)</b>			
	U233	4.13E-10	4.35E-09
	U235	1.02E-03	1.07E-02
	U238	1.62E-01	1.70E+00
	Pu239	1.25E-03	1.32E-02
	Pu240	6.19E-04	6.50E-03
	Pu241	2.68E-04	2.81E-03
	Pu242	1.37E-04	1.44E-03
Total Fissile	U233+U235+Pu239+Pu241	2.54E-03	2.67E-02
Total U	U233+U235+U238	1.63E-01	1.72E+00
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	2.19E-03	2.30E-02
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	5.69E-10	5.98E-09
Total U	U232+U233+U234+U235+U236+U238	1.64E-01	1.73E+00
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	2.36E-03	2.48E-02
<b>Corrected Dose rates for Cast Iron Container (mSv/hr)</b>			
	3m from Cast Iron Type II Container	3.57E-03	3.74E-02
	1m from Cast Iron Type II Container	1.88E-02	1.97E-01
	0m from Cast Iron Type II Container	5.49E-02	5.76E-01
	3m from unshielded waste - approx value	4.21E-01	4.41E+00



**Table 28 EPR23 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Be10	4.30E-09	1.74E-10	7.17E-09	4.51E-08	1.82E-09	7.52E-08
C14	2.37E-04	1.88E-06	7.89E-05	2.48E-03	1.97E-05	8.27E-04
Cl36	2.15E-08	9.45E-10	3.59E-08	2.26E-07	9.91E-09	3.76E-07
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	1.08E-07	5.52E-11	0.00E+00	1.13E-06	5.79E-10	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	8.42E-03	1.13E-03	8.42E-03	8.83E-02	1.18E-02	8.83E-02
Fe55	4.52E-02	4.27E-05	1.13E-03	4.74E-01	4.47E-04	1.18E-02
Co60	2.15E-02	8.95E-03	5.38E-02	2.26E-01	9.39E-02	5.64E-01
Ni59	1.14E-05	1.27E-08	0.00E+00	1.20E-04	1.33E-07	0.00E+00
Ni63	4.95E-03	1.36E-05	1.65E-04	5.19E-02	1.42E-04	1.73E-03
Zn65	9.36E-04	8.86E-05	4.68E-04	9.81E-03	9.29E-04	4.91E-03
Se79	8.61E-08	1.40E-09	4.30E-08	9.03E-07	1.47E-08	4.51E-07
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	2.43E-05	4.40E-06	8.11E-05	2.55E-04	4.62E-05	8.50E-04
Zr93	1.08E-06	3.38E-09	0.00E+00	1.13E-05	3.54E-08	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	2.80E-06	7.80E-07	4.00E-06	2.93E-05	8.18E-06	4.19E-05
Mo93	2.15E-08	5.68E-11	1.08E-09	2.26E-07	5.96E-10	1.13E-08
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	3.93E-07	6.37E-09	4.37E-07	4.12E-06	6.68E-08	4.58E-06
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	9.36E-09	1.39E-11	0.00E+00	9.81E-08	1.46E-10	0.00E+00
Ag108m	2.15E-05	5.83E-06	3.07E-05	2.26E-04	6.12E-05	3.22E-04
Ag110m	1.03E-02	4.66E-03	2.57E-02	1.08E-01	4.89E-02	2.70E-01

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	1.87E-08	3.85E-10	2.08E-08	1.96E-07	4.04E-09	2.18E-07
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	8.42E-09	3.78E-09	2.11E-08	8.83E-08	3.96E-08	2.21E-07
Sb125	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	9.36E-10	1.17E-11	0.00E+00	9.81E-09	1.23E-10	0.00E+00
Cs134	3.67E-04	1.00E-04	5.24E-04	3.84E-03	1.05E-03	5.49E-03
Cs135	2.81E-09	2.53E-11	2.81E-09	2.94E-08	2.65E-10	2.94E-08
Cs137	9.36E-04	1.22E-04	1.56E-03	9.81E-03	1.28E-03	1.64E-02
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	3.74E-06	1.18E-08	3.74E-07	3.92E-05	1.24E-07	3.92E-06
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	4.91E-16	2.12E-15	1.64E-13	5.16E-15	2.23E-14	1.72E-12
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	4.36E-15	3.60E-15	8.72E-12	4.58E-14	3.79E-14	9.16E-11
Th230	3.48E-13	2.66E-13	3.48E-10	3.66E-12	2.79E-12	3.66E-09
Th232	4.54E-19	2.98E-19	0.00E+00	4.77E-18	3.13E-18	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	2.16E-13	1.78E-13	5.40E-10	2.27E-12	1.87E-12	5.67E-09
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	1.47E-13	1.16E-13	2.46E-11	1.55E-12	1.22E-12	2.58E-10
U234	7.44E-09	5.79E-09	1.24E-06	7.82E-08	6.08E-08	1.30E-05
U235	8.17E-11	6.37E-11	0.00E+00	8.59E-10	6.69E-10	0.00E+00
U236	2.34E-09	1.72E-09	3.89E-07	2.46E-08	1.81E-08	4.09E-06
U238	2.02E-09	1.40E-09	0.00E+00	2.12E-08	1.47E-08	0.00E+00
Np237	4.60E-09	3.97E-09	2.30E-06	4.84E-08	4.18E-08	2.42E-05
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	5.30E-05	4.75E-05	5.30E-02	5.57E-04	4.99E-04	5.57E-01
Pu239	2.88E-06	2.42E-06	2.88E-03	3.03E-05	2.54E-05	3.03E-02
Pu240	5.19E-06	4.37E-06	5.19E-03	5.46E-05	4.60E-05	5.46E-02
Pu241	1.02E-03	8.76E-07	1.70E-02	1.07E-02	9.21E-06	1.79E-01

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	2.01E-08	1.60E-08	2.01E-05	2.11E-07	1.68E-07	2.11E-04
Am241	3.07E-06	2.78E-06	3.07E-03	3.23E-05	2.92E-05	3.23E-02
Am242m	2.01E-07	8.85E-09	2.01E-04	2.11E-06	9.31E-08	2.11E-03
Am243	3.15E-07	2.96E-07	3.15E-04	3.31E-06	3.11E-06	3.31E-03
Cm242	1.08E-04	1.07E-04	1.08E-02	1.13E-03	1.13E-03	1.13E-01
Cm243	3.47E-07	3.42E-07	3.47E-04	3.65E-06	3.60E-06	3.65E-03
Cm244	6.68E-05	6.32E-05	3.34E-02	7.02E-04	6.64E-04	3.51E-01
Cm245	8.04E-09	7.22E-09	8.93E-06	8.45E-08	7.59E-08	9.39E-05
Cm246	2.49E-09	2.19E-09	2.77E-06	2.62E-08	2.30E-08	2.91E-05
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>9.42E-02</b>	<b>1.54E-02</b>	<b>2.18E-01</b>	<b>9.87E-01</b>	<b>1.61E-01</b>	<b>2.29E+00</b>

**Table 29 EPR24 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	8.28E-05	5.70E-04
	beta/gamma	2.92E-02	2.01E-01
<b>Classification (GBq/te)</b>			
	alpha	1.76E-01	1.21E+00
	beta/gamma	6.21E+01	4.28E+02
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	7.05E-02	4.86E-01
	A <sub>2</sub> per gram (raw)	1.50E-07	1.03E-06
	A <sub>2</sub> per gram (conditioned)	3.56E-08	2.45E-07
	LSA criteria	LSA-II	LSA-II
<b>Heat output (W)</b>			
		4.42E-03	3.04E-02
<b>Soluble radionuclides (TBq)</b>			
	Sr90	1.93E-04	1.33E-03
	Cs134	1.91E-04	1.31E-03
	Cs137	3.81E-04	2.62E-03
<b>Radiotoxicity (Sv/yr)</b>		4.36E+00	3.00E+01
<b>Lifetime requirement (years)</b>		11	33
<b>Fissile content (g)</b>			
	U233	1.43E-10	9.84E-10
	U235	3.53E-04	2.43E-03
	U238	5.60E-02	3.86E-01
	Pu239	4.34E-04	2.99E-03
	Pu240	2.14E-04	1.47E-03
	Pu241	9.25E-05	6.37E-04
	Pu242	4.74E-05	3.27E-04
Total Fissile	U233+U235+Pu239+Pu241	8.79E-04	6.06E-03
Total U	U233+U235+U238	5.64E-02	3.88E-01
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	7.56E-04	5.21E-03
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	1.97E-10	1.35E-09
Total U	U232+U233+U234+U235+U236+U238	5.67E-02	3.91E-01
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	8.16E-04	5.62E-03
<b>Corrected Dose rates for Cast Iron Container (mSv/hr)</b>			
	3m from Cast Iron Type II Container	2.54E-03	1.75E-02
	1m from Cast Iron Type II Container	1.29E-02	8.90E-02
	0m from Cast Iron Type II Container	4.27E-02	2.94E-01
	3m from unshielded waste - approx value	2.87E-01	1.97E+00

**Table 30 EPR24 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Be10	1.49E-09	6.00E-11	2.48E-09	1.02E-08	4.13E-10	1.71E-08
C14	8.17E-05	6.48E-07	2.72E-05	5.63E-04	4.46E-06	1.88E-04
Cl36	7.43E-09	3.26E-10	1.24E-08	5.12E-08	2.25E-09	8.53E-08
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	3.72E-08	1.91E-11	0.00E+00	2.56E-07	1.31E-10	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	7.62E-04	1.02E-04	7.62E-04	5.25E-03	7.03E-04	5.25E-03
Fe55	1.56E-02	1.47E-05	3.90E-04	1.07E-01	1.01E-04	2.69E-03
Co60	7.43E-03	3.09E-03	1.86E-02	5.12E-02	2.13E-02	1.28E-01
Ni59	3.94E-06	4.37E-09	0.00E+00	2.71E-05	3.01E-08	0.00E+00
Ni63	1.71E-03	4.68E-06	5.70E-05	1.18E-02	3.22E-05	3.92E-04
Zn65	1.91E-04	1.80E-05	9.53E-05	1.31E-03	1.24E-04	6.56E-04
Se79	1.52E-09	2.48E-11	7.62E-10	1.05E-08	1.71E-10	5.25E-09
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	1.93E-04	3.50E-05	6.44E-04	1.33E-03	2.41E-04	4.43E-03
Zr93	3.72E-07	1.17E-09	0.00E+00	2.56E-06	8.03E-09	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	9.66E-07	2.70E-07	1.38E-06	6.65E-06	1.86E-06	9.50E-06
Mo93	7.43E-09	1.96E-11	3.72E-10	5.12E-08	1.35E-10	2.56E-09
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	1.60E-07	2.59E-09	1.78E-07	1.10E-06	1.79E-08	1.22E-06
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	3.81E-09	5.68E-12	0.00E+00	2.62E-08	3.91E-11	0.00E+00
Ag108m	7.43E-06	2.01E-06	1.06E-05	5.12E-05	1.39E-05	7.31E-05
Ag110m	2.10E-03	9.50E-04	5.24E-03	1.44E-02	6.54E-03	3.61E-02

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	7.62E-09	1.57E-10	8.47E-09	5.25E-08	1.08E-09	5.83E-08
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	3.43E-09	1.54E-09	8.57E-09	2.36E-08	1.06E-08	5.90E-08
Sb125	1.91E-04	1.62E-05	1.91E-04	1.31E-03	1.11E-04	1.31E-03
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	3.81E-10	4.76E-12	0.00E+00	2.62E-09	3.28E-11	0.00E+00
Cs134	1.91E-04	5.22E-05	2.72E-04	1.31E-03	3.59E-04	1.87E-03
Cs135	1.14E-09	1.03E-11	1.14E-09	7.87E-09	7.10E-11	7.87E-09
Cs137	3.81E-04	4.95E-05	6.35E-04	2.62E-03	3.41E-04	4.37E-03
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	1.52E-06	4.82E-09	1.52E-07	1.05E-05	3.32E-08	1.05E-06
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	1.70E-16	7.34E-16	5.65E-14	1.17E-15	5.06E-15	3.89E-13
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	1.51E-15	1.24E-15	3.01E-12	1.04E-14	8.57E-15	2.08E-11
Th230	1.20E-13	9.18E-14	1.20E-10	8.28E-13	6.32E-13	8.28E-10
Th232	1.57E-19	1.03E-19	0.00E+00	1.08E-18	7.08E-19	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	7.46E-14	6.16E-14	1.87E-10	5.14E-13	4.24E-13	1.28E-09
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	5.09E-14	4.00E-14	8.49E-12	3.51E-13	2.75E-13	5.85E-11
U234	2.57E-09	2.00E-09	4.28E-07	1.77E-08	1.38E-08	2.95E-06
U235	2.82E-11	2.20E-11	0.00E+00	1.95E-10	1.52E-10	0.00E+00
U236	8.07E-10	5.94E-10	1.35E-07	5.56E-09	4.09E-09	9.27E-07
U238	6.97E-10	4.84E-10	0.00E+00	4.80E-09	3.34E-09	0.00E+00
Np237	1.59E-09	1.37E-09	7.96E-07	1.10E-08	9.46E-09	5.48E-06
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	1.83E-05	1.64E-05	1.83E-02	1.26E-04	1.13E-04	1.26E-01
Pu239	9.95E-07	8.35E-07	9.95E-04	6.85E-06	5.75E-06	6.85E-03
Pu240	1.79E-06	1.51E-06	1.79E-03	1.24E-05	1.04E-05	1.24E-02
Pu241	3.52E-04	3.03E-07	5.87E-03	2.43E-03	2.09E-06	4.05E-02



Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	6.94E-09	5.53E-09	6.94E-06	4.78E-08	3.81E-08	4.78E-05
Am241	1.06E-06	9.60E-07	1.06E-03	7.30E-06	6.61E-06	7.30E-03
Am242m	6.95E-08	3.06E-09	6.95E-05	4.79E-07	2.11E-08	4.79E-04
Am243	1.09E-07	1.02E-07	1.09E-04	7.50E-07	7.05E-07	7.50E-04
Cm242	3.73E-05	3.71E-05	3.73E-03	2.57E-04	2.56E-04	2.57E-02
Cm243	1.20E-07	1.18E-07	1.20E-04	8.27E-07	8.14E-07	8.27E-04
Cm244	2.31E-05	2.18E-05	1.15E-02	1.59E-04	1.50E-04	7.95E-02
Cm245	2.78E-09	2.50E-09	3.09E-06	1.91E-08	1.72E-08	2.13E-05
Cm246	8.61E-10	7.56E-10	9.57E-07	5.93E-09	5.21E-09	6.59E-06
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>2.93E-02</b>	<b>4.42E-03</b>	<b>7.05E-02</b>	<b>2.02E-01</b>	<b>3.04E-02</b>	<b>4.86E-01</b>

**Table 31 EPR25 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	2.24E-05	2.26E-04
	beta/gamma	8.69E-03	8.07E-02
<b>Classification (GBq/te)</b>			
	alpha	4.77E-02	4.81E-01
	beta/gamma	1.85E+01	1.72E+02
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	1.91E-02	1.93E-01
	A <sub>2</sub> per gram (raw)	4.07E-08	4.10E-07
	A <sub>2</sub> per gram (conditioned)	4.30E-09	4.33E-08
	LSA criteria	LSA-II	LSA-II
<b>Heat output (W)</b>			
		1.20E-03	1.21E-02
<b>Soluble radionuclides (TBq)</b>			
	Sr90	5.25E-05	5.29E-04
	Cs134	5.18E-05	5.22E-04
	Cs137	1.04E-04	1.04E-03
<b>Radiotoxicity (Sv/yr)</b>		1.19E+00	1.19E+01
<b>Lifetime requirement (years)</b>		1	21
<b>Fissile content (g)</b>			
	U233	3.87E-11	3.90E-10
	U235	9.56E-05	9.65E-04
	U238	1.52E-02	1.53E-01
	Pu239	1.17E-04	1.18E-03
	Pu240	5.79E-05	5.84E-04
	Pu241	2.50E-05	2.53E-04
	Pu242	1.28E-05	1.30E-04
Total Fissile	U233+U235+Pu239+Pu241	2.38E-04	2.40E-03
Total U	U233+U235+U238	1.53E-02	1.54E-01
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	2.05E-04	2.07E-03
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	5.32E-11	5.37E-10
Total U	U232+U233+U234+U235+U236+U238	1.54E-02	1.55E-01
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	2.21E-04	2.23E-03
<b>Corrected Dose rates for Cast Iron Container (mSv/hr)</b>			
	3m from Cast Iron Type II Container	4.80E-04	4.84E-03
	1m from Cast Iron Type II Container	2.48E-03	2.50E-02
	0m from Cast Iron Type II Container	7.86E-03	7.92E-02
	3m from unshielded waste - approx value	5.47E-02	5.52E-01

**Table 32 EPR25 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	7.52E-04	6.84E-07	1.88E-05	7.52E-04	6.84E-07	1.88E-05
Be10	4.04E-10	1.63E-11	6.73E-10	4.07E-09	1.64E-10	6.78E-09
C14	2.22E-05	1.76E-07	7.41E-06	2.24E-04	1.78E-06	7.46E-05
Cl36	2.02E-09	8.87E-11	3.37E-09	2.04E-08	8.93E-10	3.39E-08
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	1.01E-08	5.18E-12	0.00E+00	1.02E-07	5.22E-11	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	2.07E-04	2.78E-05	2.07E-04	2.09E-03	2.80E-04	2.09E-03
Fe55	4.24E-03	4.00E-06	1.06E-04	4.27E-02	4.03E-05	1.07E-03
Co60	2.02E-03	8.40E-04	5.05E-03	2.04E-02	8.47E-03	5.09E-02
Ni59	1.07E-06	1.19E-09	0.00E+00	1.08E-05	1.20E-08	0.00E+00
Ni63	4.65E-04	1.27E-06	1.55E-05	4.68E-03	1.28E-05	1.56E-04
Zn65	5.18E-05	4.90E-06	2.59E-05	5.22E-04	4.94E-05	2.61E-04
Se79	4.14E-10	6.75E-12	2.07E-10	4.17E-09	6.80E-11	2.09E-09
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	5.25E-05	9.51E-06	1.75E-04	5.29E-04	9.58E-05	1.76E-03
Zr93	1.01E-07	3.17E-10	0.00E+00	1.02E-06	3.20E-09	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	2.63E-07	7.33E-08	3.75E-07	2.65E-06	7.38E-07	3.78E-06
Mo93	2.02E-09	5.33E-12	1.01E-10	2.04E-08	5.37E-11	1.02E-09
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	4.35E-08	7.05E-10	4.83E-08	4.38E-07	7.10E-09	4.87E-07
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	1.04E-09	1.54E-12	0.00E+00	1.04E-08	1.56E-11	0.00E+00
Ag108m	2.02E-06	5.47E-07	2.89E-06	2.04E-05	5.52E-06	2.91E-05
Ag110m	5.70E-04	2.58E-04	1.42E-03	5.74E-03	2.60E-03	1.43E-02

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	2.07E-09	4.27E-11	2.30E-09	2.09E-08	4.30E-10	2.32E-08
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	9.32E-10	4.19E-10	2.33E-09	9.39E-09	4.22E-09	2.35E-08
Sb125	5.18E-05	4.39E-06	5.18E-05	5.22E-04	4.43E-05	5.22E-04
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	1.04E-10	1.29E-12	0.00E+00	1.04E-09	1.30E-11	0.00E+00
Cs134	5.18E-05	1.42E-05	7.40E-05	5.22E-04	1.43E-04	7.45E-04
Cs135	3.11E-10	2.80E-12	3.11E-10	3.13E-09	2.82E-11	3.13E-09
Cs137	1.04E-04	1.35E-05	1.73E-04	1.04E-03	1.36E-04	1.74E-03
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	4.14E-07	1.31E-09	4.14E-08	4.17E-06	1.32E-08	4.17E-07
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	4.59E-17	1.99E-16	1.53E-14	4.63E-16	2.01E-15	1.54E-13
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	4.08E-16	3.37E-16	8.16E-13	4.12E-15	3.40E-15	8.23E-12
Th230	3.26E-14	2.48E-14	3.26E-11	3.29E-13	2.51E-13	3.29E-10
Th232	4.25E-20	2.78E-20	0.00E+00	4.29E-19	2.81E-19	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	2.02E-14	1.67E-14	5.05E-11	2.04E-13	1.68E-13	5.10E-10
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	1.38E-14	1.08E-14	2.30E-12	1.39E-13	1.09E-13	2.32E-11
U234	6.96E-10	5.41E-10	1.16E-07	7.02E-09	5.47E-09	1.17E-06
U235	7.65E-12	5.96E-12	0.00E+00	7.72E-11	6.01E-11	0.00E+00
U236	2.19E-10	1.61E-10	3.64E-08	2.21E-09	1.62E-09	3.68E-07
U238	1.89E-10	1.31E-10	0.00E+00	1.90E-09	1.32E-09	0.00E+00
Np237	4.31E-10	3.72E-10	2.15E-07	4.35E-09	3.75E-09	2.17E-06
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	4.96E-06	4.44E-06	4.96E-03	5.00E-05	4.48E-05	5.00E-02
Pu239	2.69E-07	2.26E-07	2.69E-04	2.72E-06	2.28E-06	2.72E-03
Pu240	4.86E-07	4.09E-07	4.86E-04	4.90E-06	4.13E-06	4.90E-03
Pu241	9.54E-05	8.20E-08	1.59E-03	9.63E-04	8.27E-07	1.61E-02

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	1.88E-09	1.50E-09	1.88E-06	1.90E-08	1.51E-08	1.90E-05
Am241	2.87E-07	2.60E-07	2.87E-04	2.90E-06	2.62E-06	2.90E-03
Am242m	1.88E-08	8.28E-10	1.88E-05	1.90E-07	8.36E-09	1.90E-04
Am243	2.95E-08	2.77E-08	2.95E-05	2.97E-07	2.80E-07	2.97E-04
Cm242	1.01E-05	1.00E-05	1.01E-03	1.02E-04	1.01E-04	1.02E-02
Cm243	3.25E-08	3.20E-08	3.25E-05	3.28E-07	3.23E-07	3.28E-04
Cm244	6.25E-06	5.91E-06	3.12E-03	6.31E-05	5.97E-05	3.15E-02
Cm245	7.52E-10	6.76E-10	8.36E-07	7.59E-09	6.82E-09	8.44E-06
Cm246	2.33E-10	2.05E-10	2.59E-07	2.35E-09	2.07E-09	2.61E-06
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>8.71E-03</b>	<b>1.20E-03</b>	<b>1.91E-02</b>	<b>8.09E-02</b>	<b>1.21E-02</b>	<b>1.93E-01</b>

**Table 33 EPR26 Radionuclide Inventory Data – Summary**

		Per Package Values	
		Average	Maximum
<b>Total Activity (TBq)</b>			
	alpha	2.24E-05	2.26E-04
	beta/gamma	8.69E-03	8.07E-02
<b>Classification (GBq/te)</b>			
	alpha	4.77E-02	4.81E-01
	beta/gamma	1.85E+01	1.72E+02
<b>A<sub>2</sub> content</b>			
	A <sub>2</sub>	1.91E-02	1.93E-01
	A <sub>2</sub> per gram (raw)	4.07E-08	4.10E-07
	A <sub>2</sub> per gram (conditioned)	4.30E-09	4.33E-08
	LSA criteria	LSA-II	LSA-II
<b>Heat output (W)</b>			
		1.20E-03	1.21E-02
<b>Soluble radionuclides (TBq)</b>			
	Sr90	5.25E-05	5.29E-04
	Cs134	5.18E-05	5.22E-04
	Cs137	1.04E-04	1.04E-03
<b>Radiotoxicity (Sv/yr)</b>		1.19E+00	1.19E+01
<b>Lifetime requirement (years)</b>		1	21
<b>Fissile content (g)</b>			
	U233	3.87E-11	3.90E-10
	U235	9.56E-05	9.65E-04
	U238	1.52E-02	1.53E-01
	Pu239	1.17E-04	1.18E-03
	Pu240	5.79E-05	5.84E-04
	Pu241	2.50E-05	2.53E-04
	Pu242	1.28E-05	1.30E-04
Total Fissile	U233+U235+Pu239+Pu241	2.38E-04	2.40E-03
Total U	U233+U235+U238	1.53E-02	1.54E-01
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	2.05E-04	2.07E-03
U235 enrichment	U235/U-tot	0.63%	0.63%
Pu239 separation	Pu239/(Pu239+U-tot)	0.76%	0.76%
<b>Safeguards content (g)</b>			
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	5.32E-11	5.37E-10
Total U	U232+U233+U234+U235+U236+U238	1.54E-02	1.55E-01
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	2.21E-04	2.23E-03
<b>Corrected Dose rates for Cast Iron Container (mSv/hr)</b>			
	3m from Cast Iron Type II Container	4.80E-04	4.84E-03
	1m from Cast Iron Type II Container	2.48E-03	2.50E-02
	0m from Cast Iron Type II Container	7.86E-03	7.92E-02
	3m from unshielded waste - approx value	5.47E-02	5.52E-01

**Table 34 EPR26 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	7.52E-04	6.84E-07	1.88E-05	7.52E-04	6.84E-07	1.88E-05
Be10	4.04E-10	1.63E-11	6.73E-10	4.07E-09	1.64E-10	6.78E-09
C14	2.22E-05	1.76E-07	7.41E-06	2.24E-04	1.78E-06	7.46E-05
Cl36	2.02E-09	8.87E-11	3.37E-09	2.04E-08	8.93E-10	3.39E-08
Ar39	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ar42	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
K40	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ca41	1.01E-08	5.18E-12	0.00E+00	1.02E-07	5.22E-11	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	2.07E-04	2.78E-05	2.07E-04	2.09E-03	2.80E-04	2.09E-03
Fe55	4.24E-03	4.00E-06	1.06E-04	4.27E-02	4.03E-05	1.07E-03
Co60	2.02E-03	8.40E-04	5.05E-03	2.04E-02	8.47E-03	5.09E-02
Ni59	1.07E-06	1.19E-09	0.00E+00	1.08E-05	1.20E-08	0.00E+00
Ni63	4.65E-04	1.27E-06	1.55E-05	4.68E-03	1.28E-05	1.56E-04
Zn65	5.18E-05	4.90E-06	2.59E-05	5.22E-04	4.94E-05	2.61E-04
Se79	4.14E-10	6.75E-12	2.07E-10	4.17E-09	6.80E-11	2.09E-09
Kr81	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Kr85	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Rb87	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr90	5.25E-05	9.51E-06	1.75E-04	5.29E-04	9.58E-05	1.76E-03
Zr93	1.01E-07	3.17E-10	0.00E+00	1.02E-06	3.20E-09	0.00E+00
Nb91	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb92	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb93m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nb94	2.63E-07	7.33E-08	3.75E-07	2.65E-06	7.38E-07	3.78E-06
Mo93	2.02E-09	5.33E-12	1.01E-10	2.04E-08	5.37E-11	1.02E-09
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	4.35E-08	7.05E-10	4.83E-08	4.38E-07	7.10E-09	4.87E-07
Ru106	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pd107	1.04E-09	1.54E-12	0.00E+00	1.04E-08	1.56E-11	0.00E+00
Ag108m	2.02E-06	5.47E-07	2.89E-06	2.04E-05	5.52E-06	2.91E-05
Ag110m	5.70E-04	2.58E-04	1.42E-03	5.74E-03	2.60E-03	1.43E-02



Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cd113m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn119m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn121m	2.07E-09	4.27E-11	2.30E-09	2.09E-08	4.30E-10	2.32E-08
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	9.32E-10	4.19E-10	2.33E-09	9.39E-09	4.22E-09	2.35E-08
Sb125	5.18E-05	4.39E-06	5.18E-05	5.22E-04	4.43E-05	5.22E-04
Sb126	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te125m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	1.04E-10	1.29E-12	0.00E+00	1.04E-09	1.30E-11	0.00E+00
Cs134	5.18E-05	1.42E-05	7.40E-05	5.22E-04	1.43E-04	7.45E-04
Cs135	3.11E-10	2.80E-12	3.11E-10	3.13E-09	2.82E-11	3.13E-09
Cs137	1.04E-04	1.35E-05	1.73E-04	1.04E-03	1.36E-04	1.74E-03
Ba133	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ce144	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm145	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm147	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sm151	4.14E-07	1.31E-09	4.14E-08	4.17E-06	1.32E-08	4.17E-07
Eu152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu155	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pt193	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tl204	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb205	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pb210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi208	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Bi210m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Po210	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra223	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra225	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra226	4.59E-17	1.99E-16	1.53E-14	4.63E-16	2.01E-15	1.54E-13
Ra228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ac227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th227	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th229	4.08E-16	3.37E-16	8.16E-13	4.12E-15	3.40E-15	8.23E-12
Th230	3.26E-14	2.48E-14	3.26E-11	3.29E-13	2.51E-13	3.29E-10
Th232	4.25E-20	2.78E-20	0.00E+00	4.29E-19	2.81E-19	0.00E+00
Th234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pa231	2.02E-14	1.67E-14	5.05E-11	2.04E-13	1.68E-13	5.10E-10
Pa233	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
U233	1.38E-14	1.08E-14	2.30E-12	1.39E-13	1.09E-13	2.32E-11
U234	6.96E-10	5.41E-10	1.16E-07	7.02E-09	5.47E-09	1.17E-06
U235	7.65E-12	5.96E-12	0.00E+00	7.72E-11	6.01E-11	0.00E+00
U236	2.19E-10	1.61E-10	3.64E-08	2.21E-09	1.62E-09	3.68E-07
U238	1.89E-10	1.31E-10	0.00E+00	1.90E-09	1.32E-09	0.00E+00
Np237	4.31E-10	3.72E-10	2.15E-07	4.35E-09	3.75E-09	2.17E-06
Pu236	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu238	4.96E-06	4.44E-06	4.96E-03	5.00E-05	4.48E-05	5.00E-02
Pu239	2.69E-07	2.26E-07	2.69E-04	2.72E-06	2.28E-06	2.72E-03
Pu240	4.86E-07	4.09E-07	4.86E-04	4.90E-06	4.13E-06	4.90E-03
Pu241	9.54E-05	8.20E-08	1.59E-03	9.63E-04	8.27E-07	1.61E-02

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	1.88E-09	1.50E-09	1.88E-06	1.90E-08	1.51E-08	1.90E-05
Am241	2.87E-07	2.60E-07	2.87E-04	2.90E-06	2.62E-06	2.90E-03
Am242m	1.88E-08	8.28E-10	1.88E-05	1.90E-07	8.36E-09	1.90E-04
Am243	2.95E-08	2.77E-08	2.95E-05	2.97E-07	2.80E-07	2.97E-04
Cm242	1.01E-05	1.00E-05	1.01E-03	1.02E-04	1.01E-04	1.02E-02
Cm243	3.25E-08	3.20E-08	3.25E-05	3.28E-07	3.23E-07	3.28E-04
Cm244	6.25E-06	5.91E-06	3.12E-03	6.31E-05	5.97E-05	3.15E-02
Cm245	7.52E-10	6.76E-10	8.36E-07	7.59E-09	6.82E-09	8.44E-06
Cm246	2.33E-10	2.05E-10	2.59E-07	2.35E-09	2.07E-09	2.61E-06
Cm248	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf249	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf250	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf251	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cf252	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
<b>Total</b>	<b>8.71E-03</b>	<b>1.20E-03</b>	<b>1.91E-02</b>	<b>8.09E-02</b>	<b>1.21E-02</b>	<b>1.93E-01</b>

**Table 35 EPR06 Radionuclide Inventory Data – Summary**

		Per Package Values	
Total Activity (TBq)		Average	Maximum
	alpha	1.21E-04	1.21E-04
	beta/gamma	1.98E+00	1.98E+00
Classification (GBq/te)		Average	Maximum
	alpha	5.88E-03	5.88E-03
	beta/gamma	9.66E+01	9.66E+01
A <sub>2</sub> content		Average	Maximum
	A <sub>2</sub>	3.29E-01	3.29E-01
	A <sub>2</sub> per gram (raw)	1.60E-08	1.60E-08
	A <sub>2</sub> per gram (conditioned)	6.94E-09	6.94E-09
	LSA criteria	LSA-II	LSA-II
Heat output (W)		Average	Maximum
		3.14E-02	3.14E-02
Soluble radionuclides (TBq)		Average	Maximum
	Sr90	6.63E-04	6.63E-04
	Cs134	1.01E-08	1.01E-08
	Cs137	9.01E-04	9.01E-04
Radiotoxicity (Sv/yr)		Average	Maximum
		1.55E+01	1.55E+01
Lifetime requirement (years)		Average	Maximum
		27	27
Fissile content (g)		Average	Maximum
	U233	8.45E-04	8.45E-04
	U235	2.40E-04	2.40E-04
	U238	5.56E-04	5.56E-04
	Pu239	1.09E-04	1.09E-04
	Pu240	6.30E-05	6.30E-05
	Pu241	6.90E-06	6.90E-06
	Pu242	3.28E-05	3.28E-05
Total Fissile	U233+U235+Pu239+Pu241	1.20E-03	1.20E-03
Total U	U233+U235+U238	1.64E-03	1.64E-03
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	1.12E-03	1.12E-03
U235 enrichment	U235/U-tot	14.65%	14.65%
Pu239 separation	Pu239/(Pu239+U-tot)	6.21%	6.21%
Safeguards content (g)		Average	Maximum
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	1.01E-02	1.01E-02
Total U	U232+U233+U234+U235+U236+U238	2.15E-03	2.15E-03
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	3.11E-04	3.11E-04
Dose rates (mSv/hr)		Average	Maximum
	3m from 4m box (100mm concrete)	4.71E-02	4.71E-02
	1m from 4m box (100mm concrete)	1.45E-01	1.45E-01
	0m from 4m box (100mm concrete)	1.93E-01	1.93E-01
	3m from 4m LLW box	1.30E-01	1.30E-01
	1m from 4m LLW box	4.65E-01	4.65E-01
	0m from 4m LLW box	8.98E-01	8.98E-01

**Table 36 EPR06 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	2.48E-01	2.26E-04	6.20E-03	2.48E-01	2.26E-04	6.20E-03
Be10	3.68E-07	1.49E-08	6.14E-07	3.68E-07	1.49E-08	6.14E-07
C14	3.75E-03	2.98E-05	1.25E-03	3.75E-03	2.98E-05	1.25E-03
Cl36	3.11E-06	1.36E-07	5.18E-06	3.11E-06	1.36E-07	5.18E-06
Ar39	2.57E-03	9.00E-05	1.29E-04	2.57E-03	9.00E-05	1.29E-04
Ar42	5.91E-09	1.84E-09	2.96E-07	5.91E-09	1.84E-09	2.96E-07
K40	3.22E-09	3.51E-10	3.57E-09	3.22E-09	3.51E-10	3.57E-09
Ca41	4.69E-06	2.41E-09	0.00E+00	4.69E-06	2.41E-09	0.00E+00
Mn53	1.29E-07	1.07E-10	0.00E+00	1.29E-07	1.07E-10	0.00E+00
Mn54	3.01E-14	4.03E-15	3.01E-14	3.01E-14	4.03E-15	3.01E-14
Fe55	3.04E-03	2.87E-06	7.59E-05	3.04E-03	2.87E-06	7.59E-05
Co60	6.22E-02	2.59E-02	1.56E-01	6.22E-02	2.59E-02	1.56E-01
Ni59	2.14E-02	2.37E-05	0.00E+00	2.14E-02	2.37E-05	0.00E+00
Ni63	1.60E+00	4.37E-03	5.32E-02	1.60E+00	4.37E-03	5.32E-02
Zn65	8.33E-19	7.89E-20	4.17E-19	8.33E-19	7.89E-20	4.17E-19
Se79	2.17E-06	3.54E-08	1.09E-06	2.17E-06	3.54E-08	1.09E-06
Kr81	2.93E-06	7.79E-09	7.32E-08	2.93E-06	7.79E-09	7.32E-08
Kr85	1.27E-04	5.13E-06	1.27E-05	1.27E-04	5.13E-06	1.27E-05
Rb87	6.49E-11	8.17E-13	0.00E+00	6.49E-11	8.17E-13	0.00E+00
Sr90	6.63E-04	1.20E-04	2.21E-03	6.63E-04	1.20E-04	2.21E-03
Zr93	5.56E-08	1.75E-10	0.00E+00	5.56E-08	1.75E-10	0.00E+00
Nb91	1.22E-04	3.37E-07	6.10E-03	1.22E-04	3.37E-07	6.10E-03
Nb92	5.16E-09	1.25E-09	2.58E-07	5.16E-09	1.25E-09	2.58E-07
Nb93m	2.58E-02	1.25E-04	8.60E-04	2.58E-02	1.25E-04	8.60E-04
Nb94	7.23E-04	2.02E-04	1.03E-03	7.23E-04	2.02E-04	1.03E-03
Mo93	8.69E-03	2.29E-05	4.35E-04	8.69E-03	2.29E-05	4.35E-04
Tc97	7.01E-11	2.40E-12	0.00E+00	7.01E-11	2.40E-12	0.00E+00
Tc99	1.53E-04	2.47E-06	1.70E-04	1.53E-04	2.47E-06	1.70E-04
Ru106	6.00E-16	1.56E-16	3.00E-15	6.00E-16	1.56E-16	3.00E-15
Pd107	1.37E-08	2.03E-11	0.00E+00	1.37E-08	2.03E-11	0.00E+00
Ag108m	7.41E-07	2.01E-07	1.06E-06	7.41E-07	2.01E-07	1.06E-06

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Ag110m	6.96E-22	3.15E-22	1.74E-21	6.96E-22	3.15E-22	1.74E-21
Cd109	1.26E-12	2.19E-14	6.29E-13	1.26E-12	2.19E-14	6.29E-13
Cd113m	1.59E-06	4.69E-08	3.17E-06	1.59E-06	4.69E-08	3.17E-06
Sn119m	1.02E-17	1.42E-19	3.39E-19	1.02E-17	1.42E-19	3.39E-19
Sn121m	6.47E-05	1.33E-06	7.19E-05	6.47E-05	1.33E-06	7.19E-05
Sn123	8.75E-39	7.40E-40	1.46E-38	8.75E-39	7.40E-40	1.46E-38
Sn126	2.23E-08	1.00E-08	5.58E-08	2.23E-08	1.00E-08	5.58E-08
Sb125	6.00E-07	5.09E-08	6.00E-07	6.00E-07	5.09E-08	6.00E-07
Sb126	3.13E-09	1.56E-09	7.82E-09	3.13E-09	1.56E-09	7.82E-09
Te125m	1.50E-07	3.41E-09	1.67E-07	1.50E-07	3.41E-09	1.67E-07
Te127m	5.39E-45	2.72E-46	1.08E-44	5.39E-45	2.72E-46	1.08E-44
I129	2.55E-09	3.18E-11	0.00E+00	2.55E-09	3.18E-11	0.00E+00
Cs134	1.01E-08	2.77E-09	1.44E-08	1.01E-08	2.77E-09	1.44E-08
Cs135	3.60E-08	3.25E-10	3.60E-08	3.60E-08	3.25E-10	3.60E-08
Cs137	9.01E-04	1.17E-04	1.50E-03	9.01E-04	1.17E-04	1.50E-03
Ba133	2.64E-04	1.92E-05	8.79E-05	2.64E-04	1.92E-05	8.79E-05
La137	2.44E-06	1.39E-08	4.07E-07	2.44E-06	1.39E-08	4.07E-07
La138	8.61E-13	1.76E-13	4.31E-11	8.61E-13	1.76E-13	4.31E-11
Ce144	5.47E-19	1.19E-19	2.73E-18	5.47E-19	1.19E-19	2.73E-18
Pm145	5.08E-07	3.74E-09	5.08E-08	5.08E-07	3.74E-09	5.08E-08
Pm147	1.34E-08	1.33E-10	6.70E-09	1.34E-08	1.33E-10	6.70E-09
Sm147	3.14E-14	1.15E-14	0.00E+00	3.14E-14	1.15E-14	0.00E+00
Sm151	6.62E-06	2.09E-08	6.62E-07	6.62E-06	2.09E-08	6.62E-07
Eu152	2.30E-08	4.69E-09	2.30E-08	2.30E-08	4.69E-09	2.30E-08
Eu154	9.98E-06	2.41E-06	1.66E-05	9.98E-06	2.41E-06	1.66E-05
Eu155	3.31E-07	6.53E-09	1.10E-07	3.31E-07	6.53E-09	1.10E-07
Gd153	1.46E-25	3.40E-27	1.62E-26	1.46E-25	3.40E-27	1.62E-26
Ho163	1.01E-10	3.22E-14	5.03E-09	1.01E-10	3.22E-14	5.03E-09
Ho166m	6.83E-08	2.00E-08	1.37E-07	6.83E-08	2.00E-08	1.37E-07
Tm170	1.11E-36	5.97E-38	1.86E-36	1.11E-36	5.97E-38	1.86E-36
Tm171	6.79E-10	2.83E-12	1.70E-11	6.79E-10	2.83E-12	1.70E-11
Lu174	4.95E-10	1.37E-11	5.50E-11	4.95E-10	1.37E-11	5.50E-11
Lu176	5.48E-14	6.85E-15	2.74E-12	5.48E-14	6.85E-15	2.74E-12

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf178n	1.59E-08	4.94E-09	7.96E-07	1.59E-08	4.94E-09	7.96E-07
Hf182	2.20E-09	1.00E-10	0.00E+00	2.20E-09	1.00E-10	0.00E+00
Pt193	4.17E-03	2.49E-05	1.04E-04	4.17E-03	2.49E-05	1.04E-04
Tl204	4.23E-05	8.13E-09	6.05E-05	4.23E-05	8.13E-09	6.05E-05
Pb205	7.19E-09	7.34E-11	0.00E+00	7.19E-09	7.34E-11	0.00E+00
Pb210	2.12E-10	1.47E-11	4.23E-09	2.12E-10	1.47E-11	4.23E-09
Bi208	2.99E-10	9.21E-11	1.49E-08	2.99E-10	9.21E-11	1.49E-08
Bi210m	2.74E-11	2.57E-11	1.37E-09	2.74E-11	2.57E-11	1.37E-09
Po210	2.15E-10	1.86E-10	1.08E-08	2.15E-10	1.86E-10	1.08E-08
Ra223	3.72E-09	1.68E-08	5.31E-07	3.72E-09	1.68E-08	5.31E-07
Ra225	1.78E-09	8.28E-09	4.45E-07	1.78E-09	8.28E-09	4.45E-07
Ra226	4.39E-12	1.90E-11	1.46E-09	4.39E-12	1.90E-11	1.46E-09
Ra228	4.12E-11	9.27E-12	2.06E-09	4.12E-11	9.27E-12	2.06E-09
Ac227	3.71E-09	5.38E-11	4.12E-05	3.71E-09	5.38E-11	4.12E-05
Th227	3.67E-09	3.63E-09	7.33E-07	3.67E-09	3.63E-09	7.33E-07
Th228	3.35E-06	2.02E-05	3.35E-03	3.35E-06	2.02E-05	3.35E-03
Th229	1.78E-09	1.47E-09	3.57E-06	1.78E-09	1.47E-09	3.57E-06
Th230	1.33E-10	1.02E-10	1.33E-07	1.33E-10	1.02E-10	1.33E-07
Th232	4.11E-11	2.69E-11	0.00E+00	4.11E-11	2.69E-11	0.00E+00
Th234	6.91E-12	1.01E-12	2.30E-11	6.91E-12	1.01E-12	2.30E-11
Pa231	4.99E-09	4.12E-09	1.25E-05	4.99E-09	4.12E-09	1.25E-05
Pa233	1.71E-09	1.13E-10	2.44E-09	1.71E-09	1.13E-10	2.44E-09
U232	3.26E-06	2.83E-06	3.26E-03	3.26E-06	2.83E-06	3.26E-03
U233	3.01E-07	2.36E-07	5.02E-05	3.01E-07	2.36E-07	5.02E-05
U234	7.60E-08	5.91E-08	1.27E-05	7.60E-08	5.91E-08	1.27E-05
U235	1.92E-11	1.50E-11	0.00E+00	1.92E-11	1.50E-11	0.00E+00
U236	4.21E-10	3.10E-10	7.01E-08	4.21E-10	3.10E-10	7.01E-08
U238	6.91E-12	4.81E-12	0.00E+00	6.91E-12	4.81E-12	0.00E+00
Np237	1.71E-09	1.47E-09	8.53E-07	1.71E-09	1.47E-09	8.53E-07
Pu236	8.51E-13	8.00E-13	2.84E-10	8.51E-13	8.00E-13	2.84E-10
Pu238	6.33E-05	5.67E-05	6.33E-02	6.33E-05	5.67E-05	6.33E-02
Pu239	2.49E-07	2.09E-07	2.49E-04	2.49E-07	2.09E-07	2.49E-04
Pu240	5.29E-07	4.45E-07	5.29E-04	5.29E-07	4.45E-07	5.29E-04

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu241	2.63E-05	2.26E-08	4.38E-04	2.63E-05	2.26E-08	4.38E-04
Pu242	4.80E-09	3.83E-09	4.80E-06	4.80E-09	3.83E-09	4.80E-06
Am241	5.52E-06	5.00E-06	5.52E-03	5.52E-06	5.00E-06	5.52E-03
Am242m	3.11E-08	1.37E-09	3.11E-05	3.11E-08	1.37E-09	3.11E-05
Am243	1.60E-07	1.50E-07	1.60E-04	1.60E-07	1.50E-07	1.60E-04
Cm242	2.57E-08	2.55E-08	2.57E-06	2.57E-08	2.55E-08	2.57E-06
Cm243	6.17E-08	6.08E-08	6.17E-05	6.17E-08	6.08E-08	6.17E-05
Cm244	4.26E-05	4.03E-05	2.13E-02	4.26E-05	4.03E-05	2.13E-02
Cm245	1.35E-07	1.22E-07	1.51E-04	1.35E-07	1.22E-07	1.51E-04
Cm246	8.02E-07	7.04E-07	8.91E-04	8.02E-07	7.04E-07	8.91E-04
Cm248	2.09E-09	7.04E-09	6.98E-06	2.09E-09	7.04E-09	6.98E-06
Cf249	1.13E-07	1.21E-07	1.41E-04	1.13E-07	1.21E-07	1.41E-04
Cf250	1.03E-07	1.04E-07	5.16E-05	1.03E-07	1.04E-07	5.16E-05
Cf251	9.06E-09	8.97E-09	1.29E-05	9.06E-09	8.97E-09	1.29E-05
Cf252	2.00E-10	5.91E-10	6.68E-08	2.00E-10	5.91E-10	6.68E-08
<b>Total</b>	<b>1.98E+00</b>	<b>3.14E-02</b>	<b>3.29E-01</b>	<b>1.98E+00</b>	<b>3.14E-02</b>	<b>3.29E-01</b>



**Table 37 EPR07 Radionuclide Inventory Data – Summary**

		Per Package Values	
Total Activity (TBq)		Average	Maximum
	alpha	1.88E-02	1.88E-02
	beta/gamma	1.12E+03	1.12E+03
Classification (GBq/te)		Average	Maximum
	alpha	6.48E+00	6.48E+00
	beta/gamma	3.85E+05	3.85E+05
A <sub>2</sub> content		Average	Maximum
	A <sub>2</sub>	8.38E+01	8.38E+01
	A <sub>2</sub> per gram (raw)	2.89E-05	2.89E-05
	A <sub>2</sub> per gram (conditioned)	1.03E-05	1.03E-05
	LSA criteria	N/A	N/A
Heat output (W)		Average	Maximum
		7.93E+00	7.93E+00
Soluble radionuclides (TBq)		Average	Maximum
	Sr90	1.03E-01	1.03E-01
	Cs134	1.57E-06	1.57E-06
	Cs137	1.40E-01	1.40E-01
Radiotoxicity (Sv/yr)		9.82E+03	9.82E+03
Lifetime requirement (years)		971	971
Fissile content (g)		Average	Maximum
	U233	1.32E-01	1.32E-01
	U235	3.75E-02	3.75E-02
	U238	8.66E-02	8.66E-02
	Pu239	1.69E-02	1.69E-02
	Pu240	9.81E-03	9.81E-03
	Pu241	1.07E-03	1.07E-03
	Pu242	5.11E-03	5.11E-03
Total Fissile	U233+U235+Pu239+Pu241	1.87E-01	1.87E-01
Total U	U233+U235+U238	2.56E-01	2.56E-01
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	1.74E-01	1.74E-01
U235 enrichment	U235/U-tot	14.65%	14.65%
Pu239 separation	Pu239/(Pu239+U-tot)	6.21%	6.21%
Safeguards content (g)		Average	Maximum
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	1.58E+00	1.58E+00
Total U	U232+U233+U234+U235+U236+U238	3.35E-01	3.35E-01
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	4.85E-02	4.85E-02
Dose rates (mSv/hr)		Average	Maximum
	3m from 3 m <sup>3</sup> box	4.87E+01	4.87E+01
	1m from SWTC-285	4.41E-03	4.41E-03
	0m from SWTC-285	4.79E-03	4.79E-03
	1m from SWTC-070	2.24E+01	2.24E+01
	0m from SWTC-070	3.24E+01	3.24E+01

**Table 38 EPR07 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	3.86E+01	3.51E-02	9.65E-01	3.86E+01	3.51E-02	9.65E-01
Be10	5.74E-05	2.32E-06	9.57E-05	5.74E-05	2.32E-06	9.57E-05
C14	4.10E+00	3.25E-02	1.37E+00	4.10E+00	3.25E-02	1.37E+00
Cl36	4.84E-04	2.12E-05	8.07E-04	4.84E-04	2.12E-05	8.07E-04
Ar39	4.00E-01	1.40E-02	2.00E-02	4.00E-01	1.40E-02	2.00E-02
Ar42	9.21E-07	2.87E-07	4.61E-05	9.21E-07	2.87E-07	4.61E-05
K40	5.01E-07	5.46E-08	5.57E-07	5.01E-07	5.46E-08	5.57E-07
Ca41	7.31E-04	3.75E-07	0.00E+00	7.31E-04	3.75E-07	0.00E+00
Mn53	3.14E-05	2.62E-08	0.00E+00	3.14E-05	2.62E-08	0.00E+00
Mn54	2.33E-11	3.12E-12	2.33E-11	2.33E-11	3.12E-12	2.33E-11
Fe55	3.47E-01	3.28E-04	8.67E-03	3.47E-01	3.28E-04	8.67E-03
Co60	1.17E+01	4.86E+00	2.92E+01	1.17E+01	4.86E+00	2.92E+01
Ni59	1.13E+01	1.25E-02	0.00E+00	1.13E+01	1.25E-02	0.00E+00
Ni63	1.04E+03	2.86E+00	3.47E+01	1.04E+03	2.86E+00	3.47E+01
Zn65	1.30E-16	1.23E-17	6.49E-17	1.30E-16	1.23E-17	6.49E-17
Se79	3.39E-04	5.52E-06	1.69E-04	3.39E-04	5.52E-06	1.69E-04
Kr81	4.56E-04	1.21E-06	1.14E-05	4.56E-04	1.21E-06	1.14E-05
Kr85	1.97E-02	7.98E-04	1.97E-03	1.97E-02	7.98E-04	1.97E-03
Rb87	1.01E-08	1.27E-10	0.00E+00	1.01E-08	1.27E-10	0.00E+00
Sr90	1.03E-01	1.87E-02	3.44E-01	1.03E-01	1.87E-02	3.44E-01
Zr93	8.67E-06	2.72E-08	0.00E+00	8.67E-06	2.72E-08	0.00E+00
Nb91	1.90E-02	5.25E-05	9.51E-01	1.90E-02	5.25E-05	9.51E-01
Nb92	8.04E-07	1.94E-07	4.02E-05	8.04E-07	1.94E-07	4.02E-05
Nb93m	4.02E+00	1.95E-02	1.34E-01	4.02E+00	1.95E-02	1.34E-01
Nb94	1.13E-01	3.14E-02	1.61E-01	1.13E-01	3.14E-02	1.61E-01
Mo93	1.35E+00	3.57E-03	6.77E-02	1.35E+00	3.57E-03	6.77E-02
Tc97	1.09E-08	3.73E-10	0.00E+00	1.09E-08	3.73E-10	0.00E+00
Tc99	2.38E-02	3.85E-04	2.64E-02	2.38E-02	3.85E-04	2.64E-02
Ru106	9.35E-14	2.43E-14	4.68E-13	9.35E-14	2.43E-14	4.68E-13
Pd107	2.13E-06	3.17E-09	0.00E+00	2.13E-06	3.17E-09	0.00E+00
Ag108m	1.15E-04	3.13E-05	1.65E-04	1.15E-04	3.13E-05	1.65E-04
Ag110m	1.08E-19	4.91E-20	2.71E-19	1.08E-19	4.91E-20	2.71E-19

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	1.96E-10	3.41E-12	9.79E-11	1.96E-10	3.41E-12	9.79E-11
Cd113m	2.47E-04	7.31E-06	4.94E-04	2.47E-04	7.31E-06	4.94E-04
Sn119m	1.58E-15	2.22E-17	5.28E-17	1.58E-15	2.22E-17	5.28E-17
Sn121m	1.01E-02	2.08E-04	1.12E-02	1.01E-02	2.08E-04	1.12E-02
Sn123	1.36E-36	1.15E-37	2.27E-36	1.36E-36	1.15E-37	2.27E-36
Sn126	3.48E-06	1.56E-06	8.70E-06	3.48E-06	1.56E-06	8.70E-06
Sb125	9.34E-05	7.92E-06	9.34E-05	9.34E-05	7.92E-06	9.34E-05
Sb126	4.87E-07	2.43E-07	1.22E-06	4.87E-07	2.43E-07	1.22E-06
Te125m	2.34E-05	5.31E-07	2.60E-05	2.34E-05	5.31E-07	2.60E-05
Te127m	8.39E-43	4.23E-44	1.68E-42	8.39E-43	4.23E-44	1.68E-42
I129	3.97E-07	4.96E-09	0.00E+00	3.97E-07	4.96E-09	0.00E+00
Cs134	1.57E-06	4.31E-07	2.25E-06	1.57E-06	4.31E-07	2.25E-06
Cs135	5.61E-06	5.06E-08	5.61E-06	5.61E-06	5.06E-08	5.61E-06
Cs137	1.40E-01	1.82E-02	2.34E-01	1.40E-01	1.82E-02	2.34E-01
Ba133	4.11E-02	3.00E-03	1.37E-02	4.11E-02	3.00E-03	1.37E-02
La137	3.81E-04	2.16E-06	6.35E-05	3.81E-04	2.16E-06	6.35E-05
La138	1.34E-10	2.74E-11	6.71E-09	1.34E-10	2.74E-11	6.71E-09
Ce144	8.52E-17	1.85E-17	4.26E-16	8.52E-17	1.85E-17	4.26E-16
Pm145	7.92E-05	5.82E-07	7.92E-06	7.92E-05	5.82E-07	7.92E-06
Pm147	2.09E-06	2.07E-08	1.04E-06	2.09E-06	2.07E-08	1.04E-06
Sm147	4.89E-12	1.80E-12	0.00E+00	4.89E-12	1.80E-12	0.00E+00
Sm151	1.03E-03	3.26E-06	1.03E-04	1.03E-03	3.26E-06	1.03E-04
Eu152	3.58E-06	7.30E-07	3.58E-06	3.58E-06	7.30E-07	3.58E-06
Eu154	1.55E-03	3.76E-04	2.59E-03	1.55E-03	3.76E-04	2.59E-03
Eu155	5.16E-05	1.02E-06	1.72E-05	5.16E-05	1.02E-06	1.72E-05
Gd153	2.28E-23	5.30E-25	2.53E-24	2.28E-23	5.30E-25	2.53E-24
Ho163	1.57E-08	5.01E-12	7.83E-07	1.57E-08	5.01E-12	7.83E-07
Ho166m	1.06E-05	3.12E-06	2.13E-05	1.06E-05	3.12E-06	2.13E-05
Tm170	1.74E-34	9.30E-36	2.89E-34	1.74E-34	9.30E-36	2.89E-34
Tm171	1.06E-07	4.41E-10	2.64E-09	1.06E-07	4.41E-10	2.64E-09
Lu174	7.71E-08	2.13E-09	8.57E-09	7.71E-08	2.13E-09	8.57E-09
Lu176	8.54E-12	1.07E-12	4.27E-10	8.54E-12	1.07E-12	4.27E-10
Hf178n	2.48E-06	7.69E-07	1.24E-04	2.48E-06	7.69E-07	1.24E-04

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	3.42E-07	1.56E-08	0.00E+00	3.42E-07	1.56E-08	0.00E+00
Pt193	6.49E-01	3.89E-03	1.62E-02	6.49E-01	3.89E-03	1.62E-02
Tl204	6.59E-03	1.27E-06	9.42E-03	6.59E-03	1.27E-06	9.42E-03
Pb205	1.12E-06	1.14E-08	0.00E+00	1.12E-06	1.14E-08	0.00E+00
Pb210	3.30E-08	2.29E-09	6.59E-07	3.30E-08	2.29E-09	6.59E-07
Bi208	4.66E-08	1.43E-08	2.33E-06	4.66E-08	1.43E-08	2.33E-06
Bi210m	4.27E-09	4.01E-09	2.14E-07	4.27E-09	4.01E-09	2.14E-07
Po210	3.35E-08	2.90E-08	1.68E-06	3.35E-08	2.90E-08	1.68E-06
Ra223	5.79E-07	2.61E-06	8.28E-05	5.79E-07	2.61E-06	8.28E-05
Ra225	2.77E-07	1.29E-06	6.94E-05	2.77E-07	1.29E-06	6.94E-05
Ra226	6.84E-10	2.96E-09	2.28E-07	6.84E-10	2.96E-09	2.28E-07
Ra228	6.42E-09	1.44E-09	3.21E-07	6.42E-09	1.44E-09	3.21E-07
Ac227	5.78E-07	8.38E-09	6.42E-03	5.78E-07	8.38E-09	6.42E-03
Th227	5.71E-07	5.65E-07	1.14E-04	5.71E-07	5.65E-07	1.14E-04
Th228	5.22E-04	3.15E-03	5.22E-01	5.22E-04	3.15E-03	5.22E-01
Th229	2.78E-07	2.29E-07	5.55E-04	2.78E-07	2.29E-07	5.55E-04
Th230	2.08E-08	1.58E-08	2.08E-05	2.08E-08	1.58E-08	2.08E-05
Th232	6.40E-09	4.19E-09	0.00E+00	6.40E-09	4.19E-09	0.00E+00
Th234	1.08E-09	1.57E-10	3.59E-09	1.08E-09	1.57E-10	3.59E-09
Pa231	7.78E-07	6.42E-07	1.94E-03	7.78E-07	6.42E-07	1.94E-03
Pa233	2.66E-07	1.75E-08	3.80E-07	2.66E-07	1.75E-08	3.80E-07
U232	5.07E-04	4.40E-04	5.07E-01	5.07E-04	4.40E-04	5.07E-01
U233	4.69E-05	3.68E-05	7.82E-03	4.69E-05	3.68E-05	7.82E-03
U234	1.18E-05	9.20E-06	1.97E-03	1.18E-05	9.20E-06	1.97E-03
U235	2.99E-09	2.33E-09	0.00E+00	2.99E-09	2.33E-09	0.00E+00
U236	6.55E-08	4.82E-08	1.09E-05	6.55E-08	4.82E-08	1.09E-05
U238	1.08E-09	7.48E-10	0.00E+00	1.08E-09	7.48E-10	0.00E+00
Np237	2.66E-07	2.29E-07	1.33E-04	2.66E-07	2.29E-07	1.33E-04
Pu236	1.33E-10	1.25E-10	4.42E-08	1.33E-10	1.25E-10	4.42E-08
Pu238	9.86E-03	8.84E-03	9.86E+00	9.86E-03	8.84E-03	9.86E+00
Pu239	3.88E-05	3.26E-05	3.88E-02	3.88E-05	3.26E-05	3.88E-02
Pu240	8.23E-05	6.93E-05	8.23E-02	8.23E-05	6.93E-05	8.23E-02
Pu241	4.09E-03	3.52E-06	6.82E-02	4.09E-03	3.52E-06	6.82E-02

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	7.48E-07	5.97E-07	7.48E-04	7.48E-07	5.97E-07	7.48E-04
Am241	8.60E-04	7.78E-04	8.60E-01	8.60E-04	7.78E-04	8.60E-01
Am242m	4.84E-06	2.13E-07	4.84E-03	4.84E-06	2.13E-07	4.84E-03
Am243	2.48E-05	2.34E-05	2.48E-02	2.48E-05	2.34E-05	2.48E-02
Cm242	4.00E-06	3.98E-06	4.00E-04	4.00E-06	3.98E-06	4.00E-04
Cm243	9.61E-06	9.47E-06	9.61E-03	9.61E-06	9.47E-06	9.61E-03
Cm244	6.64E-03	6.28E-03	3.32E+00	6.64E-03	6.28E-03	3.32E+00
Cm245	2.11E-05	1.90E-05	2.35E-02	2.11E-05	1.90E-05	2.35E-02
Cm246	1.25E-04	1.10E-04	1.39E-01	1.25E-04	1.10E-04	1.39E-01
Cm248	3.26E-07	1.10E-06	1.09E-03	3.26E-07	1.10E-06	1.09E-03
Cf249	1.76E-05	1.88E-05	2.19E-02	1.76E-05	1.88E-05	2.19E-02
Cf250	1.61E-05	1.62E-05	8.04E-03	1.61E-05	1.62E-05	8.04E-03
Cf251	1.41E-06	1.40E-06	2.02E-03	1.41E-06	1.40E-06	2.02E-03
Cf252	3.12E-08	9.20E-08	1.04E-05	3.12E-08	9.20E-08	1.04E-05
<b>Total</b>	<b>1.12E+03</b>	<b>7.93E+00</b>	<b>8.38E+01</b>	<b>1.12E+03</b>	<b>7.93E+00</b>	<b>8.38E+01</b>

**Table 39 EPR08 Radionuclide Inventory Data – Summary**

		Per Package Values	
Total Activity (TBq)		Average	Maximum
	alpha	6.04E-02	6.04E-02
	beta/gamma	3.59E+03	3.59E+03
Classification (GBq/te)		Average	Maximum
	alpha	2.00E+01	2.00E+01
	beta/gamma	1.19E+06	1.19E+06
A <sub>2</sub> content		Average	Maximum
	A <sub>2</sub>	3.33E+02	3.33E+02
	A <sub>2</sub> per gram (raw)	1.10E-04	1.10E-04
	A <sub>2</sub> per gram (conditioned)	4.03E-05	4.03E-05
	LSA criteria	N/A	N/A
Heat output (W)		Average	Maximum
		3.57E+01	3.57E+01
Soluble radionuclides (TBq)		Average	Maximum
	Sr90	3.32E-01	3.32E-01
	Cs134	5.06E-06	5.06E-06
	Cs137	4.51E-01	4.51E-01
Radiotoxicity (Sv/yr)		4.97E+04	4.97E+04
Lifetime requirement (years)		1228	1228
Fissile content (g)		Average	Maximum
	U233	4.23E-01	4.23E-01
	U235	1.20E-01	1.20E-01
	U238	2.78E-01	2.78E-01
	Pu239	5.44E-02	5.44E-02
	Pu240	3.15E-02	3.15E-02
	Pu241	3.46E-03	3.46E-03
	Pu242	1.64E-02	1.64E-02
Total Fissile	U233+U235+Pu239+Pu241	6.02E-01	6.02E-01
Total U	U233+U235+U238	8.22E-01	8.22E-01
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	5.59E-01	5.59E-01
U235 enrichment	U235/U-tot	14.65%	14.65%
Pu239 separation	Pu239/(Pu239+U-tot)	6.21%	6.21%
Safeguards content (g)		Average	Maximum
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	5.07E+00	5.07E+00
Total U	U232+U233+U234+U235+U236+U238	1.08E+00	1.08E+00
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	1.56E-01	1.56E-01
Dose rates (mSv/hr)		Average	Maximum
	3m from 3 m <sup>3</sup> box	2.56E+02	2.56E+02
	1m from SWTC-285	2.32E-02	2.32E-02
	0m from SWTC-285	2.52E-02	2.52E-02
	1m from SWTC-070	1.18E+02	1.18E+02
	0m from SWTC-070	1.70E+02	1.70E+02

**Table 40 EPR08 Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
H3	1.24E+02	1.13E-01	3.10E+00	1.24E+02	1.13E-01	3.10E+00
Be10	1.85E-04	7.46E-06	3.08E-04	1.85E-04	7.46E-06	3.08E-04
C14	1.78E+01	1.41E-01	5.95E+00	1.78E+01	1.41E-01	5.95E+00
Cl36	1.56E-03	6.83E-05	2.59E-03	1.56E-03	6.83E-05	2.59E-03
Ar39	1.29E+00	4.51E-02	6.44E-02	1.29E+00	4.51E-02	6.44E-02
Ar42	2.96E-06	9.24E-07	1.48E-04	2.96E-06	9.24E-07	1.48E-04
K40	1.61E-06	1.76E-07	1.79E-06	1.61E-06	1.76E-07	1.79E-06
Ca41	2.35E-03	1.21E-06	0.00E+00	2.35E-03	1.21E-06	0.00E+00
Mn53	1.40E-04	1.17E-07	0.00E+00	1.40E-04	1.17E-07	0.00E+00
Mn54	7.50E-11	1.00E-11	7.50E-11	7.50E-11	1.00E-11	7.50E-11
Fe55	1.52E+00	1.44E-03	3.81E-02	1.52E+00	1.44E-03	3.81E-02
Co60	6.22E+01	2.59E+01	1.55E+02	6.22E+01	2.59E+01	1.55E+02
Ni59	1.42E+01	1.57E-02	0.00E+00	1.42E+01	1.57E-02	0.00E+00
Ni63	3.35E+03	9.18E+00	1.12E+02	3.35E+03	9.18E+00	1.12E+02
Zn65	4.17E-16	3.95E-17	2.09E-16	4.17E-16	3.95E-17	2.09E-16
Se79	1.09E-03	1.77E-05	5.44E-04	1.09E-03	1.77E-05	5.44E-04
Kr81	1.47E-03	3.90E-06	3.67E-05	1.47E-03	3.90E-06	3.67E-05
Kr85	6.34E-02	2.57E-03	6.34E-03	6.34E-02	2.57E-03	6.34E-03
Rb87	3.25E-08	4.09E-10	0.00E+00	3.25E-08	4.09E-10	0.00E+00
Sr90	3.32E-01	6.01E-02	1.11E+00	3.32E-01	6.01E-02	1.11E+00
Zr93	2.79E-05	8.75E-08	0.00E+00	2.79E-05	8.75E-08	0.00E+00
Nb91	6.12E-02	1.69E-04	3.06E+00	6.12E-02	1.69E-04	3.06E+00
Nb92	2.58E-06	6.25E-07	1.29E-04	2.58E-06	6.25E-07	1.29E-04
Nb93m	1.29E+01	6.28E-02	4.31E-01	1.29E+01	6.28E-02	4.31E-01
Nb94	3.62E-01	1.01E-01	5.17E-01	3.62E-01	1.01E-01	5.17E-01
Mo93	4.35E+00	1.15E-02	2.18E-01	4.35E+00	1.15E-02	2.18E-01
Tc97	3.51E-08	1.20E-09	0.00E+00	3.51E-08	1.20E-09	0.00E+00
Tc99	7.64E-02	1.24E-03	8.49E-02	7.64E-02	1.24E-03	8.49E-02
Ru106	3.01E-13	7.82E-14	1.50E-12	3.01E-13	7.82E-14	1.50E-12
Pd107	6.84E-06	1.02E-08	0.00E+00	6.84E-06	1.02E-08	0.00E+00
Ag108m	3.71E-04	1.01E-04	5.31E-04	3.71E-04	1.01E-04	5.31E-04
Ag110m	3.48E-19	1.58E-19	8.71E-19	3.48E-19	1.58E-19	8.71E-19

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Cd109	6.30E-10	1.10E-11	3.15E-10	6.30E-10	1.10E-11	3.15E-10
Cd113m	7.94E-04	2.35E-05	1.59E-03	7.94E-04	2.35E-05	1.59E-03
Sn119m	5.09E-15	7.13E-17	1.70E-16	5.09E-15	7.13E-17	1.70E-16
Sn121m	3.24E-02	6.68E-04	3.60E-02	3.24E-02	6.68E-04	3.60E-02
Sn123	4.38E-36	3.71E-37	7.31E-36	4.38E-36	3.71E-37	7.31E-36
Sn126	1.12E-05	5.02E-06	2.80E-05	1.12E-05	5.02E-06	2.80E-05
Sb125	3.00E-04	2.55E-05	3.00E-04	3.00E-04	2.55E-05	3.00E-04
Sb126	1.57E-06	7.82E-07	3.92E-06	1.57E-06	7.82E-07	3.92E-06
Te125m	7.52E-05	1.71E-06	8.36E-05	7.52E-05	1.71E-06	8.36E-05
Te127m	2.70E-42	1.36E-43	5.40E-42	2.70E-42	1.36E-43	5.40E-42
I129	1.28E-06	1.59E-08	0.00E+00	1.28E-06	1.59E-08	0.00E+00
Cs134	5.06E-06	1.39E-06	7.22E-06	5.06E-06	1.39E-06	7.22E-06
Cs135	1.80E-05	1.63E-07	1.80E-05	1.80E-05	1.63E-07	1.80E-05
Cs137	4.51E-01	5.87E-02	7.52E-01	4.51E-01	5.87E-02	7.52E-01
Ba133	1.32E-01	9.64E-03	4.40E-02	1.32E-01	9.64E-03	4.40E-02
La137	1.22E-03	6.94E-06	2.04E-04	1.22E-03	6.94E-06	2.04E-04
La138	4.31E-10	8.80E-11	2.16E-08	4.31E-10	8.80E-11	2.16E-08
Ce144	2.74E-16	5.94E-17	1.37E-15	2.74E-16	5.94E-17	1.37E-15
Pm145	2.55E-04	1.87E-06	2.55E-05	2.55E-04	1.87E-06	2.55E-05
Pm147	6.71E-06	6.66E-08	3.36E-06	6.71E-06	6.66E-08	3.36E-06
Sm147	1.57E-11	5.78E-12	0.00E+00	1.57E-11	5.78E-12	0.00E+00
Sm151	3.31E-03	1.05E-05	3.31E-04	3.31E-03	1.05E-05	3.31E-04
Eu152	1.15E-05	2.35E-06	1.15E-05	1.15E-05	2.35E-06	1.15E-05
Eu154	5.00E-03	1.21E-03	8.33E-03	5.00E-03	1.21E-03	8.33E-03
Eu155	1.66E-04	3.27E-06	5.53E-05	1.66E-04	3.27E-06	5.53E-05
Gd153	7.32E-23	1.71E-24	8.13E-24	7.32E-23	1.71E-24	8.13E-24
Ho163	5.03E-08	1.61E-11	2.52E-06	5.03E-08	1.61E-11	2.52E-06
Ho166m	3.42E-05	1.00E-05	6.84E-05	3.42E-05	1.00E-05	6.84E-05
Tm170	5.58E-34	2.99E-35	9.30E-34	5.58E-34	2.99E-35	9.30E-34
Tm171	3.40E-07	1.42E-09	8.50E-09	3.40E-07	1.42E-09	8.50E-09
Lu174	2.48E-07	6.85E-09	2.76E-08	2.48E-07	6.85E-09	2.76E-08
Lu176	2.75E-11	3.43E-12	1.37E-09	2.75E-11	3.43E-12	1.37E-09
Hf178n	7.97E-06	2.47E-06	3.99E-04	7.97E-06	2.47E-06	3.99E-04



Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Hf182	1.10E-06	5.01E-08	0.00E+00	1.10E-06	5.01E-08	0.00E+00
Pt193	2.09E+00	1.25E-02	5.22E-02	2.09E+00	1.25E-02	5.22E-02
Tl204	2.12E-02	4.07E-06	3.03E-02	2.12E-02	4.07E-06	3.03E-02
Pb205	3.60E-06	3.67E-08	0.00E+00	3.60E-06	3.67E-08	0.00E+00
Pb210	1.06E-07	7.37E-09	2.12E-06	1.06E-07	7.37E-09	2.12E-06
Bi208	1.50E-07	4.61E-08	7.49E-06	1.50E-07	4.61E-08	7.49E-06
Bi210m	1.37E-08	1.29E-08	6.87E-07	1.37E-08	1.29E-08	6.87E-07
Po210	1.08E-07	9.33E-08	5.39E-06	1.08E-07	9.33E-08	5.39E-06
Ra223	1.86E-06	8.40E-06	2.66E-04	1.86E-06	8.40E-06	2.66E-04
Ra225	8.92E-07	4.15E-06	2.23E-04	8.92E-07	4.15E-06	2.23E-04
Ra226	2.20E-09	9.52E-09	7.33E-07	2.20E-09	9.52E-09	7.33E-07
Ra228	2.06E-08	4.64E-09	1.03E-06	2.06E-08	4.64E-09	1.03E-06
Ac227	1.86E-06	2.69E-08	2.06E-02	1.86E-06	2.69E-08	2.06E-02
Th227	1.84E-06	1.82E-06	3.67E-04	1.84E-06	1.82E-06	3.67E-04
Th228	1.68E-03	1.01E-02	1.68E+00	1.68E-03	1.01E-02	1.68E+00
Th229	8.93E-07	7.38E-07	1.79E-03	8.93E-07	7.38E-07	1.79E-03
Th230	6.67E-08	5.09E-08	6.67E-05	6.67E-08	5.09E-08	6.67E-05
Th232	2.06E-08	1.35E-08	0.00E+00	2.06E-08	1.35E-08	0.00E+00
Th234	3.46E-09	5.06E-10	1.15E-08	3.46E-09	5.06E-10	1.15E-08
Pa231	2.50E-06	2.06E-06	6.25E-03	2.50E-06	2.06E-06	6.25E-03
Pa233	8.55E-07	5.64E-08	1.22E-06	8.55E-07	5.64E-08	1.22E-06
U232	1.63E-03	1.42E-03	1.63E+00	1.63E-03	1.42E-03	1.63E+00
U233	1.51E-04	1.18E-04	2.51E-02	1.51E-04	1.18E-04	2.51E-02
U234	3.80E-05	2.96E-05	6.34E-03	3.80E-05	2.96E-05	6.34E-03
U235	9.63E-09	7.50E-09	0.00E+00	9.63E-09	7.50E-09	0.00E+00
U236	2.11E-07	1.55E-07	3.51E-05	2.11E-07	1.55E-07	3.51E-05
U238	3.46E-09	2.41E-09	0.00E+00	3.46E-09	2.41E-09	0.00E+00
Np237	8.55E-07	7.38E-07	4.27E-04	8.55E-07	7.38E-07	4.27E-04
Pu236	4.27E-10	4.01E-10	1.42E-07	4.27E-10	4.01E-10	1.42E-07
Pu238	3.17E-02	2.84E-02	3.17E+01	3.17E-02	2.84E-02	3.17E+01
Pu239	1.25E-04	1.05E-04	1.25E-01	1.25E-04	1.05E-04	1.25E-01
Pu240	2.65E-04	2.23E-04	2.65E-01	2.65E-04	2.23E-04	2.65E-01
Pu241	1.32E-02	1.13E-05	2.19E-01	1.32E-02	1.13E-05	2.19E-01

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A <sub>2</sub> per Package
Pu242	2.41E-06	1.92E-06	2.41E-03	2.41E-06	1.92E-06	2.41E-03
Am241	2.77E-03	2.50E-03	2.77E+00	2.77E-03	2.50E-03	2.77E+00
Am242m	1.56E-05	6.85E-07	1.56E-02	1.56E-05	6.85E-07	1.56E-02
Am243	7.99E-05	7.51E-05	7.99E-02	7.99E-05	7.51E-05	7.99E-02
Cm242	1.29E-05	1.28E-05	1.29E-03	1.29E-05	1.28E-05	1.29E-03
Cm243	3.09E-05	3.05E-05	3.09E-02	3.09E-05	3.05E-05	3.09E-02
Cm244	2.13E-02	2.02E-02	1.07E+01	2.13E-02	2.02E-02	1.07E+01
Cm245	6.79E-05	6.09E-05	7.54E-02	6.79E-05	6.09E-05	7.54E-02
Cm246	4.02E-04	3.53E-04	4.46E-01	4.02E-04	3.53E-04	4.46E-01
Cm248	1.05E-06	3.52E-06	3.50E-03	1.05E-06	3.52E-06	3.50E-03
Cf249	5.64E-05	6.04E-05	7.06E-02	5.64E-05	6.04E-05	7.06E-02
Cf250	5.17E-05	5.22E-05	2.59E-02	5.17E-05	5.22E-05	2.59E-02
Cf251	4.54E-06	4.49E-06	6.48E-03	4.54E-06	4.49E-06	6.48E-03
Cf252	1.00E-07	2.96E-07	3.34E-05	1.00E-07	2.96E-07	3.34E-05
<b>Total</b>	<b>3.59E+03</b>	<b>3.57E+01</b>	<b>3.33E+02</b>	<b>3.59E+03</b>	<b>3.57E+01</b>	<b>3.33E+02</b>



### **3 DATASHEETS FOR SPENT FUEL PACKAGES**

Data summary sheets and package inventory data for the spent fuel packages proposed by EdF/Areva are presented in this section. For each waste package, we present a summary data sheet that provides information on waste package characteristics, and a table providing average and maximum waste package inventory data.

The tables presented are:

- Table 41 and Table 42 present the data sheet and inventory for EPR09.

**Table 41 EPR09 Radionuclide Inventory Data – Summary**

		Per Package Values	
Total Activity (TBq)		Average	Maximum
	alpha	1.03E+03	1.03E+03
	beta/gamma	3.59E+03	3.59E+03
Classification (GBq/te)		Average	Maximum
	alpha	3.35E+05	3.35E+05
	beta/gamma	1.17E+06	1.17E+06
A <sub>2</sub> content		Average	Maximum
	A <sub>2</sub>	1.02E+06	1.02E+06
	A <sub>2</sub> per gram (raw)	3.32E-01	3.32E-01
	A <sub>2</sub> per gram (conditioned)	9.60E-02	9.60E-02
	LSA criteria	N/A	N/A
Heat output (W)		Average	Maximum
		1.43E+03	1.43E+03
Soluble radionuclides (TBq)		Average	Maximum
	Sr90	1.27E+03	1.27E+03
	Cs134	2.33E-09	2.33E-09
	Cs137	2.06E+03	2.06E+03
Radiotoxicity (Sv/yr)		2.42E+06	2.42E+06
Lifetime requirement (years)		922	922
Fissile content (g)		Average	Maximum
	U233	8.17E-02	8.17E-02
	U235	1.31E+04	1.31E+04
	U238	1.90E+06	1.90E+06
	Pu239	1.35E+04	1.35E+04
	Pu240	7.19E+03	7.19E+03
	Pu241	5.65E+01	5.65E+01
	Pu242	2.67E+03	2.67E+03
Total Fissile	U233+U235+Pu239+Pu241	2.67E+04	2.67E+04
Total U	U233+U235+U238	1.91E+06	1.91E+06
Pu239 eq	U233+0.65U235+(Pu239+Pu241)	2.21E+04	2.21E+04
U235 enrichment	U235/U-tot	0.69%	0.69%
Pu239 separation	Pu239/(Pu239+U-tot)	0.70%	0.70%
Safeguards content (g)		Average	Maximum
Total Th	Th227+Th228+Th229+Th230+Th232+Th234	2.28E-01	2.28E-01
Total U	U232+U233+U234+U235+U236+U238	1.93E+06	1.93E+06
Total Pu	Pu236+Pu238+Pu239+Pu240+Pu241+Pu242	2.40E+04	2.40E+04
Dose rates (mSv/hr)		Average	Maximum
	Bare Copper Canister – 3m Gamma	2.47E+00	2.47E+00
	Bare Copper Canister – 3m Neutron	8.10E-02	8.10E-02
	Bare Copper Canister – 3m Total	2.55E+00	2.55E+00
	1m From Transport Container - Gamma	1.01E-01	1.01E-01
	1m From Transport Container - Neutron	1.85E-02	1.85E-02
	1m From Transport Container - Total	1.20E-01	1.20E-01
	0m From Transport Container - Gamma	7.98E-01	7.98E-01
	0m From Transport Container - Neutron	8.29E-02	8.29E-02
	0m From Transport Container - Total	8.81E-01	8.81E-01

**Table 42 EPR09 - Average and Maximum Package Inventory Data**

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A2 per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A2 per Package
H3	4.55E-01	4.14E-04	1.14E-02	4.55E-01	4.14E-04	1.14E-02
Be10	1.66E-06	6.73E-08	2.77E-06	1.66E-06	6.73E-08	2.77E-06
C14	3.11E-01	2.47E-03	1.04E-01	3.11E-01	2.47E-03	1.04E-01
Cl36	1.57E-02	6.87E-04	2.61E-02	1.57E-02	6.87E-04	2.61E-02
Ar39	5.59E-05	1.96E-06	2.79E-06	5.59E-05	1.96E-06	2.79E-06
Ar42	4.34E-14	1.36E-14	2.17E-12	4.34E-14	1.36E-14	2.17E-12
K40	3.61E-09	3.93E-10	4.01E-09	3.61E-09	3.93E-10	4.01E-09
Ca41	7.21E-05	3.70E-08	0.00E+00	7.21E-05	3.70E-08	0.00E+00
Mn53	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Mn54	8.99E-32	1.20E-32	8.99E-32	8.99E-32	1.20E-32	8.99E-32
Fe55	2.32E-09	2.19E-12	5.79E-11	2.32E-09	2.19E-12	5.79E-11
Co60	3.88E-04	1.61E-04	9.69E-04	3.88E-04	1.61E-04	9.69E-04
Ni59	3.63E-02	4.03E-05	0.00E+00	3.63E-02	4.03E-05	0.00E+00
Ni63	2.91E+00	7.97E-03	9.69E-02	2.91E+00	7.97E-03	9.69E-02
Zn65	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Se79	1.01E-02	1.64E-04	5.03E-03	1.01E-02	1.64E-04	5.03E-03
Kr81	2.34E-08	6.23E-11	5.85E-10	2.34E-08	6.23E-11	5.85E-10
Kr85	3.76E+00	1.52E-01	3.76E-01	3.76E+00	1.52E-01	3.76E-01
Rb87	3.04E-06	3.83E-08	0.00E+00	3.04E-06	3.83E-08	0.00E+00
Sr90	1.27E+03	2.30E+02	4.24E+03	1.27E+03	2.30E+02	4.24E+03
Zr93	1.92E-01	6.04E-04	0.00E+00	1.92E-01	6.04E-04	0.00E+00
Nb91	8.69E-06	2.40E-08	4.35E-04	8.69E-06	2.40E-08	4.35E-04
Nb92	5.06E-07	1.23E-07	2.53E-05	5.06E-07	1.23E-07	2.53E-05
Nb93m	8.53E-01	4.14E-03	2.84E-02	8.53E-01	4.14E-03	2.84E-02
Nb94	7.17E-01	2.00E-01	1.02E+00	7.17E-01	2.00E-01	1.02E+00
Mo93	1.50E-03	3.96E-06	7.49E-05	1.50E-03	3.96E-06	7.49E-05
Tc97	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc99	1.89E+00	3.06E-02	2.10E+00	1.89E+00	3.06E-02	2.10E+00
Ru106	9.57E-23	2.49E-23	4.78E-22	9.57E-23	2.49E-23	4.78E-22
Pd107	1.91E-02	2.84E-05	0.00E+00	1.91E-02	2.84E-05	0.00E+00
Ag108m	1.19E-03	3.23E-04	1.70E-03	1.19E-03	3.23E-04	1.70E-03
Ag110m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A2 per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A2 per Package
Cd109	3.95E-25	6.88E-27	1.98E-25	3.95E-25	6.88E-27	1.98E-25
Cd113m	5.80E-02	1.72E-03	1.16E-01	5.80E-02	1.72E-03	1.16E-01
Sn119m	4.11E-33	5.76E-35	1.37E-34	4.11E-33	5.76E-35	1.37E-34
Sn121m	1.16E-01	2.40E-03	1.29E-01	1.16E-01	2.40E-03	1.29E-01
Sn123	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sn126	8.59E-02	3.85E-02	2.15E-01	8.59E-02	3.85E-02	2.15E-01
Sb125	1.63E-07	1.38E-08	1.63E-07	1.63E-07	1.38E-08	1.63E-07
Sb126	1.20E-02	6.00E-03	3.00E-02	1.20E-02	6.00E-03	3.00E-02
Te125m	4.08E-08	9.26E-10	4.53E-08	4.08E-08	9.26E-10	4.53E-08
Te127m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
I129	4.81E-03	6.01E-05	0.00E+00	4.81E-03	6.01E-05	0.00E+00
Cs134	2.33E-09	6.39E-10	3.33E-09	2.33E-09	6.39E-10	3.33E-09
Cs135	7.22E-02	6.51E-04	7.22E-02	7.22E-02	6.51E-04	7.22E-02
Cs137	2.06E+03	2.68E+02	3.44E+03	2.06E+03	2.68E+02	3.44E+03
Ba133	1.14E-08	8.34E-10	3.81E-09	1.14E-08	8.34E-10	3.81E-09
La137	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
La138	3.46E-11	7.06E-12	1.73E-09	3.46E-11	7.06E-12	1.73E-09
Ce144	2.11E-30	4.59E-31	1.06E-29	2.11E-30	4.59E-31	1.06E-29
Pm145	2.27E-05	1.67E-07	2.27E-06	2.27E-05	1.67E-07	2.27E-06
Pm147	7.51E-07	7.46E-09	3.76E-07	7.51E-07	7.46E-09	3.76E-07
Sm147	6.21E-07	2.29E-07	0.00E+00	6.21E-07	2.29E-07	0.00E+00
Sm151	2.74E+01	8.67E-02	2.74E+00	2.74E+01	8.67E-02	2.74E+00
Eu152	7.76E-03	1.58E-03	7.76E-03	7.76E-03	1.58E-03	7.76E-03
Eu154	8.86E-01	2.14E-01	1.48E+00	8.86E-01	2.14E-01	1.48E+00
Eu155	1.24E-03	2.45E-05	4.14E-04	1.24E-03	2.45E-05	4.14E-04
Gd153	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho163	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ho166m	1.85E-04	5.41E-05	3.69E-04	1.85E-04	5.41E-05	3.69E-04
Tm170	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tm171	3.73E-18	1.55E-20	9.32E-20	3.73E-18	1.55E-20	9.32E-20
Lu174	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lu176	1.37E-12	1.72E-13	6.87E-11	1.37E-12	1.72E-13	6.87E-11
Hf178n	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A2 per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A2 per Package
Hf182	1.16E-07	5.29E-09	0.00E+00	1.16E-07	5.29E-09	0.00E+00
Pt193	9.34E-06	5.59E-08	2.33E-07	9.34E-06	5.59E-08	2.33E-07
Tl204	1.21E-28	2.33E-32	1.73E-28	1.21E-28	2.33E-32	1.73E-28
Pb205	2.34E-08	2.39E-10	0.00E+00	2.34E-08	2.39E-10	0.00E+00
Pb210	1.22E-06	8.47E-08	2.44E-05	1.22E-06	8.47E-08	2.44E-05
Bi208	3.40E-10	1.05E-10	1.70E-08	3.40E-10	1.05E-10	1.70E-08
Bi210m	8.59E-11	8.06E-11	4.29E-09	8.59E-11	8.06E-11	4.29E-09
Po210	1.20E-06	1.04E-06	5.99E-05	1.20E-06	1.04E-06	5.99E-05
Ra223	4.14E-06	1.87E-05	5.92E-04	4.14E-06	1.87E-05	5.92E-04
Ra225	1.53E-06	7.12E-06	3.83E-04	1.53E-06	7.12E-06	3.83E-04
Ra226	2.41E-06	1.05E-05	8.04E-04	2.41E-06	1.05E-05	8.04E-04
Ra228	1.52E-10	3.43E-11	7.62E-09	1.52E-10	3.43E-11	7.62E-09
Ac227	4.13E-06	5.99E-08	4.59E-02	4.13E-06	5.99E-08	4.59E-02
Th227	4.08E-06	4.04E-06	8.17E-04	4.08E-06	4.04E-06	8.17E-04
Th228	1.08E-02	6.50E-02	1.08E+01	1.08E-02	6.50E-02	1.08E+01
Th229	1.53E-06	1.27E-06	3.06E-03	1.53E-06	1.27E-06	3.06E-03
Th230	1.42E-04	1.08E-04	1.42E-01	1.42E-04	1.08E-04	1.42E-01
Th232	1.67E-10	1.10E-10	0.00E+00	1.67E-10	1.10E-10	0.00E+00
Th234	2.36E-02	3.45E-03	7.88E-02	2.36E-02	3.45E-03	7.88E-02
Pa231	4.94E-06	4.08E-06	1.24E-02	4.94E-06	4.08E-06	1.24E-02
Pa233	6.94E-02	4.58E-03	9.92E-02	6.94E-02	4.58E-03	9.92E-02
U232	1.05E-02	9.09E-03	1.05E+01	1.05E-02	9.09E-03	1.05E+01
U233	2.91E-05	2.29E-05	4.85E-03	2.91E-05	2.29E-05	4.85E-03
U234	2.31E-01	1.80E-01	3.86E+01	2.31E-01	1.80E-01	3.86E+01
U235	1.05E-03	8.17E-04	0.00E+00	1.05E-03	8.17E-04	0.00E+00
U236	3.67E-02	2.70E-02	6.11E+00	3.67E-02	2.70E-02	6.11E+00
U238	2.36E-02	1.64E-02	0.00E+00	2.36E-02	1.64E-02	0.00E+00
Np237	6.94E-02	5.99E-02	3.47E+01	6.94E-02	5.99E-02	3.47E+01
Pu236	4.01E-07	3.77E-07	1.34E-04	4.01E-07	3.77E-07	1.34E-04
Pu238	3.91E+02	3.51E+02	3.91E+05	3.91E+02	3.51E+02	3.91E+05
Pu239	3.10E+01	2.60E+01	3.10E+04	3.10E+01	2.60E+01	3.10E+04
Pu240	6.03E+01	5.08E+01	6.03E+04	6.03E+01	5.08E+01	6.03E+04
Pu241	2.15E+02	1.85E-01	3.59E+03	2.15E+02	1.85E-01	3.59E+03



Isotope	Average			Maximum		
	Activity per package (TBq)	Heat Output per Package (Watts)	A2 per Package	Activity per package (TBq)	Heat Output per Package (Watts)	A2 per Package
Pu242	3.90E-01	3.11E-01	3.90E+02	3.90E-01	3.11E-01	3.90E+02
Am241	4.97E+02	4.50E+02	4.97E+05	4.97E+02	4.50E+02	4.97E+05
Am242m	8.21E-01	3.61E-02	8.21E+02	8.21E-01	3.61E-02	8.21E+02
Am243	6.26E+00	5.88E+00	6.26E+03	6.26E+00	5.88E+00	6.26E+03
Cm242	6.78E-01	6.75E-01	6.78E+01	6.78E-01	6.75E-01	6.78E+01
Cm243	6.53E-01	6.43E-01	6.53E+02	6.53E-01	6.43E-01	6.53E+02
Cm244	4.37E+01	4.13E+01	2.18E+04	4.37E+01	4.13E+01	2.18E+04
Cm245	1.43E-01	1.29E-01	1.59E+02	1.43E-01	1.29E-01	1.59E+02
Cm246	6.19E-02	5.43E-02	6.87E+01	6.19E-02	5.43E-02	6.87E+01
Cm248	4.23E-06	1.42E-05	1.41E-02	4.23E-06	1.42E-05	1.41E-02
Cf249	8.97E-05	9.60E-05	1.12E-01	8.97E-05	9.60E-05	1.12E-01
Cf250	3.68E-06	3.72E-06	1.84E-03	3.68E-06	3.72E-06	1.84E-03
Cf251	4.41E-06	4.37E-06	6.30E-03	4.41E-06	4.37E-06	6.30E-03
Cf252	9.28E-14	2.74E-13	3.09E-11	9.28E-14	2.74E-13	3.09E-11
<b>Total</b>	<b>4.62E+03</b>	<b>1.43E+03</b>	<b>1.02E+06</b>	<b>4.62E+03</b>	<b>1.43E+03</b>	<b>1.02E+06</b>

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