SITE Hinkley Point A SITE OWNER **Nuclear Decommissioning Authority WASTE CUSTODIAN** Magnox Limited LLW **WASTE TYPE** Is the waste subject to Nο Scottish Policy: **WASTE VOLUMES** Reported At 1.4.2022..... Stocks: $0 \, \text{m}^3$ 1.4.2085 - 31.3.2088...... Future arisings -27019.0 m³ 27019.0 m³ Total future arisings: Total waste volume: 27019.0 m³ Comment on volumes: For inventory purposes the arisings are assumed to arise at a uniform rate over three years. Final Dismantling & Site Clearance is assumed to commence in 2081 and end in 2090. Reactor dismantling will commence in 2085 and last for three years. Volumes and radioactivity have been calculated for 85 years after reactor shutdown, i.e. 2085. Uncertainty factors on Stock (upper): Arisings (upper) volumes: Stock (lower): Arisings (lower) x 0.8 **WASTE SOURCE** Concrete wastes from dismantling of reactors and associated plant. PHYSICAL CHARACTERISTICS General description: A wide variety of concrete and reinforced concrete items (reinforcing steel is described in waste stream 9D314). Waste can be packaged in standard LLW packages. Physical components (%vol): Concrete and reinforced concrete mainly from reactor bioshield (99% vol). Sealed sources: The waste does not contain sealed sources. Bulk density (t/m³): ~1.4 Comment on density: The density is of the waste as cut for packaging assuming 20% of the concrete is in blocks and 80% is rubble. CHEMICAL COMPOSITION General description and Concrete (100%). Some of the concrete may include iron shot. components (%wt): Chemical state: Alkali Chemical form of H-3: The tritium is incorporated in the concrete. radionuclides: C-14: The carbon 14 is incorporated in the concrete. Cl-36: The chlorine 36 is incorporated in the concrete. Se-79: The selenium content is insignificant. Tc-99: The technetium content is insignificant. Ra: The radium content is insignificant. Th: The thorium content is insignificant. U: The uranium content is insignificant. Np: The neptunium content is insignificant. Pu: The plutonium content is insignificant. Metals and alloys (%wt): There is no sheet metal or bulk metal in this waste stream. % of total C14 (%wt) Type(s) / Grade(s) with proportions activity Stainless steel..... Other ferrous metals..... Some of the concrete may incorporate iron shot. Iron..... Aluminium...... 0

Beryllium.....

Cobalt			
Copper	. 0		
Lead	. 0		
Magnox/Magnesium	. 0		
Nickel			
Titanium			
Uranium			
Zinc	. 0		
Zircaloy/Zirconium	. 0		
Other metals	. 0	Reinforcing steel is described in waste stream 9D314. Some of the concrete may include iron shot; otherwise only trace quantities of metals are expected.	
Organics (%wt): None expected. The	ere are no	halogenated plastics or rubbers present.	
	(%wt)	Type(s) and comment	% of total C14
Total cellulosics	0		activity
Paper, cotton	0		
Wood	0		
Halogenated plastics	0		
Total non-halogenated plastics	0		
Condensation polymers	0		
Others	0		
Organic ion exchange materials	0		
Total rubber	0		
Halogenated rubber	0		
Non-halogenated rubber	0		
Hydrocarbons			
Oil or grease			
Fuel			
Asphalt/Tarmac (cont.coal tar)			
Asphalt/Tarmac (no coal tar)			
Bitumen			
Others			
Other organics	0		
Other materials (%wt):			
	(0/ 1)	-	0/ // 1044
	(%wt)	Type(s) and comment	% of total C14 activity
Inorganic ion exchange materials	0		
Inorganic sludges and flocs	0		
Soil	0		
Brick/Stone/Rubble	0		
Cementitious material	100.0		100.0
Sand			

Glass/Ceramics	0	
Graphite	TR	
Desiccants/Catalysts		
Asbestos	0	
Non/low friable		
Moderately friable		
Highly friable		
Free aqueous liquids	0	
Free non-aqueous liquids	0	
Powder/Ash	0	
Inorganic anions (%wt): Principal anions wi be up to 20% if limit		es and aluminates in various anionic forms. Carbonates could das an aggregate.
	(%wt)	Type(s) and comment
Fluoride	<1.0	
Chloride	<1.0	
lodide	<1.0	
Cyanide	0	
Carbonate	<2.0	
Nitrate	~1.0	
Nitrite	NE	
Phosphate	<1.0	
Sulphate	~2.0	

Materials of interest for waste acceptance criteria:

Sulphide.....

No materials likely to pose a fire or other non-radiological hazard have been identified.

	(%wt)	Type(s) and comment
Combustible metals	0	
Low flash point liquids	0	
Explosive materials	0	
Phosphorus	0	
Hydrides	0	
Biological etc. materials	0	
Biodegradable materials		
Putrescible wastes	0	
Non-putrescible wastes		
Corrosive materials	0	
Pyrophoric materials	0	
Generating toxic gases	0	
Reacting with water	0	
Higher activity particles		
Soluble solids as bulk chemical compounds		

<1.0

Hazardous subs	stances /
non hazardous	pollutants:

Complexing

None expected

	(%wt)	Type(s) and comment
Acrylamide		
Benzene		
Chlorinated solvents		
Formaldehyde		
Organometallics		
Phenol		
Styrene		
Tri-butyl phosphate		
Other organophosphates		
Vinyl chloride		
Arsenic		
Barium		
Boron		
Boron (in Boral)		
Boron (non-Boral)		
Cadmium		
Caesium		
Selenium		
Chromium		
Molybdenum		
Thallium		
Tin		
Vanadium		
Mercury compounds		
Others		
Electronic Electrical Equipment (EEE)		
EEE Type 1		
EEE Type 2		
EEE Type 3		
EEE Type 4		
EEE Type 5		
agents (%wt):		
	(%wt)	Type(s) and comment
EDTA		
DPTA		
NTA		
Polycarboxylic acids		
Other organic complexants		
Total complexing agents	NE	

Potential for the waste to contain discrete items:

Yes. Large Concrete Items (LCIs) may be DIs; drummed (ungrouted)/"rubbleised" wastes assumed NOT DIs

TREATMENT, PACKAGING AND DISPOSAL

Planned on-site / off-site treatment(s):

Treatment	On-site / Off site	Stream volume %
Low force compaction		
Supercompaction (HFC)		
Incineration		
Solidification		
Decontamination		
Metal treatment		
Size reduction		
Decay storage		
Recyling / reuse		
Other / various		
None		100.0
	1	

Comment on planned treatments:

Disposal Routes:

Disposal Route	Stream volume %	Disposal density t/m3
Expected to be consigned to the LLW Repository Expected to be consigned to a Landfill Facility Expected to be consigned to an On-Site Disposal Facility Expected to be consigned to an Incineration Facility Expected to be consigned to a Metal Treatment Facility Expected to be consigned as Out of Scope Expected to be recycled / reused Disposal route not known	100.0	1.4

Classification codes for waste expected to be consigned to a landfill facility:

17 01 01

Upcoming (2022/23-2024/25) Waste Routing (if expected to change from above):

Disposal Route	Stream volume %		
	2022/23	2023/24	2024/25
Expected to be consigned to the LLW Repository Expected to be consigned to a Landfill Facility Expected to be consigned to an On-Site Disposal Facility Expected to be consigned to an Incineration Facility Expected to be consigned to a Metal Treatment Facility Expected to be consigned as Out of Scope Expected to be recycled / reused Disposal route not known			

Opportunities for alternative disposal routing:

Baseline Opportunity Stream Management Route Management Route volume (%)	Estimated Date that Opportunity Will be realised	('omment
--------------------------------------------------------------------------	--------------------------------------------------	----------

Waste Packaging for Disposal: (Not applicable to this waste stream)

Container	Stream volume %	Waste loading m³	Number of packages
1/3 Height IP-1 ISO 2/3 Height IP-2 ISO 1/2 Height WAMAC IP-2 ISO 1/2 Height IP-2 Disposal/Re-usable ISO 2m box (no shielding) 4m box (no shielding) Other			

Other information: -

Waste Planned for Disposal at the LLW Repository: (Not applicable to this waste stream)

Container voidage:

Waste Characterisation

Form (WCH):

ł):

Waste consigned for disposal to LLWR in year of generation:

Non-Containerised Waste for In-Vault Grouting: (Not applicable to this waste stream)

Stream volume (%):

Waste stream variation:

Bounding cuboidal volume:

Inaccessible voidage: -

Other information:

RADIOACTIVITY

Source: Activation of the concrete and impurities. There may be some contamination.

Uncertainty: The values quoted were derived by calculation from available material specifications and

are indicative of the activities that are expected. The majority of uncertainty is in the

impurity levels.

Definition of total alpha

and total beta/gamma:

Where totals are shown on the table of radionuclide activities they are the sums of the listed alpha or beta/gamma emitting radionuclides plus 'other alpha' or 'other beta/gamma'.

Measurement of radioactivities:

The specific activities were estimated from neutron activation calculations of the material

and its impurities.

Other information: The activities quoted are those at 85 years after reactor shutdown, i.e. in 2085. There may

be some contamination by Cs137.

Mean radioactivity, TBq/m² Waste at Bands and 1.4.2022 Code Future Bands and 1.4.2022 Future Bands and 1.2.28 Future Bands and 1.4.2022 Future Bands and 1.4.2022 Future Bands and 1.2.28 Future Bands and 1.4.2022 Future Bands and 1.4.2022 Future Bands and 1.4.2022 Future Bands and 1.4.2022 Future Bands and 1.2.28 Future	
Be 10 C 14	e Bands and
C 14 Na 22 Na 22 Al 26 C 136 Al 26 C 136 Al 27 C 136 Al 29 Ar 42 K 40 Ca 41 Mn 53 Mn 53 Mn 54 Fe 55 C 06 C 0 Ni 59 Ni 120 Ni 50 Ni 5	8
Na 22	8
Al 26 Cl 36 Ar 39 Ar 42 K 40 Ca 41 Mn 53 Mn 54 Fe 55 Co 60 Ni 59 Ni 63 Ni 63 Ni 64 Se 79 Kr 81 Kr 85 Rb 87 Sr 90 S	08 CC 2
Cl 36 Ar 39 Ar 42 K 40 Ca 41 Mn 53 Mn 54 Fe 55 Co 60 Ni 59 Ni 63 Zn 65 Se 79 Kr 81 Kr 85 Rb 87 Sr 90 Zr 93 Nb 91 Nb 92 Nb 93 Nb 93 Nb 91 Nb 92 Nb 93 Nb 94 Mn 93 Tc 97 Tc 99 Ru 106 Pd 107 Ag 108m Ag 110m Cd 109 Cd 113m Sn 123 Sn 126 Sn 125 Sn 126 Sn 123 Sn 126 Sn 125 Sn 126 Sn 128 Sn 128 Lu 176 Sn Lu 176 Sn Lu 1776 Sn L	8
Ar 39 Ar 42 K 40 Ca 41 Mn 53 Mn 54 Fe 55 Co 60 Ni 59 Ni 59 Ni 63 Se 79 Kr 81 Kr 85 Rb 87 Sr 90 Zr 93 Nb 91 Nb 92 Nb 93 Nb 91 Nb 92 Nb 93 Nb 93 Nb 94 Mo 93 Tc 97 Tc 99 Ru 106 Pd 107 Ag 108m Ag 110m Cd 109 Cd 113m Sn 123 Sn 123 Sn 126 Sb 125 Se 79 Sr 90 Cd 113m Sn 121m Sn 123 Sn 126 Sb 125 Se 79 Ru 208 Se 79 Ru 106 Pd 107 Ag 108m Ag 110m Cd 109 Cd 113m Sn 123 Sn 123 Sn 126 Sb 125 Se 79 Sr 90 Cd 113m Sn 123 Sn 123 Sn 126 Sb 125 Se 79 Ru 208 Ru 226 Ru 227 Ru 238 Ru 227 Ru 238 Ru 228 Ru 227 Ru 238 Ru 228 Ru 229 Ru 238 Ru 238 Ru 238 Ru 239 Ru 239 Ru 238 Ru	8
Ar 42 K 40 8 Hf 178n Ca 41 4.95E-05 CC 2 Pt 193 Mn 53 8 Ti 204 Mn 54 8 Pb 205 Fe 55 8 Pb 210 Co 60 3.11E-09 CC 2 Bi 208 Ni 59 1.89E-08 CC 2 Bi 210m Ni 63 1.1E-06 CC 2 Po 210 Zn 65 8 Ra 223 Se 79 8 Ra 223 Kr 81 8 Ra 226 Kr 85 8 Ra 226 Rb 87 8 Ra 227 Sr 90 8 Th 227 Zr 93 8 Th 229 Nb 91 8 Th 229 Nb 92 8 Th 230 Nb 93m 8 Th 230 Nb 94 1.71E-08 CC 2 Th 234 Mo 93 8 Pa 233 Tc 97 8 U 233 Ru 106 8 U 233 Pd 107 8 U 235 Ag 110m 8 U	8
K 40 Ca 41 Mn 53 Mn 54 Fe 55 Co 60 Ni 59 Ni 63 Zn 65 Se 79 Kr 81 Kr 85 Rb 87 Sr 90 Sr 90 Nb 91 Nb 91 Nb 92 Nb 93 Nb 91 Nb 92 Nb 93 Tc 97 Tc 99 Ru 106 Pd 107 Ag 108m Ag 1120 Sn 123 Sn 123 Sn 126 Sb 123 Sn 126 Sn Sn 127 Sn 120 Sn 120 Sn 120 Sn 126 Sn 127 Sn 120 Sn 120 Sn 120 Sn 120 Sn 120 Sn 120 Sn 126 Sn 126 Sn 124 Sn 122 Sn 124 Sn 124 Sn 125 Sn 126 Sn 1	8
Ca 41 Mn 53 Mn 54 Fe 55 Co 60 Ni 59 Ni 63 Se 79 Kr 81 Kr 85 Rb 87 Sr 90 Zr 93 Nb 91 Nb 92 Nb 93 Nb 91 Nb 92 Nb 93 Nb 94 Mo 93 Tc 97 Tc 99 Ru 106 Pd 107 Ag 108m Ag 120 Ag 110m Cd 109 Cd 113m Cd 109 Cd 113m Sn 123 Sn 123 Sn 123 Sn 126 Sb 72 Sr 90 Sc 72 Ri 73 Sr 90 Sc 74 Sc 75 S	8
Mn 53 Mn 54 Fe 55 Co 60 Si 1.1E-09 CC 2 Bi 208 Ni 59 Ni 63 Zn 65 Se 79 Kr 81 Kr 85 Rb 87 Sr 90 Zr 93 Nb 91 Nb 92 Nb 92 Nb 93 Nb 91 Nb 92 Nb 93 Nb 94 Mo 93 Tc 97 Tc 99 Ru 106 Pd 107 Ag 108m Cd 109 Cd 108 Cd 109 Cd 1108 Character and a company of the company of t	8
Mn 54	8
Fe 55 Co 60 Ni 59 Ni 59 Ni 63 Zn 65 Se 79 Kr 81 Kr 85 Rb 87 Sr 90 Zr 93 Nb 91 Nb 92 Nb 93m Nb 94 Mo 93 Tc 97 Tc 99 Ru 106 Pd 107 Ag 108m Ag 110m Cd 109 Cd 113m Sn 123 Sn 125 Si 20 Bi 210m Bi 208 Bi 210m Pb 2 21 Bi 210m Pb 21 Bi 220 Bi 208 Bi 210m Pb 21 Bi 210m Pb 21 Bi 210m Pb 21 Bi 210m Pb 21 Bi 228 Bi 210m Pb 22 Bi 210m Pb 22 Bi 210m Pb 22 Bi 210m Pb 22 Bi 223 Ra 223 Ra 225 Ra 226 Ra 227 Th 227 Th 227 Th 230 Th 232 Th 234 Pa 233 Th 232 Th 234 Pa 233 U 232 U 233 U 233 U 236 U 236 U 236 Bi 208 Bi 210m Pb 210 Bi 208 Bi 210m Pb 210 Bi 208 Bi 210m Pb 210 Bi 208 Bi 210m Pb 211 Bi 208 Bi 210m Pb 211 Bi 208 Bi 208 Bi 210m Pb 211 Bi 208 Bi 210m Bi 210m Bi 208 Bi 210m Bi 208 Bi 210m Bi 208 Bi 210m Bi 208 Bi 210m Bi 210m Bi 208 Bi 210m Bi 210m Bi 210m Bi 223 Bi 224 Bi 224 Bi 224 Bi 224 Bi 224 Bi 226 Bi 220 Bi 2	8
Co 60	8
Ni 59	8
Ni 63 Zn 65 Se 79 Kr 81 Kr 85 Rb 87 Sr 90 Zr 93 Nb 91 Nb 92 Nb 93m Nb 94 Mo 93 Tc 97 Tc 99 Ru 106 Pd 107 Ag 108m Ag 110m Cd 109 Cd 113m Sn 123 Sn 126 Sb 125 Sh 125	8
Zn 65 8 Ra 223 Se 79 8 Ra 225 Kr 81 8 Ra 226 Kr 85 8 Ra 228 Rb 87 8 Ac 227 Sr 90 8 Th 227 Zr 93 8 Th 229 Nb 91 8 Th 230 Nb 92 8 Th 230 Nb 93m 8 Th 232 Nb 94 1.71E-08 CC 2 Th 234 Mo 93 7c 97 8 Pa 231 Tc 97 8 Pa 233 Tc 99 8 U 232 Ru 106 8 U 234 Pd 107 8 U 236 Ag 110m 8 U 236 Cd 109 8 U 238 Cd 113m 8 Pu 236 Sn 121m 8 Pu 239 Sn 126 8 Pu 241	8 8
Se 79 8 Ra 225 Kr 81 8 Ra 226 Kr 85 8 Ra 228 Rb 87 8 Ac 227 Sr 90 8 Th 227 Zr 93 8 Th 228 Nb 91 8 Th 230 Nb 92 8 Th 230 Nb 93m 8 Th 232 Nb 94 1.71E-08 CC 2 Th 234 Mo 93 8 Pa 231 Tc 97 8 Pa 233 Tc 99 8 U 232 Ru 106 8 U 233 Pd 107 8 U 236 Ag 110m 8 U 236 Cd 109 8 U 238 Cd 113m 8 Pu 236 Sn 121m 8 Pu 239 Sn 126 8 Pu 240 Sb 125 8 Pu 241	8
Kr 81 8 Ra 226 Kr 85 8 Ra 228 Rb 87 8 Ac 227 Sr 90 8 Th 227 Zr 93 8 Th 228 Nb 91 8 Th 229 Nb 92 8 Th 230 Nb 93m 8 Th 232 Nb 94 1.71E-08 CC 2 Th 234 Mo 93 8 Pa 231 Tc 97 8 Pa 233 Tc 99 8 U 232 Ru 106 8 U 233 Pd 107 8 U 234 Ag 108m 1.79E-08 CC 2 U 235 Ag 110m 8 U 236 Cd 109 8 U 238 Cd 113m 8 Pu 236 Sn 121m 8 Pu 239 Sn 121 8 Pu 239 Sn 126 8 Pu 241	8
Kr 85 8 Ra 228 Rb 87 8 Ac 227 Sr 90 8 Th 227 Zr 93 8 Th 228 Nb 91 8 Th 229 Nb 92 8 Th 230 Nb 93m 8 Th 232 Nb 94 1.71E-08 C 2 Th 234 Mo 93 8 Pa 231 Tc 97 8 Pa 233 Tc 99 8 U 232 Ru 106 8 U 233 Pd 107 8 U 234 Ag 108m 1.79E-08 C 2 U 235 Ag 110m 8 U 238 Cd 109 8 U 238 Cd 113m 8 Np 237 Sn 119m 8 Pu 238 Sn 121m 8 Pu 239 Sn 126 8 Pu 241	8
Rb 87 8 Ac 227 Sr 90 8 Th 227 Zr 93 8 Th 228 Nb 91 8 Th 229 Nb 92 8 Th 230 Nb 93m 8 Th 232 Nb 94 1.71E-08 CC 2 Th 234 Mo 93 8 Pa 231 Tc 97 8 Pa 233 Tc 99 8 U 232 Ru 106 8 U 233 Pd 107 8 U 234 Ag 108m 1.79E-08 CC 2 U 235 Ag 110m 8 U 236 Cd 109 8 U 238 Cd 113m 8 Np 237 Sn 12m 8 Pu 239 Sn 121m 8 Pu 239 Sn 126 8 Pu 240 Sb 125 8 Pu 241	8
Sr 90 8 Th 227 Zr 93 8 Th 228 Nb 91 8 Th 229 Nb 92 8 Th 230 Nb 93m 8 Th 232 Nb 94 1.71E-08 CC 2 Th 234 Mo 93 8 Pa 231 Tc 97 8 Pa 233 Tc 99 8 U 232 Ru 106 8 U 233 Pd 107 8 U 234 Ag 108m 1.79E-08 CC 2 U 235 Ag 110m 8 U 236 Cd 109 8 U 238 Cd 113m 8 Pu 236 Sn 121m 8 Pu 238 Sn 121m 8 Pu 239 Sn 126 8 Pu 240 Sb 125 8 Pu 241	8
Zr 93 8 Th 228 Nb 91 8 Th 229 Nb 92 8 Th 230 Nb 93m 8 Th 232 Nb 94 1.71E-08 CC 2 Th 234 Mo 93 8 Pa 231 Tc 97 8 Pa 233 Tc 99 8 U 232 Ru 106 8 U 234 Pd 107 8 U 234 Ag 108m 1.79E-08 CC 2 U 235 Ag 110m 8 U 236 Cd 109 8 U 238 Cd 113m 8 Pu 236 Sn 121m 8 Pu 238 Sn 123 8 Pu 239 Sn 126 8 Pu 240 Sb 125 8 Pu 241	8
Nb 91 8 Th 229 Nb 92 8 Th 230 Nb 93m 8 Th 232 Nb 94 1.71E-08 CC 2 Th 234 Mo 93 8 Pa 231 Tc 97 8 Pa 233 Tc 99 8 U 232 Ru 106 8 U 233 Pd 107 8 U 234 Ag 108m 1.79E-08 CC 2 U 235 Ag 110m 8 U 236 Cd 109 8 U 238 Cd 113m 8 Np 237 Sn 119m 8 Pu 236 Sn 121m 8 Pu 239 Sn 123 8 Pu 240 Sb 125 8 Pu 241	8
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Mo 93 8 Pa 231 Tc 97 8 Pa 233 Tc 99 8 U 232 Ru 106 8 U 233 Pd 107 8 U 234 Ag 108m 1.79E-08 CC 2 U 235 Ag 110m 8 U 236 Cd 109 8 U 238 Cd 113m 8 Np 237 Sn 119m 8 Pu 236 Sn 121m 8 Pu 239 Sn 123 8 Pu 240 Sb 125 8 Pu 241	8
Tc 99 Ru 106 Pd 107 Ag 108m Ag 110m Cd 109 Cd 113m Sn 121m Sn 123 Sn 126 Sb 125 Ru 106 8 U 232 U 233 8 U 234 U 234 U 235 8 U 236 U 236 U 238 U 238 V 238 Pu 238 Pu 238 Pu 239 Sn 126 Sb 125 8 U 232 U 233 Sn 126 Sn 124 Sn 125 Sn 125 Sn 125 Sn 126 Sn 127 Sn 128 Sn 129 Sn 1240 Sn 125 Sn 125 Sn 126 Sn 127 Sn 128 Sn 129 Sn 126 Sn 127 Sn 128 Sn 129 Sn 120 Sn 121 Sn 123 Sn 126 Sn 124 Sn 125 Sn 126 Sn 127 Sn 128 Sn 129 Sn 129 Sn 120 Sn 121 Sn 122 Sn 126 Sn 127 Sn 128 Sn 128 Sn 129 Sn 129 Sn 120 Sn 121 Sn 122 Sn 126 Sn 127 Sn 128 Sn 129 Sn 129 Sn 120 Sn 121 Sn 122 Sn 124 Sn 125 Sn 125 Sn 126 Sn 127 Sn 128 Sn 129 Sn 129 Sn 120 Sn 120 Sn 121 Sn 122 Sn 124	8
Ru 106 Pd 107 Ag 108m Ag 110m Cd 109 Cd 113m Sn 119m Sn 123 Sn 126 Sb 125 Ru 106 8 U 233 U 234 U 235 B U 235 B U 236 C 2 U 235 B U 238 C 2 U 238 C 2 U 238 B U 238 B U 238 B Pu 236 B Pu 238 B Pu 239 B Pu 240 B Pu 241	8
Rd 107 8 U 234 Ag 108m 1.79E-08 CC 2 U 235 Ag 110m 8 U 236 Cd 109 8 U 238 Cd 113m 8 Np 237 Sn 119m 8 Pu 236 Sn 121m 8 Pu 238 Sn 123 8 Pu 239 Sn 126 8 Pu 240 Sb 125 8 Pu 241	8
Ag 108m Ag 110m Cd 109 Cd 113m Sn 119m Sn 121 Sn 123 Sn 126 Sb 125 Ag 108m 1.79E-08 CC 2 U 235 U 236 U 236 U 238 V 238 Pu 238 Pu 236 Pu 239 Sn 124 Sp 125 Sp 125 Sp 125 Sp 1241	8
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Cd 109 Cd 113m Sn 119m Sn 121m Sn 123 Sn 126 Sb 125 Cd 109 8 U 238 Np 237 Pu 236 Pu 238 Pu 238 Pu 239 Pu 240 Pu 241	8
Cd 113m	8
Sn 119m Sn 121m Sn 123 Sn 126 Sb 125 Sn 126 Sb 125 Sn 126 Sn 127	8
Sn 121m 8 Pu 238 Sn 123 8 Pu 239 Sn 126 8 Pu 240 Sb 125 8 Pu 241	8
Sn 123 8 Pu 239 Sn 126 8 Pu 240 Sb 125 8 Pu 241	8 8
Sn 126 Sb 125 8 Pu 240 Pu 241	8
Sb 125 8 Pu 241	8
	8
D: 040	8
Sb 126	8
Te 127m 8 Am 242m	8
1 1 1 2 9 8 Am 2 4 3	8
Cs 134 8 Cm 242	8
Cs 135 8 Cm 243	8
Cs 137 8 Cm 244	8
Ba 133 2.16E-09 CC 2 Cm 245	8
La 137 8 Cm 246	8
La 138 8 Cm 248	8
Ce 144 8 Cf 249	8
Pm 145 8 Cf 250	8
Pm 147 8 Cf 251	8
Sm 147 8 Cf 252	8
Sm 151 9.2E-07 CC 2 Other a	
Eu 152 6.97E-06 CC 2 Other b/g	
Eu 154 3.66E-08 CC 2 Total a 0	0
Eu 155 8 Total b/g 0 1.34E-	04 CC 2

Bands (Upper and Lower)

A a factor of 1.5 B a factor of 3 C a factor of 10

D a factor of 100 E a factor of 1000

Bands quantify uncertainty in mean radioactivity.

- Code

 1 Measured activity
 2 Derived activity (best estimate)
 3 Derived activity (upper limit)
 4 Not present
 5 Present but not significant
 6 Likely to be present but not assessed
 7 Present in significant quantities but not determined
 8 Not expected to be present in significant quantity