The Decommissioning and Waste Management programme of the European Commission Joint Research Centre

Stéphane Brémier¹, Vincenzo Rondinella¹, Paolo Peerani², Francesco Basile² and Riccardo Casale²

¹European Commission, Karlsruhe, Germany
²European Commission, Ispra (Va), Italy
Corresponding author: Stéphane Brémier <stephane.bremier@ec.europa.eu>

The European Commission Joint Research Centre (JRC) Nuclear Decommissioning and Waste Management Programme (D&WM) is tasked to progressively dismantle all EURATOM nuclear installations at 4 JRC sites (Ispra in Italy; Petten in The Netherlands, Karlsruhe in Germany and Geel in Belgium), including those already shutdown and, at the end their operational life, those currently in use for research activities.

The scope of the programme includes a variety of installations, ranging from research reactors to hot cells, laboratories and other facilities where radioactive substances were and are still handled. It also intends to treat “historical” waste and waste arising from the dismantling operations.

All D&WM activities are implemented safely and according to relevant Member State regulations. The decommissioning activities (including pre-decommissioning activities, dismantling, waste clearance or safe conditioning and removal) are to be pursued as soon as possible after the end of the R&D operation to avoid unnecessary ageing of the infrastructure, and to limit costs escalation arising from extended safe conservation and loss of know-how. The final objective is to release the buildings and areas free of radiological constraint.

The programme is assumed to last for several decades until the decommissioning of the last JRC nuclear installation and the related waste disposal are complete. This contribution illustrates the present status of the JRC D&WM programme with examples of completed decommissioning and dismantling of facilities and descriptions of ongoing and future activities.
Figure P39: The JRC D&WM programme: Examples of facilities located in the different sites of the JRC. Top: ESSOR and HFR reactors located in JRC-Ispra and JRC-Petten. Bottom: View of Hot Cells laboratories in JRC-Karlsruhe and JRC-Ispra.