

**Sector:** Waste

**Name of the Pilot Location:**

OHIS Skopje (FYR of Macedonia)

**Proposed Project Title:**

Remediation of HCH dumps at OHIS Skopje

**Preliminary cost:**

Estimated between 1.4 million USD and 6.4 million USD (depending on remediation option)

**Summary of existing Environmental Situation:**

The site comprises a disposal site for waste from a former Lindan production plant belonging to AD OHIS. On the site, in total 25,000-35,000 alpha and beta isomers, together with 3,000 t delta isomers have been disposed of between 1968 and 1975. The present substances can be classified as very hazardous. The production plant is now closed.

The main environmental problem arising from the site is the contamination of groundwater used for agricultural purposes, due to the fact that there is no (alfa and beta isomers) or not sufficient (delta polymers) protective cover between the basins and the soil on which they have been constructed. The site is close to two smaller settlements at a distance of 1 km, and the major town of Dracevo with 50,000 inhabitants at 5 km.

A plan has been developed to remediate the site by UNEP in 2001, by treatment and/or removal of the HCH waste, followed by remediation of contaminated soil.

**Strengths:** Detailed site data are known. Detailed emission data and state of the environment data are available.

**Weaknesses:** Some detailed environmental data are missing.

**Opportunities:** The executed UNEP study provide a solid basis to work upon further with an even more extensive feasibility study specifically aimed at concrete remediation measures.

**Threats:** Financial resources for remediation are missing and not identified yet.

**Summary of Directions for Future Work:**

To meet the requirements of the European Landfill Directive (99/31/EC), the following needs to be addressed: Collection of additional background information; Responsible organisation; ToR for feasibility study (preferably on the regional rather than local level); Assessment of most appropriate technical remediation measures to prevent further emissions and reduce risks; Defining the overall investment projects (measures, costs); Defining a financing strategy: Assessing if and to what extent co-financing of the remediation is affordable, what IFIs can be approached; Approaching IFIs; Introducing fees or charges (if applicable); and Amending proposed projects on basis of negotiations with IFIs.