Environment

A wide range of nuclear techniques can be used to measure pollution levels and, in some instances, can be used to identify the sources of pollutants and facilitate the use of mitigation measures. A number of RCA Member States have acquired the knowledge to use these techniques, which are being applied to address environmental issues in their respective countries.

Air Pollution

Member States have effective sample analysis capability using Neutron Activation Analysis(NAA) techniques. Data collected through the techniques not only helped Member States establish national projects or related committee to mitigate air pollution but also assisted international organizations to lead collaborative projects.

Water resource management and assessment of water and pollutant flows on the surface and underground water and water quality parameters has been performed.

- Philippines and Thailand have established protection zones for aquifers.
- Indonesia has set up a safe groundwater exploitation zone.
- Malaysia has enacted controls on the effects of mining activity on groundwater dynamics.

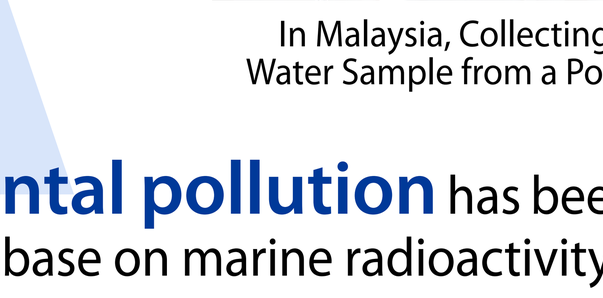
In Malaysia, Collecting Water Sample from a Pond

In China, Field Work for Groundwater Assessment

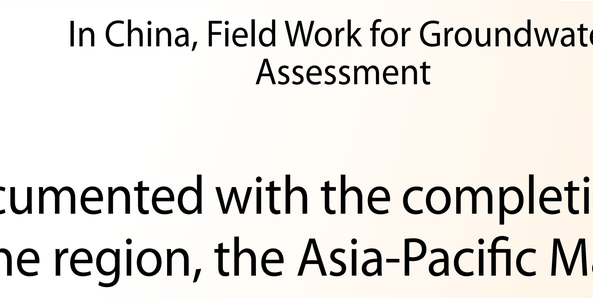
Marine coastal environmental pollution has been documented with the completion of the first comprehensive IAEA/RCA database on marine radioactivity for the region, the Asia-Pacific Marine Radioactivity Database (ASPAMARD).

- 1,443 inputs of new data into the ASPAMARD database for seawater, sediments and marine biota endemic to the region
- This has provided an enhanced regional resource for analysing trends and understanding the fate and behaviour of key radionuclides in the marine of the Asia-Pacific region.

Artificial Radionuclide Distribution in the Marine Environment, Cs-137 Concentration in Surface Seawater (1975~1999), ASPAMARD



Dissecting Fish Samples Collected in Malaysia



Collecting Samples of Seawater, Marine Sediments and Biota for Monitoring of the Marine Environments