

|                     |              |                 |
|---------------------|--------------|-----------------|
| <b>WASTE STREAM</b> | <b>9E913</b> | <b>AETP LLW</b> |
|---------------------|--------------|-----------------|

**SITE** Oldbury  
**SITE OWNER** Nuclear Decommissioning Authority

**WASTE CUSTODIAN** Magnox Limited

**WASTE TYPE** LLW

Is the waste subject to Scottish Policy: No

**WASTE VOLUMES**

|                        |                           | Reported             |
|------------------------|---------------------------|----------------------|
| Stocks:                | At 1.4.2022.....          | 3.5 m <sup>3</sup>   |
| Future arisings -      | 1.4.2022 - 31.3.2023..... | 4.3 m <sup>3</sup>   |
|                        | 1.4.2023 - 31.3.2025..... | 10.0 m <sup>3</sup>  |
|                        | 1.4.2025 - 31.3.2026..... | 10.0 m <sup>3</sup>  |
|                        | 1.4.2026 - 31.3.2031..... | 118.1 m <sup>3</sup> |
| Total future arisings: |                           | 142.4 m <sup>3</sup> |
| Total waste volume:    |                           | 145.8 m <sup>3</sup> |

Comment on volumes: Waste in this stream is assumed to arise after defueling.

Uncertainty factors on volumes: Stock (upper): x 1.2 Arisings (upper) x 1.2  
Stock (lower): x 0.8 Arisings (lower) x 0.8

**WASTE SOURCE** The 9E913 waste stream captures operational and maintenance wastes from the Active Effluent Treatment Plant (AETP) and associated areas. The AETP provides the processing facilities for active effluents onsite. Pond Water Treatment Plant and Active Waste Vaults are now incorporated into 9E914.

**PHYSICAL CHARACTERISTICS**

General description: This stream will act as an operational support waste stream as the majority of work planned is expected to be focused on the operation and maintenance of the AETP. It should be noted that the AETP fine filters and associated waste will now be consigned under the 9E913 waste stream. The waste consigned under waste stream 9E913 mainly comprises metal (aluminium, copper, iron, magnesium, mild steel, stainless steel, zinc and lead), concrete and rubble, soil, biodegradable materials, plasterboard, plastics, rubber, wood and other materials including EEE materials, MMMF, asbestos, glass and sand. The waste is expected to be in the form of mixed trash, with occasional large items such as pipework, motors and pumps. Fixative is included as it may be used to seal surface contamination to prevent an airborne hazard during size reduction operations.

Physical components (%wt): Metal (~34%wt), rubble including concrete and brick/blockwork (~7%wt), soil (~1%), biodegradables (~2%), plasterboard (1%), PVC/plastic pipework (~16%wt), rubber (~1%), wood (~4%wt), other organic (~1%) and others including asbestos and sand (~33%).

Sealed sources: The waste does not contain sealed sources.

Bulk density (t/m<sup>3</sup>): ~0.27

Comment on density: Data taken from WCH mass divided by volume.

**CHEMICAL COMPOSITION**

General description and components (%wt): The waste comprises metal (~34%wt), rubble including concrete and brick/blockwork (~7%wt), soil (~1%), biodegradables (~2%), plasterboard (1%), PVC/plastic pipework (~16%wt), rubber (~1%), wood (~4%wt), other organic (~1%) and others including asbestos and sand (~33%).

Chemical state: -

Chemical form of radionuclides: H-3: The tritium may be present as tritiated water.  
C-14: The chemical form of carbon 14 has not been determined.  
Cl-36: The chemical form of chlorine 36 has not been determined.  
Se-79: The selenium content is insignificant.  
Tc-99: The technetium content is insignificant.  
Ra: Radium isotope content is expected to be insignificant.  
Th: The thorium content is insignificant.  
U: Chemical form of uranium isotopes has not been determined but may be uranium oxides.  
Np: The neptunium content is insignificant.

**WASTE STREAM      9E913      AETP LLW**

Pu: Chemical form of plutonium isotopes has not been determined but may be plutonium oxides.

Metals and alloys (%wt):      The thickness of the metal varies from 1 mm to 30 mm.

|                           | (%wt) | Type(s) / Grade(s) with proportions  | % of total C14 activity |
|---------------------------|-------|--|-------------------------|
| Stainless steel.....      | ~12.7 | Items such as pipework, flooring plates, brackets, frames.   |                         |
| Other ferrous metals..... | ~16.3 | Mild steel - Items such as pipework, flooring plates, brackets, frames.  |                         |
| Iron.....                 | 0.54  | Iron in waste items such as cast iron piping.  |                         |
| Aluminium.....            | ~0.78 | Aluminium in waste items such as ladders and ducting.  |                         |
| Beryllium.....            | 0     |  |                         |
| Cobalt.....               |       |  |                         |
| Copper.....               | 0.47  | Trace in waste items such as pipework.   |                         |
| Lead.....                 | 2.9   | Sheet, pipe, block & shot.   |                         |
| Magnox/Magnesium.....     | 0.01  | Trace in waste items.  |                         |
| Nickel.....               |       |  |                         |
| Titanium.....             |       |  |                         |
| Uranium.....              | NE    |  |                         |
| Zinc.....                 | 0.26  | Galvanised steel in items such as gratings or buckets.   |                         |
| Zircaloy/Zirconium.....   | TR    |  |                         |
| Other metals.....         | 0     | "Other" metals have not been identified. Mass estimates in the table above for mild steel and stainless steel include the constituent alloying elements such as Cr, Fe, Ni, & Co. Therefore, these constituent alloying elements are not recorded seperately to avoid double accounting. |                         |

Organics (%wt):      Trace quantities of oil may be present.

|                                     | (%wt) | Type(s) and comment                                     | % of total C14 activity |
|-------------------------------------|-------|---|-------------------------|
| Total cellulosics.....              | ~4.0  |   |                         |
| Paper, cotton.....                  | 0     |   |                         |
| Wood.....                           | ~4.0  |   |                         |
| Halogenated plastics .....          | ~9.0  | PVC, PPE.   |                         |
| Total non-halogenated plastics..... | 7.0   |   |                         |
| Condensation polymers.....          | 0     |   |                         |
| Others.....                         | 7.0   | Pipes, poly, PPE, perspex, containers, sheet and hoses. |                         |
| Organic ion exchange materials....  | 0     |   |                         |
| Total rubber.....                   | ~1.0  |   |                         |
| Halogenated rubber .....            | ~0.50 | Neoprene.   |                         |
| Non-halogenated rubber.....         | ~0.50 |   |                         |
| Hydrocarbons.....                   |       |   |                         |
| Oil or grease .....                 |       |   |                         |

|                     |              |                 |
|---------------------|--------------|-----------------|
| <b>WASTE STREAM</b> | <b>9E913</b> | <b>AETP LLW</b> |
|---------------------|--------------|-----------------|

Fuel.....  
 Asphalt/Tarmac (cont.coal tar)...  
 Asphalt/Tarmac (no coal tar)....  
 Bitumen.....  
 Others.....  
 Other organics..... ~1.0

Other materials (%wt): -

|                                    | (%wt) | Type(s) and comment                                | % of total C14 activity |
|------------------------------------|-------|--|-------------------------|
| Inorganic ion exchange materials.. | 0     |  |                         |
| Inorganic sludges and flocs.....   | 0     |  |                         |
| Soil.....                          | ~1.0  |  |                         |
| Brick/Stone/Rubble.....            | ~7.0  |  |                         |
| Cementitious material.....         |       |  |                         |
| Sand.....                          | 31.8  | Sand - included in others total in WCH (3 tonnes). |                         |
| Glass/Ceramics.....                | 0.22  | 0.11% MMMF Lagging, 0.11% glass.                   |                         |
| Graphite.....                      | 0     |  |                         |
| Desiccants/Catalysts.....          |       |  |                         |
| Asbestos.....                      | 0.22  |  |                         |
| Non/low friable.....               | 0.11  | Gaskets/joints chrysotile (white).                 |                         |
| Moderately friable.....            | 0     |  |                         |
| Highly friable.....                | 0.11  | Lagging / gaskets chrysotile (white).              |                         |
| Free aqueous liquids.....          | 0     |  |                         |
| Free non-aqueous liquids.....      | 0     |  |                         |
| Powder/Ash.....                    | TR    |  |                         |

Inorganic anions (%wt): Carbonates and sulphates expected to be present in trace quantities.

|                | (%wt) | Type(s) and comment |
|----------------|-------|---------------------|
| Fluoride.....  | 0     |                     |
| Chloride.....  | 0     |                     |
| Iodide.....    | 0     |                     |
| Cyanide.....   | 0     |                     |
| Carbonate..... | TR    |                     |
| Nitrate.....   | 0     |                     |
| Nitrite.....   | 0     |                     |
| Phosphate..... | 0     |                     |
| Sulphate.....  | TR    |                     |
| Sulphide.....  | 0     |                     |

Materials of interest for waste acceptance criteria: There may be traces of powder as residues. Magnox may be present in trace quantities, but will not constitute a hazard.

|                     |              |                 |
|---------------------|--------------|-----------------|
| <b>WASTE STREAM</b> | <b>9E913</b> | <b>AETP LLW</b> |
|---------------------|--------------|-----------------|

|  | (%wt) | Type(s) and comment |
|--|-------|---------------------|
| Combustible metals.....                        | TR    |                     |
| Low flash point liquids.....                   | 0     |                     |
| Explosive materials.....                       | 0     |                     |
| Phosphorus.....                                | 0     |                     |
| Hydrides.....                                  | 0     |                     |
| Biological etc. materials.....                 | 0     |                     |
| Biodegradable materials.....                   | 2.0   |                     |
| Putrescible wastes.....                        | 1.0   |                     |
| Non-putrescible wastes.....                    | 1.0   |                     |
| Corrosive materials.....                       | 0     |                     |
| Pyrophoric materials.....                      | 0     |                     |
| Generating toxic gases.....                    | 0     |                     |
| Reacting with water.....                       | P     | 20.846m2            |
| Higher activity particles.....                 |       |                     |
| Soluble solids as bulk chemical compounds..... |       |                     |

Hazardous substances / -  
non hazardous pollutants:

|                             | (%wt) | Type(s) and comment |
|-----------------------------|-------|---------------------|
| Acrylamide.....             |       |                     |
| Benzene.....                |       |                     |
| Chlorinated solvents.....   |       |                     |
| Formaldehyde.....           |       |                     |
| Organometallics.....        |       |                     |
| Phenol.....                 |       |                     |
| Styrene.....                |       |                     |
| Tri-butyl phosphate.....    |       |                     |
| Other organophosphates..... |       |                     |
| Vinyl chloride.....         |       |                     |
| Arsenic.....                |       |                     |
| Barium.....                 |       |                     |
| Boron.....                  | 0     |                     |
| Boron (in Boral).....       |       |                     |
| Boron (non-Boral).....      |       |                     |
| Cadmium.....                |       |                     |
| Caesium.....                |       |                     |
| Selenium.....               |       |                     |
| Chromium.....               |       |                     |
| Molybdenum.....             |       |                     |
| Thallium.....               |       |                     |
| Tin.....                    |       |                     |
| Vanadium.....               |       |                     |

**WASTE STREAM      9E913      AETP LLW**

Mercury compounds.....  
 Others..... ~1.0      Others include ET-150-AF Fixative (~0.26%), and EEE materials (~0.63%). The weight of EEE materials is approx. 60kg.

Electronic Electrical Equipment (EEE)  
 EEE Type 1..... P      25 off Stripped down circuit boards.  
 EEE Type 2..... P      50 off Plant items containing electrical components e.g. pumps and motors, transformers and capacitors.  
 EEE Type 3..... P      100 off Electrical tools e.g. saws and drills.  
 EEE Type 4..... P      50 off Fluorescent tubes / lamps.  
 EEE Type 5..... P      10 off Rechargeable batteries which are nickel-Cadmium and Lithium-ion.

Complexing agents (%wt):      No

(%wt)      Type(s) and comment  
 EDTA.....  
 DPTA.....  
 NTA.....  
 Polycarboxylic acids.....  
 Other organic complexants.....  
 Total complexing agents.....      0

Potential for the waste to contain discrete items:      Yes. Sand - In & of itself not a DI; assumed not likely to contain any "rogue" items that could be Large Metal Items (LMIs)/"substantial" thickness items considered "durable" assumed DIs; Stainless items assumed DIs

**TREATMENT, PACKAGING AND DISPOSAL**

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

| Treatment             | On-site / Off site | Stream volume % |
|-----------------------|--------------------|-----------------|
| Low force compaction  | On-site            | 14.3            |
| Supercompaction (HFC) | Off-site           | 14.3            |
| Incineration          | Off-site           | 42.9            |
| Solidification        |                    |                 |
| Decontamination       |                    |                 |
| Metal treatment       | Off-site           | 8.6             |
| Size reduction        |                    |                 |
| Decay storage         |                    |                 |
| Recycling / reuse     |                    |                 |
| Other / various       |                    |                 |
| None                  |                    | 34.3            |

Comment on planned treatments:      14.29% of this waste stream is expected to be sent for VLLW Landfill disposal.

**Disposal Routes:**

| Disposal Route   | Stream volume % | Disposal density t/m3 |
|--|-----------------|-----------------------|
| Expected to be consigned to the LLW Repository           | 34.3            | 0.27                  |
| Expected to be consigned to a Landfill Facility          | 14.3            | 0.27                  |
| Expected to be consigned to an On-Site Disposal Facility |                 |                       |
| Expected to be consigned to an Incineration Facility     | 42.9            | 0.40                  |
| Expected to be consigned to a Metal Treatment Facility   | 8.6             | 1.4                   |
| Expected to be consigned as Out of Scope                 |                 |                       |
| Expected to be recycled / reused                         |                 |                       |
| Disposal route not known                                 |                 |                       |

**WASTE STREAM 9E913 AETP LLW**

Classification codes for waste expected to be consigned to a landfill facility: 17 04 05, 17 01 07, 17 02 01, 17 02 02, 17 02 03, 17 05 04, 17 06 04, 17 06 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 Management Route | Opportunity Management Route | Stream volume (%) | Estimated Date that Opportunity will be realised | Opportunity Confidence | Comment |
|---------------------------|------------------------------|-------------------|--|------------------------|---------|
| -                         | -                            | -                 | -  | -                      | -       |

**Waste Packaging for Disposal:**

| Container                              | Stream volume % | Waste loading m <sup>3</sup> | Number of packages |
|--|-----------------|------------------------------|--------------------|
| 1/3 Height IP-1 ISO                    |                 |                              |                    |
| 2/3 Height IP-2 ISO                    |                 |                              |                    |
| 1/2 Height WAMAC IP-2 ISO              | 14.3            | 43.2                         | < 1                |
| 1/2 Height IP-2 Disposal/Re-usable ISO | 20.0            | 10                           | 3                  |
| 2m box (no shielding)                  |                 |                              |                    |
| 4m box (no shielding)                  |                 |                              |                    |
| Other                                  |                 |                              |                    |

Other information: It is likely that this waste will be placed in a container with other LLW. 43.2m<sup>3</sup> loading volume is calculated based on the fact that you can low force compact two times the normal volume of waste into a 200 litre/0.2m<sup>3</sup> drum (400 litres/0.4m<sup>3</sup>), you can then fit 36 drums (14.4m<sup>3</sup>) into a 1/2 height ISO, each drum can be super-compacted to a 1/3 of its original volume so therefore we can get 3 x the amount of un-compacted drums into the final disposal container (43.2m<sup>3</sup>).

**Waste Planned for Disposal at the LLW Repository:**

Container voidage: No significant inaccessible voidage is expected.

Waste Characterisation Form (WCH): The waste meets the LLWR's Waste Acceptance Criteria (WAC). The waste has a current WCH. Inventory information is consistent with the current WCH.

Waste consigned for disposal to LLWR in year of generation: Yes.

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

Stream volume (%): -

Waste stream variation: -

Bounding cuboidal volume:

Inaccessible voidage: -

**WASTE STREAM**

**9E913**

**AETP LLW**

Other information: -

**RADIOACTIVITY**

Source: Activation and contamination of materials.

Uncertainty: Activity values are current best estimates. Specific activity is a function of Station operating history. The values quoted are indicative of the activities that would be expected, although demolition wastes are predicted to be lower in activity than the routine operational wastes and so the values quoted for this stream are expected to be an over estimate.

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: Data taken from WCH -1MXN-3OLD-0-WCH-0-4749 V4 and decayed by 1 year for RWI 2022.

Other information: -

**WASTE STREAM 9E913 AETP LLW**

| Nuclide | Mean radioactivity, TBq/m <sup>3</sup> |                |                 |                | Nuclide          | Mean radioactivity, TBq/m <sup>3</sup> |                |                 |                |
|---------|--|----------------|-----------------|----------------|------------------|--|----------------|-----------------|----------------|
|         | Waste at 1.4.2022                      | Bands and Code | Future arisings | Bands and Code |                  | Waste at 1.4.2022                      | Bands and Code | Future arisings | Bands and Code |
| H 3     | 2.37E-06                               | CC 1           | 2.37E-06        | CC 1           | Gd 153           |  | 8              |                 | 8              |
| Be 10   |  | 8              |                 | 8              | Ho 163           |  | 8              |                 | 8              |
| C 14    | 1.58E-06                               | CC 1           | 1.58E-06        | CC 1           | Ho 166m          |  | 8              |                 | 8              |
| Na 22   |  | 8              |                 | 8              | Tm 170           |  | 8              |                 | 8              |
| Al 26   |  | 8              |                 | 8              | Tm 171           |  | 8              |                 | 8              |
| Cl 36   | 1.81E-08                               | CC 1           | 1.81E-08        | CC 1           | Lu 174           |  | 8              |                 | 8              |
| Ar 39   |  | 8              |                 | 8              | Lu 176           |  | 8              |                 | 8              |
| Ar 42   |  | 8              |                 | 8              | Hf 178n          |  | 8              |                 | 8              |
| K 40    |  | 8              |                 | 8              | Hf 182           |  | 8              |                 | 8              |
| Ca 41   |  | 8              |                 | 8              | Pt 193           |  | 8              |                 | 8              |
| Mn 53   |  | 8              |                 | 8              | Tl 204           |  | 8              |                 | 8              |
| Mn 54   |  | 8              |                 | 8              | Pb 205           |  | 8              |                 | 8              |
| Fe 55   | 8.87E-07                               | CC 1           | 8.87E-07        | CC 1           | Pb 210           |  | 8              |                 | 8              |
| Co 60   | 1.59E-07                               | CC 2           | 1.59E-07        | CC 2           | Bi 208           |  | 8              |                 | 8              |
| Ni 59   |  | 8              |                 | 8              | Bi 210m          |  | 8              |                 | 8              |
| Ni 63   | 3.28E-07                               | CC 1           | 3.28E-07        | CC 1           | Po 210           |  | 8              |                 | 8              |
| Zn 65   |  | 8              |                 | 8              | Ra 223           |  | 8              |                 | 8              |
| Se 79   |  | 8              |                 | 8              | Ra 225           |  | 8              |                 | 8              |
| Kr 81   |  | 8              |                 | 8              | Ra 226           |  | 8              |                 | 8              |
| Kr 85   |  | 8              |                 | 8              | Ra 228           |  | 8              |                 | 8              |
| Rb 87   |  | 8              |                 | 8              | Ac 227           |  | 8              |                 | 8              |
| Sr 90   | 1.95E-05                               | CC 1           | 1.95E-05        | CC 1           | Th 227           |  | 8              |                 | 8              |
| Zr 93   |  | 8              |                 | 8              | Th 228           |  | 8              |                 | 8              |
| Nb 91   |  | 8              |                 | 8              | Th 229           |  | 8              |                 | 8              |
| Nb 92   |  | 8              |                 | 8              | Th 230           |  | 8              |                 | 8              |
| Nb 93m  |  | 8              |                 | 8              | Th 232           |  | 8              |                 | 8              |
| Nb 94   | 1.39E-07                               | CC 2           | 1.39E-07        | CC 2           | Th 234           |  | 8              |                 | 8              |
| Mo 93   |  | 8              |                 | 8              | Pa 231           |  | 8              |                 | 8              |
| Tc 97   |  | 8              |                 | 8              | Pa 233           |  | 8              |                 | 8              |
| Tc 99   |  | 8              |                 | 8              | U 232            |  | 8              |                 | 8              |
| Ru 106  | 1.02E-08                               | CC 2           | 1.02E-08        | CC 2           | U 233            |  | 8              |                 | 8              |
| Pd 107  |  | 8              |                 | 8              | U 234            |  | 8              |                 | 8              |
| Ag 108m | 3.36E-07                               | CC 2           | 3.36E-07        | CC 2           | U 235            |  | 8              |                 | 8              |
| Ag 110m |  | 8              |                 | 8              | U 236            |  | 8              |                 | 8              |
| Cd 109  |  | 8              |                 | 8              | U 238            |  | 8              |                 | 8              |
| Cd 113m |  | 8              |                 | 8              | Np 237           |  | 8              |                 | 8              |
| Sn 119m |  | 8              |                 | 8              | Pu 236           |  | 8              |                 | 8              |
| Sn 121m |  | 8              |                 | 8              | Pu 238           | 5.2E-07                                | CC 1           | 5.2E-07         | CC 1           |
| Sn 123  |  | 8              |                 | 8              | Pu 239           | 6.04E-07                               | CC 1           | 6.04E-07        | CC 1           |
| Sn 126  |  | 8              |                 | 8              | Pu 240           | 8.3E-07                                | CC 1           | 8.3E-07         | CC 1           |
| Sb 125  | 1.4E-07                                | CC 2           | 1.4E-07         | CC 2           | Pu 241           | 1.79E-05                               | CC 1           | 1.79E-05        | CC 1           |
| Sb 126  |  | 8              |                 | 8              | Pu 242           |  | 8              |                 | 8              |
| Te 125m | 3.44E-08                               | CC 2           | 3.44E-08        | CC 2           | Am 241           | 1.19E-06                               | CC 1           | 1.19E-06        | CC 1           |
| Te 127m |  | 8              |                 | 8              | Am 242m          |  | 8              |                 | 8              |
| I 129   |  | 8              |                 | 8              | Am 243           |  | 8              |                 | 8              |
| Cs 134  | 9.98E-07                               | CC 2           | 9.98E-07        | CC 2           | Cm 242           |  | 8              |                 | 8              |
| Cs 135  |  | 8              |                 | 8              | Cm 243           |  | 8              |                 | 8              |
| Cs 137  | 1.13E-03                               | CC 2           | 1.13E-03        | CC 2           | Cm 244           | 1.01E-08                               | CC 1           | 1.01E-08        | CC 1           |
| Ba 133  | 2.69E-07                               | CC 2           | 2.69E-07        | CC 2           | Cm 245           |  | 8              |                 | 8              |
| La 137  |  | 8              |                 | 8              | Cm 246           |  | 8              |                 | 8              |
| La 138  |  | 8              |                 | 8              | Cm 248           |  | 8              |                 | 8              |
| Ce 144  |  | 8              |                 | 8              | Cf 249           |  | 8              |                 | 8              |
| Pm 145  |  | 8              |                 | 8              | Cf 250           |  | 8              |                 | 8              |
| Pm 147  | 8.22E-08                               | CC 1           | 8.22E-08        | CC 1           | Cf 251           |  | 8              |                 | 8              |
| Sm 147  |  | 8              |                 | 8              | Cf 252           |  | 8              |                 | 8              |
| Sm 151  |  | 8              |                 | 8              | Other a          |  |                |                 |                |
| Eu 152  | 9.23E-07                               | CC 2           | 9.23E-07        | CC 2           | Other b/g        |  |                |                 |                |
| Eu 154  | 1.3E-07                                | CC 2           | 1.3E-07         | CC 2           | <b>Total a</b>   | <b>3.15E-06</b>                        | <b>CC 2</b>    | <b>3.15E-06</b> | <b>CC 2</b>    |
| Eu 155  | 1.15E-07                               | CC 2           | 1.15E-07        | CC 2           | <b>Total b/g</b> | <b>1.18E-03</b>                        | <b>CC 2</b>    | <b>1.18E-03</b> | <b>CC 2</b>    |

**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

Note: 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