

CHALLENGES TODAY.  
RESPONSIBILITY FOR AGES



IGNALINA  
NUCLEAR  
POWER PLANT

# Construction of the INPP Near Surface Repository for Low- and Intermediate-Level Short-Lived Radioactive Waste B25



ACCREDITED  
MSCB-113



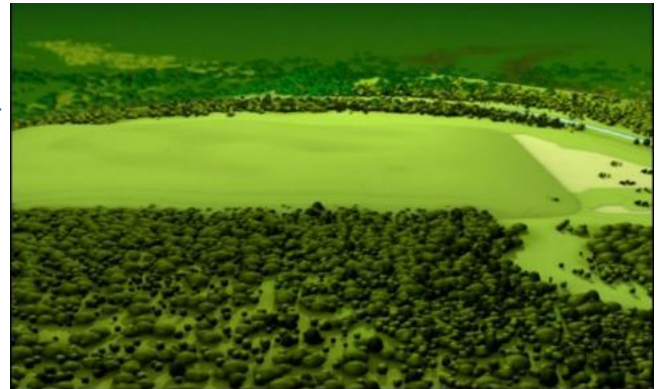
ISO 9001:2015  
GKLT-0199-QC



Ignalina NPP decommissioning activities are co-financed by the European Union

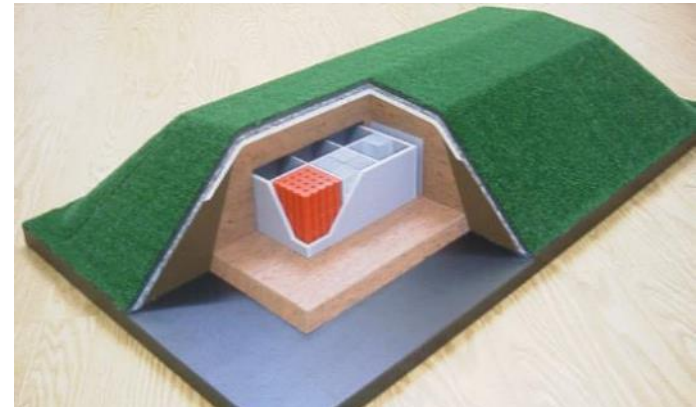
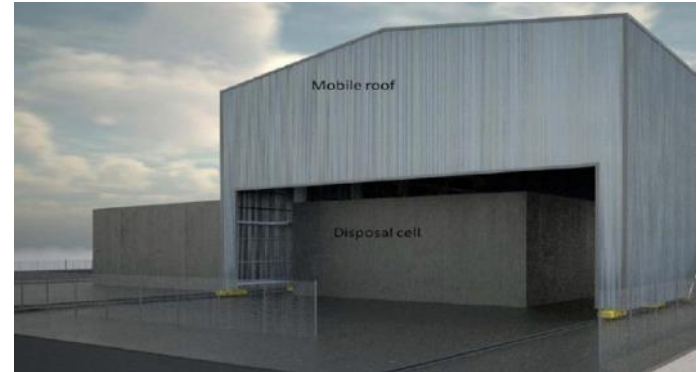
## Near Surface Repository for Low- and Intermediate-Level Short-Lived Radioactive Waste B25 (conception)

- B25 repository is a radioactive waste management facility to put radioactive waste without the intention of removing it.
- It is planned to place up to 100,000 m<sup>3</sup> of radioactive waste in the B25 repository. The repository itself, its protection zones and auxiliary structures required for its operation will occupy an area of ~ 45 ha.
- The entire infrastructure of the repository includes more than 20 buildings (administrative, production and auxiliary buildings, engineering networks, communications, other buildings).
- Closed repository shall be institutionally supervised for 300 years: 100 years - active maintenance (physical safety is ensured, necessary maintenance works, environmental condition monitoring), 200 years - passive maintenance (limited economic activity).
- Construction site of the repository - Stabatiškės village, Visaginas municipality. Stabatiskės is located in the territory of INPP, about 1 km southeast of NPP and 7 km east of Visaginas.



# Near Surface Repository for Low- and Intermediate-Level Short-Lived Radioactive Waste B25 (conception)

- Since the waste will be stored for a long time, the repository is divided into three groups of basements, so as not to build all the basements at the same time, thus reducing atmospheric exposure to the unfilled basements.
- **At certain stages, the repository will have cellars under construction, in operation and already closed at the same time.**
- Two cellars of one group covered with mobile temporary roofs will be operated at the same time.
- After the operational basements are filled with containers, they will be concreted by installing r/c slabs, and the temporary roofs will be moved to the other basements.
- In order not to maintain open basements for a long time, the filled basements of one group will be immediately closed by installing the final engineering barrier above them.
- The engineering barrier is designed to divert rainwater away from basements and protect structures from physical impact due to animals or other activities.



# Near Surface Repository for Low- and Intermediate-Level Short-Lived Radioactive Waste B25 (conception)



El Cabril repository in Spain



Center de L'Aube (CSA) repository in France

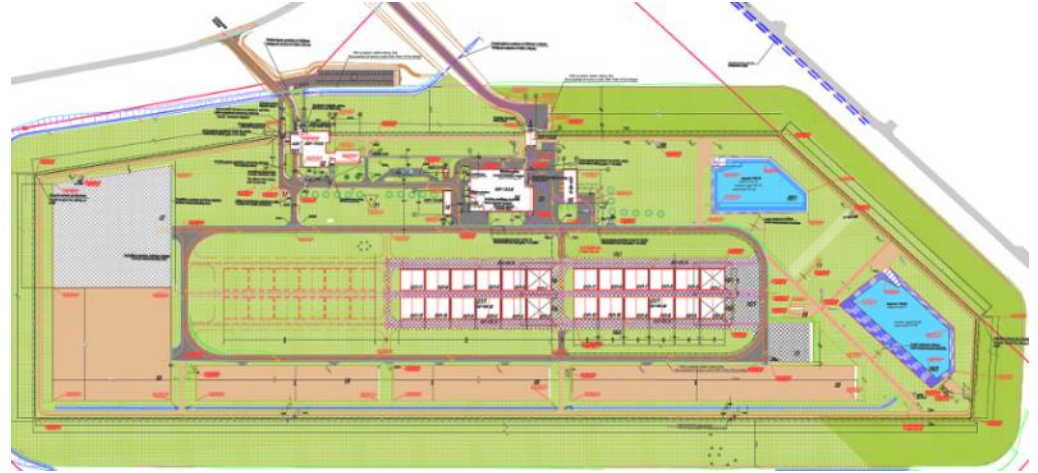
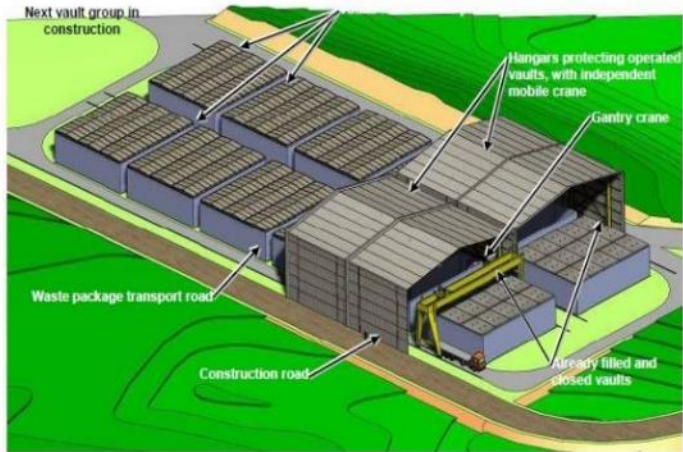


Mochovce repository in Slovakia

B25 repository, while unique as being a part of the decommissioning program of the Ignalina nuclear power plant, is not the first facility of its kind. At the moment, radioactive waste disposal sites are being built and operated in various European "nuclear" states and around the world.

**The B25 technical project was prepared in consultation with the French radioactive waste management agency ANDRA, and the B25 solutions were prepared based on the concept of the already operational CSA repository.**

## Near Surface Repository for Low- and Intermediate-Level Short-Lived Radioactive Waste B25 (main infrastructure)



The main infrastructure of the repository is reinforced concrete basements installed above the level of groundwater subsidence, in which appropriately processed radioactive waste placed in special containers. Each cellar consists of two sections, the cellars are arranged in three groups of 12 cellars. Mobile canopies are installed above the operating cellars (during the storage period of containers) to protect the infrastructure from the effects of the atmosphere. After the basements are filled, the sheds are moved, and a fixed reinforced concrete slab is installed above the filled basement groups.

**In the first phase of the construction technical project (construction stages IA and IIA), the entire infrastructure of the repository and two groups of basements will be installed.**

# Near Surface Repository for Low- and Intermediate-Level Short-Lived Radioactive Waste B25 (main infrastructure)

The general contract covers construction phases of I/A and II/A stages:

- Earthworks in the preparation of the entire repository site (including reclamation works, the preparation of a separate technical-detail design);
- Construction of repository infrastructure (fences, engineering networks, internal roads, telecommunications, rainwater basins, auxiliary sites, access roads, drainage system of the territory);
- Construction of administrative, technological and other auxiliary buildings;
- Construction of group I and II basements (2 x 12 units), installing temporary roofs over each basement;
- Construction of a temporary drainage system and access roads to group I basements;
- Construction of wells for monitoring the repository site;
- Installation of temporary shelter sections above the first two basements of the 1st group, as well as installation of a gantry crane.



**! Stages I/B, II/B - installation of r/c slabs for basements and stages I/C, II/C - final covering of basements (engineering barrier system) shall be purchased separately**

# Near Surface Repository for Low- and Intermediate-Level Short-Lived Radioactive Waste B25 (main infrastructure)



- **The preparatory work for B25 has been going on since 2000, during which the repository concept was prepared, the site was selected, engineering geological, geotechnical and other studies were carried out, and an environmental impact assessment was carried out.**
- 2007-11-21 by the Resolution no. 1227 of the Government of the Republic of Lithuania, the proposal of the Ministry of Economy of the Republic of Lithuania (now the Ministry of Economy and Innovation) was approved to allow the nuclear power plant to design a surface repository for burying low- and medium-activity short-lived radioactive waste in the territory of the village of Stabatiškės, Visaginas municipality.
- **2009-2017, the B25 technical project, environmental monitoring program, preliminary safety analysis report, construction permit and State Nuclear Power Safety Inspectorate license to build and operate a surface repository were prepared.**
- Construction permit received on 22/05/2017.
- **2019-10-30 the contract for the provision of FIDIC engineer and maintenance services was signed.**
- 2019-2022, three procurement procedures took place, which ended without concluding a contract due to circumstances beyond the control of INPP.
- **Since 2020, the planning and preparation for purchases of the external infrastructure of the repository (construction of the technological road from the temporary storage to the repository, installation of electrical and telecommunications engineering networks, modular boiler house construction) have been carried out.**

# Near Surface Repository for Low- and Intermediate-Level Short-Lived Radioactive Waste B25 (purchase procedure and contracting milestones)



- **2022-09-25 preparation of purchase documents and coordination with the funding administrator - public institution Central Project Management Agency (CPMA)**
  - **2022-10-03 purchase announcement**
  - **2022-11-30 submission of offers**
  - **2023-03-30 determination of the winner on**
  - **2023-05-15 mandatory inspection of procurement procedure documents and potential contractor (CPMA and National Security Commission)**
  - **2023-05-30 signing of the general contract**
  - **2023-06-15 start of works**
- 
- **Planned purchase budget - not published, a single price (lump sum) contract will be signed, with a flexible indexing mechanism**
  - **The preliminary duration of the contract is 1 650 days**
  - **The repository is a nuclear energy facility, therefore the general contractor and subcontractors are subject to BEOS certification requirements (legal recognition requirements for foreign suppliers)**



For questions related to the public procurement procedure,  
please contact B25 Procurement Manager Artiom Valujev  
+370 646 19531 [artiom.valujev@iae.lt](mailto:artiom.valujev@iae.lt)

Other questions - B25 project manager Jurgis Gelčys  
+370 658 89089 [jurgis.gelcys@iae.lt](mailto:jurgis.gelcys@iae.lt)

We are waiting for your comments and suggestions!

Elektrinės str. 12/1  
Drūkšinių vil. 31152  
Visagino mun. Lietuva

State Enterprise  
Ignalina Nuclear Power Plant  
[www.iae.lt](http://www.iae.lt)

Phone +370 386 28985  
Fax +370 386 24396  
E-mail [iae@iae.lt](mailto:iae@iae.lt)



Ignalina NPP decommissioning  
activities are co-financed by  
the European Union