



IAEA

International Atomic Energy Agency

Atoms for Peace

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Strengthening environmental monitoring in Montenegro

The challenge...

Persistent organic pollutants (POPs) are toxic and persistent compounds that travel large distances and accumulate in the fat tissue of humans, posing a threat to the environment and to human health. By ratifying the Stockholm Convention on POPs, which Montenegro signed in 2002, Montenegro commits to manage POPs in accordance with best international practices. A prerequisite for this is a well equipped national reference centre that can carry out the analysis necessary to identify POPs, assess their impact on human health and the environment and give recommendations to the Government on how to comply with the agreements and obligations of the Convention.

The project...

Through this project, the Centre for Ecotoxicological Research of Montenegro (CETI) has been provided with the means and expert advice required to set up and validate reliable methods to identify and quantitatively determine POPs. Training for the staff of the Centre has included the use of the analytical approaches for the determination of POPs in environmental matrices, adequate sampling techniques, sample preparation and extraction, cleanup and GC/MS determination of target compounds. CETI's quality management system was also assessed to identify gaps and advice was provided on how it could be optimized for accreditation to international standards.



Environmental contamination by POPs has been identified at the Aluminium Plant in Podgorica.

The impact...

The accreditation of CETI's analytical procedures for the detection and quantification of POPs will contribute to meeting the development goals of the country and, at the same time, is a crucial step to setting up a reliable and competitive reference centre in the region.

With the support of the IAEA, a fully functional analytical laboratory is now available at CETI, which is well staffed and equipped to show compliance with the requirements of new European Union regulations and directives, as well as those of the United States Environmental Protection Agency. It is an important step towards the integration of Montenegro into the European Union in these fields, and paves the way for CETI to become a national centre of excellence able to perform sophisticated environmental analyses according to international standards.

The laboratory has already carried out numerous activities, including an environmental monitoring programme for harmful trace contaminants for the Environmental Protection Agency, a monitoring programme for the Veterinary Directorate of the Ministry of Agriculture, and another for the determination of pesticides in foods of plant origin for the Phytosanitary Directorate of the Ministry of Agriculture of Montenegro.

Technical cooperation project MNE/8/002: Upgrading a Persistent Organic Pollutant Laboratory towards Accreditation for Environmental Monitoring