

TECHNICAL REPORT

ALBANIA

SITE: Shkoder Municipality: Stockpile of Toxic Chemicals at Bajza railway station

ENVIRONMENTAL/HUMAN HEALTH PROBLEM

There was a concern that site contamination from a store of approx 250 tones of suspected hazardous chemicals (industrial/banned pesticides) held within a site building and possible (historic) spillage of pesticides stolen from train wagons could affect environmental and human health nearby including cross border impacts on the fish and bird life. There were reports of sheep deaths on the site as well as fish kills in nearby Lake Skadar.

INTERVENTION & PLANNED WORKS

It was originally planned that the site be subject to a comprehensive environmental investigation to determine the full impacts of the stored materials and the historic spillage of pesticides. The EIA was to also characterize the stored chemicals and explore options for its packaging, storage/transport and destruction/disposal.

After conducting a site visit and in discussion with the National Project co-coordinator and Country Team the CTA advised that due to the unknown condition of the site a full scale EIA process, site assessment and development of a comprehensive remedial Action Plan was not warranted at the site and could represent an unnecessary expense and loss of time without an initial investigation. The CTA therefore recommended that a "first stage" preliminary site investigation be undertaken, which is much faster and cheaper than a full scale EIA, and then after review of the information gathered the "second stage" actions appropriate to the sites condition are undertaken.

The "first stage" to include the following:

- a) Characterizing the storehouse chemicals, repackaging, temporary storage and recommendations for final treatment/disposal.
- (b) preliminary assessment of the soil, substrate and surface water in the immediate vicinity or close to **the storehouse and "impacted" train stabling area.**

The "second stage" (which would be based on what was found in the first stage) to include;

- (a) Final treatment and/or disposal of the storehouse wastes (development and implementation of an Action Plan); and (if required);
- (b) Environmental impact assessment, full scale site assessment and development of a remedial action plan etc (only if the findings in the preliminary site assessment support such an expanded response).

WORKS CONDUCTED TO DATE AND SITE CONDITION

PRELIMINARY SITE INVESTIGATION

ToRs for the Preliminary Environmental Investigation were advertised in mid 2008 with the field investigation and stockpile characterization being conducted in late 2008 by the contracted consultancy (Montec Pty Ltd) with a final report provided on November 2008. In addition to these activities Montec also prepared bidding documents for the repackaging, treatment and offsite disposal of the stockpile present on the site.

As a summary the investigations concluded that the site itself is not contaminated and does not present a risk to human health or the environment. With this information it was possible to conclude that a full scale EIA is not required and with the final removal of the stockpile in 2009 the intervention at this site will be concluded and the site cleanup completed.

"Chemicals store"

A number of samples were taken in characterizing the waste stockpile present within the Bajza railway storehouse. The results show that there are no pesticides present within this stockpile. Out of the approximate 250 tonnes of waste there is approximately 80 tonnes of sodium hexafluorosilicate present with the remaining material consisting of waste leather (approx. 170 tonnes). The chemical sodium hexafluorosilicate is an industrial chemical used in the aluminum production process and is classified both as dangerous goods and hazardous waste and will need to be treated prior to being disposed of to a landfill. Treatment is a relatively simple process that will involve immobilizing (reducing the solubility) of fluoride.

"Site Contamination"

A number of samples were taken in and around the site and included water samples at nearby offsite locations. The samples were tested for a broad range of chemicals, pesticides and heavy metals including those pesticides believed to be present as part of the German train delivery in 1992/1993. The results showed that neither the soil nor the water samples contained detectable levels of the chemicals or pesticides and that metals were not present at levels of concern. There was a small amount of spilt pesticide powder found (less than 5kg) on one of the train wagons on the site which will be removed as part of the final stockpile removal. Therefore there is no evidence that the site or the surrounding water has been contaminated either by the presence and reported spilling of pesticides from rail wagons in the 1990s or by the presence of industrial chemicals stored in the rail yard shed.

"Bidding Documents"

Based on the characterization and quantity of the chemicals and wastes present in the rail yard stockpile bidding documents were prepared by Montec for the repackaging, removal, treatment and disposal of the sodium hexafluorosilicate and waste leather. With input from the CTA, National Project coordinator and UNDP Country Office these were converted into ToRs and were advertised with a closing date of 30 January 2009. Projected costs from Montec for carrying out the activity specified in the bidding documents is approximately 330,000 USD.

CURRENT POSITION

The ToRs for the repackaging, removal, treatment and disposal closed on the 30th of January and the selection process for contracting a suitable company has now commenced. It is expected that company selection process should be finalized in February with the site expected to be cleared within the first quarter of 2009. This will complete the physical works required to remediate the site at Bajza.

NEXT STEPS REQUIRED

The level of cleanup required at the Bajza site has been much smaller than what was envisaged when this site was selected. Based on the current expenditure in conducting the site investigation and stockpile characterization combined with the expected cost in removing and treating the stockpile it is expected that there will still be approx 1 Million USD left from the amount allocated for cleanup.

It is recommended that these funds are used to clean **up another high priority "Hot spot" site that is adversely affecting human and environmental health**. Selection of a suitable site should be progressed as a priority in accordance with an agreed framework. Consideration should include the site has full documentation identifying and costing the works required (ie through environmental impact studies, feasibility studies or other investigations) and the works can be completed within the remaining timeframe for the Regional Program, and that national Government will commit necessary co-financing

A number of potential sites have already been identified both through a recent UNEP mission to Albania and through a hotspot screening program conducted by UNDP Albania, and this should be used in the process of identification/selection of another high priority hot spot in Albania.