

Cleaning up environmental hazards

CARDS 2000

Country
Albania

Implementation period
March 2004 – March 2005

Funding
€ 998,000

Results.
Removal, storage, treatment and final disposal of arsenic waste solution from Fier's nitrate fertiliser plant

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Environmental hot spots put people and nature at risk

Unchecked industrial development since the Second World War has left modern-day Albania with several environmental 'hot spots' that are in need of urgent attention. If left to degenerate further, there is a strong possibility that they will turn into environmental disasters, causing irreparable damage to the land and people's health. In turn, internal and external investors will be further deterred from contributing much-needed funds to Albania's economic reconstruction.

A series of assessments of the country's hazardous waste sites have now been carried out by international organisations to identify sites most in need of cleaning-up and decontamination. Some waste has already been safely removed from Albanian territory: in 2002, a complex project funded by the EU to dispose of obsolete pesticides stored in 18 different locations in the country was completed. Following on from the success of this work, the EU is presently involved in other environmental operations, including the decontamination of a nitrate fertilizer plant near Fier, in southwest Albania.

The plant was built in the 60s and included six lines for the production of fertilizers, among which urea and ammonium nitrate. During the period 1967-1971, the plant used crude oil with high sulphur content which was removed with solutions of arsenate and arsenite. Today, more than 1,000 m³ of arsenic-contaminated solution, leftover from the site's former production days, is stored in old tanks in the plant.

Corroded storage containers allowing waste to leak

Increasing corrosion of these tanks poses a risk of serious leakage occurring which would have disastrous effects on the surrounding area, and the health of tens of thousands of people living downstream of the plant.

Recent tests conducted in the area have confirmed that pollution of the soil is already occurring around the plant



site through the transportation of arsenic compounds by wind and water. These findings have prompted agreement among Albanian officials and international observers that the spread of this pollution to the groundwater and surface water must be prevented.

A short but intensive EU-funded project got underway in March 2004 to ‘neutralise’ the source of contamination. The work entailed both treatment of the hazardous solution in the tanks and the decontamination of a large area of land around the site to make it as safe and clean as possible in future.

Containing the contamination

The project was split into two stages: the first involved, among others, an assessment of the site conditions through environmental sampling and laboratory analysis of the contaminated liquid and soil. The contractor ran a set of tests on the materials, as well as carrying out core drilling to depths of up to 3 metres in the defined area to establish accurately the depth and distribution of arsenic contamination. The second stage included the treatment of arsenic solution, rehabilitation of the most polluted area and the final disposal of the hazardous waste.

Making the area safe for future generations

This first project was due for completion in November 2004. Now a second project is due to be funded to allow work to continue until the site can, once again, be considered environmentally ‘safe’.

