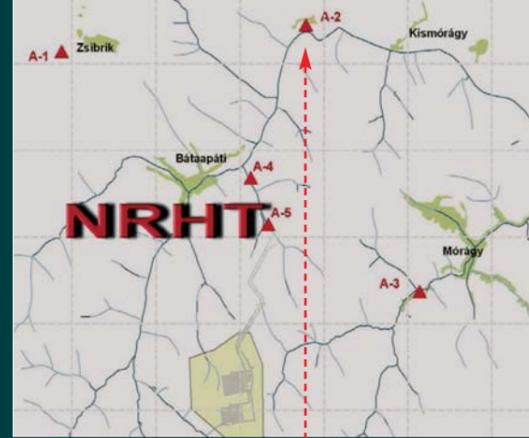


Environmental monitoring

In case of a radioactive waste disposal site, the most important social expectation is safety, the demonstration of which calls for established professional and technical evidence. In the course of operation, it must be demonstrated clearly and unambiguously that we are sufficiently aware of the placement system. This means that we are capable of estimating processes underway in the vicinity of the repository with a high degree of accuracy, that we are capable of recognising changes occurring in environmental conditions due to such processes, and of making the necessary interventions.

The expectations enumerated may only be satisfied through the operation of a properly elaborated environment-monitoring system, the processing and assessment of the findings thereof. Monitoring programmes have been devised to check the radiation circumstances of the site and to monitor the environment, which have been approved by the inspection authority. The environment-monitoring system comprises three parts: geological-hydrogeological-, radiological- and conventional environment monitoring.

An observing, controlling and signalling system was installed in the immediate and the remote environment of the disposal site, which is capable of supply data on changes in the facility and its environment, and radiation and contamination circumstances.



Social Control

Since its foundation, the Social Oversight and Information Association (TETT for short) has been constantly monitoring the process of setting up the repository and has taken on a significant role in informing the population. They are preparing for new responsibilities in the period of operation.

Pursuant to the agreement between PURAM and TETT, the representatives of settlements in the vicinity of the disposal site have set up an 18-member Public Control Group, which is responsible for ensuring social control. This covers the checking of waste take over and the environment. Social controllers have been given the required specialist training and proper instruments for fulfilling their tasks. They regularly inform the inhabitants of settlements on their controls.

nrht

NATIONAL RADIOACTIVE WASTE REPOSITORY IN BÁTAPÁTI (NRWR)

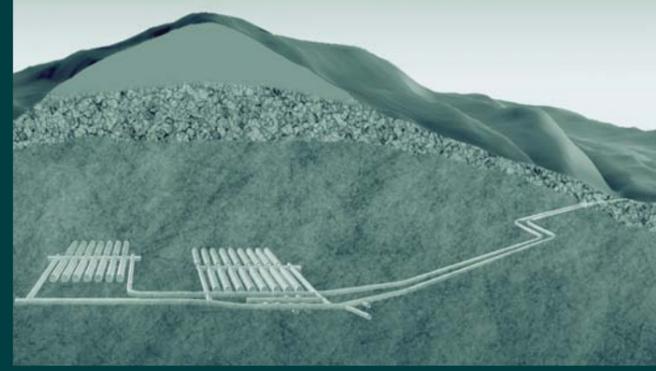


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What type of waste needs disposal?

A major category of low- and intermediate-level radioactive wastes covers protective devices, tools, parts and air-filters generated within the plant, which might have been contaminated by radioactive substances more or less. Solid wastes are placed in 200-litre metal drums, and if they are compressible, then they are compacted by a 50 t press.

Another large group of wastes is generated in the course of technological processes. Waters contaminated by radioactive substances are purified, in the course of which evaporation residue and used ion exchange resin are generated. They are stored in tanks within the power plant. They are also processed subsequently, since wastes must be solidified prior to their final emplacement.



Dear Reader,

The outstanding role of the nuclear power plant in Paks providing nearly 40% of Hungary's electricity generation is undisputable in national energy supply. The application of nuclear technology, however, presents new challenges to professionals, one of which is the safe solution of the final disposal of radioactive wastes.



Dr. József HEGYHÁTI,
managing director

The main objective of the National Project launched in 1993 was to seek a suitable site and solution for final disposal of low- and intermediate-level wastes through engagement of competent ministries and under acceptance from stakeholders.

Our systematic research and planning efforts underway for 15 years have borne fruit by now. Following preliminary consent from the Hungarian Parliament in principle, a successful local referendum, and the obtaining of required official permits, the first waste shipment was accomplished from the nuclear power plant to the National Radioactive Waste Repository (NRWR) in Bátaapáti.

Of course, there still remains a lot to be done since we must continue the underground program to render available a sufficient number of disposal chambers for safe placement of operating and - later on - decommissioning wastes from the nuclear power plant.

It fills my staffs and me with a good feeling that we had the opportunity to take an active part in resolving a matter of national scale. I am confident that this professional success will give us further strength and faith to continue our efforts.



Receiving, transporting and storing waste

In the first phase of NRWR operation, only solid wastes packed in 200-litre metal drums are shipped from the nuclear power plant. An important element to guaranteeing safety is the sole receiving of waste packages complying with acceptance criteria accepted in advance by the authority into the disposal site. To this end, strict controls already commence upon receipt, within the nuclear power plant. 16 drums are transported in 4 carrying frames on a single occasion.

Purpose-built and officially licensed vehicles en route from Paks to Bátaapáti forward waste packages to the site; such transport is governed by the specifications of the European Agreement concerning the International Carriage of Dangerous Goods by Road.

Vehicles transporting the waste are received in the central building of the site. After the inspection, the vehicle is parked in the technological hall in the controlled zone, where a crane unloads the carrying frame and places it in the storage space after another inspection.

Waste packages remain in the hall with a capacity of 3000 tunnels until their final packaging is completed, then they are moved to the underground disposal chambers.

A radiation protection control system oversees the plant's area. The dosimetry control room receives data from metering equipment, from where some data and alert signals are displayed on the central control room as well.

