Linnaeus ECO-TECH 2016
Kalmar, Sweden, November 21-23, 2016

SWEDEN'S LARGEST NATIONALLY FINANCED REMEDIATION PROJECT, THE REMEDIATION OF THE OSKARSHAMN HARBOR, A DEMO SITE TO DEVELOP NEW TECHNOLOGIES AND START NEW ENTERPRICES

Bodil Liedberg Jönsson
Oskarshamns kommun
Sweden

Abstract

The harbor of Oskarshamn is contaminated with more than 1000 tons of heavy metals, which have been accumulating since the end of the 19th century. The sediments also contain about 70 grams of dioxin of which 0.1-0.3 grams migrate to the Baltic Sea every year. This amount should be compared with the yearly total discharge of dioxin from the Swedish Industry, which is estimated to about 2 grams/year. In September 2016 Sweden's largest, nationally financed, remediation project is launched in the Oskarshamn harbor. The overall aim is to decrease the dispersion of heavy metals and dioxin from the harbor to the Baltic by 90 %. During the three year remediation, it is possible to use the remediation project as a test bed for new techniques and methods.

The municipality is seeking possibilities to use the remediation site as a demonstration- and testing ground to support the development of new environmental-friendly and innovative enterprises and to encourage scientists to engage in research concerning treatment of contaminated sediments. The municipality has a long tradition of cooperating with scientist and development of new technology, being involved with the work at the Äspö laboratory for storage of nuclear waste. It is in the same manner that the remediation project wants to offer possibilities for scientists and entrepreneurs to test new methods in a real life environment. The long term objective is to aid the development and establishing of environmental enterprises in the municipality or in the region. One possibility is a demonstration project for energy-efficient freeze dredging in difficult environments.

A large remediation site is a good environment for developing new techniques, implementing new methods and for testing new ideas. The project can also act as an inspiring force for developing new innovative enterprises. A large and interesting remediation may also become the base for municipal growth and a good support for the local industry and commerce.

Keywords

Remediation, Sediments, Heavy metals, Dioxin, Test bed