

# MECSEKÉRC Environmental Company Limited by Shares (MECSEKÉRC Ltd.)



H-7633 Pécs, Esztergár Lajos str. 19

Contact: Mr. György ERŐS, Director General,  
Chairman of Board

Phone&Fax: +36 72 535 370, +36 72 535 388

E-mail: [mecsekerc@mecsekerc.hu](mailto:mecsekerc@mecsekerc.hu)

Website: [www.mecsekerc.hu](http://www.mecsekerc.hu)

## Introduction

Hungarian State founded legal predecessor of MECSEKÉRC Ltd (MECSEKÉRC) was established in 1955 mainly for mining and processing of uranium ore. Uranium ore mining started in 1958, while milling in 1964. Due to the expensive mining technology and low-grade ore, it was clear from the beginning that uranium production could not be competitive in this site, it was enforced upon Hungary because of strategic reasons. After the political changes in 1989, the government soon realised this and decided to finish the mining and processing activity by the end of 1997.

After shut-down of uranium ore mines, remediation of former sites of uranium industry became the main task of the company. Today the investigations concerning the final disposal of radioactive wastes of nuclear power plants and the related earth sciences are also important activities.

At present MECSEKÉRC is one of the biggest companies in Hungary involved in the environmental protection activity. The company has well-equipped laboratories for testing, up-to date instruments for monitoring and solving different environmental problems. MECSEKÉRC is certified in accordance with ISO 9001:2000 and ISO 14001.

On the basis of four-decade experience in mining, exploration and other mining related activities, MECSEKÉRC can take part in solving partners' problems especially on the fields below.

## Main activities

### 1. Rehabilitation of former mining sites, treatment of contaminated water

- Radiological, hydrological, geo-mechanical, geophysical etc. monitoring
- Clean-up of the sites, planning the demolition of buildings contaminated by radioactive elements
- Remediation of waste-rock piles and tailings ponds
- Groundwater restoration
- Mine water treatment and treatment of other contaminated waters (Chemical, ion exchange methods and reverse osmosis; removing of uranium from mine waters in form of by-product, removing heavy metals by using in-situ remediation technologies (permeable reactive barriers))
- Shut-down of deep mines, open pits, backfilling of the abandoned mining areas
- Preparing the restoring technology, time schedules, cost calculation, obtaining approvals from the competent authorities
- Treatment of contaminated waters containing fission products (waste waters of nuclear power plants)

### 2. Design, supply and operation of monitoring system

- Detection of horizontal and vertical extension of contaminated water and evaluation of the migration of contaminants with high-effective geophysical (geo-electric multi-electrode) measurements
- Seismic and stability analyses of surface and underground facilities, ( from nuclear power plants to housing estates) installation of complex measuring systems
- Radiological monitoring in the area of nuclear power plants, other nuclear facilities and facilities of uranium industry

- Hydrological monitoring of surface and groundwater quality
- Monitoring of the environment of communal waste repository, detection, drainage and collection of the produced light hydrocarbon gas

### 3. Final disposal of radioactive wastes

- Preparation of final disposal of radwastes in deep geological formation
- Organisation, implementation, evaluation of geological and geotechnical classification programme on final surface disposal of low and intermediate-level radwastes.

## References

Name of work, technical content	Customer	Completion time
Mine closure, remediation and reclamation works in uranium industry	Ministry of Economy	1998-2004
Investigation for the final disposal of radioactive wastes in deep geological formations in Hungary	Paks Nuclear Power Plant Plc.	1983-2000
Participation in the previous investigations preparing the final disposal of radioactive wastes in Hungary	Paks Nuclear Power Plant Plc.	1989-1992
Backfilling and final closure of the Komló Main Adit	Mecsek Mine Property Utilization Plc.	2000-2001
Our experts have taken part in the diagnostic phase of projects preparing the ensuring of water reserves within sensible geological environment: - Pécs-Tortyogó water reserve, 2000 - Bükkösd water reserve, 2001 - Hetvehely water reserve, 2001 - Abaliget water reserve, 2000	South Transdanubian Water Directorate	2000-2001
Remediation, post-remediation control and monitoring reports, post-remediation control final report on the former Soviet barracks in Polgárdi	State Privatization and Property Holding Plc	2003-2007
Surface water sampling on the affected area of the Mecsek coal mines	Mecsek Mine Property Utilization Plc.	2002
Investigation and mining activities in connection with the planned repository of low and intermediate level radioactive wastes at Üveghuta	BÁTATOM Ltd	2001-2004
Site selection of the underground research laboratory for the disposal of high level radioactive wastes in the Western Mecsek Mts.	PURAM Ltd.	2003-2008
Preparing the reclamation plan for the firing range of the Hungarian Army at Várpalota	Ministry of Defense	2003-2004
Completing the additional tests of the Püspökszilágy Radioactive Waste Processing and Disposal Facility	RHK Co.	2002-2006
Operating monitoring system in the Mecsek Mts. (Uranium mine)	MECSEK-ÖKO Plc	2004-2005
Operating monitoring system on the Recsk area (Copper mine)	MECSEK-ÖKO Plc	2004-2005
Investigation of communal waste disposals at Zalabér	ISPA	2006
Reclamation of outer incineration plant of Nitrokémia Ltd.	LOKO-WASH Plc.	2006.