September 2009

Managing the legacy of uranium mining and milling in Central Asia

The challenge...

Uranium production was historically an important industry for most of Central Asia. After the collapse of the former Soviet Union, four newly independent states, Kazakhstan, Kyrgyzstan, Tajikistan and Uzbekistan, found themselves facing the need for safe management, remediation

and decommissioning of the mining and milling facilities. A common problem was the lack of adequate regulatory infrastructure and experienced personnel. IAEA Member States in the region requested technical assistance to help restore their regulatory capacity and ability to deal with the issues associated with the legacy of uranium mining and milling in order to ensure protection of their population and environment.



Legacy uranium production site 'Yellow Hill' in Taboshar, Tajikistan.

The projects...

Through the regional and related national projects, workshops and scientific visits were arranged to learn from similar projects in other countries. Sampling and analytical equipment was upgraded and management and laboratory staff members were trained. Experts worked with the four Member States to evaluate their monitoring and remediation activities and to assess the status and radiological impact of residues at the former uranium mining and milling sites. Advice was provided on the development of regulatory framework and environmental monitoring programmes, and improvements to the national legislation were identified. An analytical laboratory was set up at the National Academy of Sciences in Kyrgyzstan to measure environmental samples from the affected areas. In Tajikistan, the laboratory and monitoring capacity of the regulator and operator were enhanced while development of a network to monitor radionuclide groundwater migration patterns is ongoing at Degmai, the largest uranium mill tailing site in Central Asia.

The impact...

The project has created an opportunity for a safer environment in the region through improved communication among the affected parties, higher regulatory awareness and enhanced analytical capabilities in support of the decision making processes for removing public hazards arising from former uranium mining and milling sites. As a result of the success to date more Member States will join a follow-up project in the 2009-11 TC cycle. IAEA is working with them and international stakeholders to find sustainable solutions. The Joint Declaration adopted in Geneva on 29 June 2009 by the four most affected countries of Central Asia, the UN system Agencies, the IAEA, the EC, the EBRD and the OSCE calls on the international community to reinforce cooperation, coordination and joint action in relation to this issue.

RER/9/086: Safe Management of Residues from Former Mining and Milling Activities in Central Asia KIG/9/003, TAD/9/002 and TAD/9/003