

## ***Cleaning up former iodine plants at the Absheron Peninsula, Azerbaijan***

### ***The challenge...***

Between 1930 and 1990, iodine was produced on Azerbaijan's Absheron Peninsula. Iodine was extracted from striatal waters, which surfaced together with oil extracted from oil fields. The iodine production plants deployed activated charcoal as absorbents that, among other elements, absorbed different natural radioisotopes (naturally occurring radioactive materials, or NORM). The used radioactive charcoal was then stored at the production sites without proper disposal. The clean-up of the radioactively contaminated site was a critical environmental concern for Azerbaijan.

### ***The project...***

Through an IAEA technical cooperation project, the IAEA supported the training of local specialists and fielded expert missions to provide technical guidance and recommendations on decontamination technology, waste transportation and disposal before and during the clean-up campaign. A 'site characterization exercise' was also performed to assess the results of the clean-up of the affected sites.

As a result of the clean-up activities, which were supported by the Azeri Ministry of Emergency, in collaboration with the National Academy of Science, more than 150 000 cubic metres of the NORM contaminated soil were transported and disposed at dedicated disposal cells, constructed near the national waste storage facility.



*Cleaning up at the Absheron Peninsula, Azerbaijan – before (left) and after (right) clean up.*

### ***The impact...***

The IAEA Mobile Unit for Site Characterization confirmed the high quality of the clean-up activities and that the removal of contaminated material was effective. Recommendations for the remediation of similar areas in the country were also made.

The clean-up campaign, performed in 2012, improved the environmental situation at the Absheron Peninsula, eliminating health threats to the local population and facilitating further development of these areas. The Baku Urban Development Plan states that the city areas that have been cleaned up are to be covered with vegetative soils, trees, bushes and grass and further used for recreational purposes.