

Site (Data) : ETE

Stock of waste as at December 2011

Country: CZECH REPUBLIC

Reporting Year: 2011

Site Name: ETE

Full Name: JE Temelin

Inventory Reporting Date: December 2011

Waste Matrix Used: cz-eu

Comment # 390: NPP Temelin

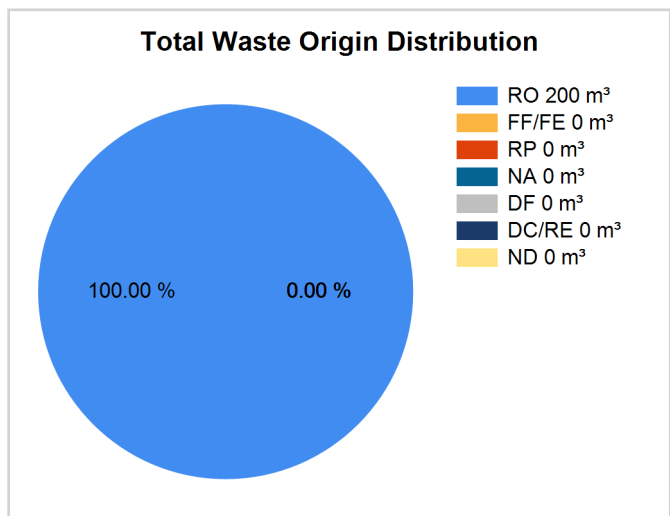
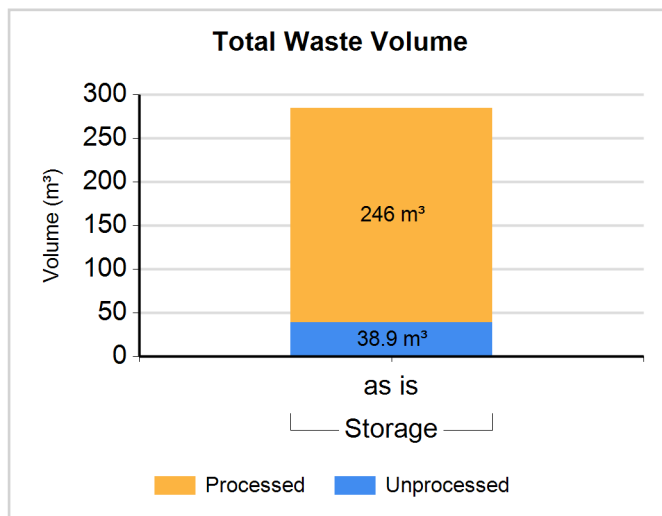
The Temelín NPP is the largest power station in the Czech Republic. 2 PWR reactors of the VVER-1000-320 type are installed with capacity of 2000 MW.

The NPP station is situated approximately 24 km north of the City of Ceske Budejovice.

The site preparation started in 1983. In 1990, the government of the CSFR decided to cease the construction on the 3rd and 4th units. Finally, in March 1993, the government of the CR decided that the 1st and 2nd VVER 1000 units should be completed only. However, the modifications and alterations further postponed the commissioning of the power station. Unit 1 was critical in October 2000. The trial operation of the Unit 1 started in July 2002. The Unit 2 was critical in May 2002. The trial operation of the Unit 2 started in April 2003.

Waste Inventory

Est=distribution is an estimate, Proc.=Is the waste processed (Yes/No)? RO=Reactor Operations, FF/FE=Fuel Fabrication/Fuel Enrichment, RP=Reprocessing, NA=Nuclear Applications,DF=Defence, DC/RE=Decommissioning/Remediation, ND=Not Determined



Note: where volume "as dispo" is provided, volume "as is" is used in the graph instead.

Waste Class: LILW-SL

| Waste Class Name | Location / Facility | Proc | Est. | Volume "as is" (m³) | Volume "as dispo" (m³) | RO % | FF/FE % | RP % | NA % | DF % | DC/RE % | ND % |
|------------------|---------------------|------|------|---------------------|------------------------|--------|---------|------|------|------|---------|------|
| LILW-SL (liquid) | Storage | N | N | 38.900 | 38.900 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| LILW-SL (liquid) | Storage | Y | N | 246.000 | 246.000 | 100.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

Comment # 4974: The additional characteristics of the waste

Processed waste covers only radioactive concentrates. Additionally 385.5 m3 of solid waste was stored in NPP Temelin in 2006, 119,2 t in 2007, 125 t in 2008, 119 t in 2009, 109 t in 2010 and 94,3 t in 2011.

Site (Data) : ETE

Stock of waste as at December 2011

Country: CZECH REPUBLIC

Reporting Year: 2011

Processing - Treatment method(s)

| Method | Status | | | |
|--------------|---------|-------------|---|---------------|
| | Planned | R&D program | Current practice method use over the last 5 years | Past Practice |
| Compaction | N | N | Increase | N |
| Evaporation | N | N | Increase | N |
| Incineration | N | N | Increase | N |
| Ion Exchange | N | N | Increase | N |

Processing - Conditioning method(s)

| Method | Status | | | |
|----------------|---------|-------------|---|---------------|
| | Planned | R&D program | Current practice method use over the last 5 years | Past Practice |
| Bituminization | N | N | Increase | N |
| Polymerization | N | N | Increase | N |

RadioNuclide Inventory in Storage

| RadioNuclide | Activity (GBq) |
|---------------------|----------------|
| Americium (Am-241) | 0.00213 |
| Calcium (Ca-41) | 0.0243 |
| Carbon (C-14) | 34.3 |
| Cesium (Cs-137) | 1680 |
| Cobalt (Co-60) | 11.4 |
| Iodine (I-129) | 0.0249 |
| Nickel (Ni-59) | 0.049 |
| Nickel (Ni-63) | 10.5 |
| Niobium (Nb-94) | 0.134 |
| Plutonium (Pu-239) | 0.00225 |
| Strontium (Sr-90) | 1.37 |
| Technetium (Tc-99) | 0.0281 |

Comment # 25759: Origin of summary data

Radioactivity of radionuclides limited by OLC + Co-60 is calculated as a sum of radioactivity of all solid and liquid RAW stored at the premises of NPP Temelin. The radioactivity of RAW stored at a batch storage facility in BAPP is considered as well.