

Biotechnological Laboratory DEKONTA, a.s.

The laboratory is holding the Certificate on correct laboratory activities in compliance with the international standard of CSN EN ISO/IEC 17025

Solidification/Stabilization Treatability Lab Test

Solidification and stabilization (S/S) methods prevent or slow down the leachability of harmful compounds from contaminated soils, sediments, and sludge. This treatment technology involves mixing contaminated soil/waste with binding agents (additives), such as cement, asphalt, fly ash or clay, to reduce migration of contaminants into the surrounding environment. Solidification binds the waste into a compact mass that is less permeable than the original waste. Stabilisation creates physical-chemical bounds between the contaminants and the additives. The reaction fixes the contaminants and makes them less leachable.

Typical objectives of the solidification/stabilization technology are:

- To transform a hazardous waste into a nonhazardous one;
- To reduce leachability of contaminants from an in situ or ex situ stabilized contaminated soil/waste;
- To obtain a mechanically resistant material allowing landscape rehabilitation;
- To reprocess a contaminated soil/waste into a material that is mechanically and chemically stable in the long term.



DEKONTA offers a wide range of laboratory testing services to evaluate the effectiveness of S/S technology, including the following:

- Testing of different types of binding agents, their combinations and dosages, to achieve the desirable stabilization/solidification effect;
- Selection of the most appropriate stabilization/solidification formula for a specific application;
- Waste analyses in compliance with the applicable EU legislation (including leachability tests);

- Ecological and economical evaluation of the proposed technology;
- Pilot scale verification of the developed stabilization/solidification technology;
- Full-scale application of the developed stabilization/solidification technology in both ex-situ and in-situ applications.

Lab test duration: 4 – 6 weeks (depending on the maturation period)

Price of lab test: Available on request

Contact: Michal Otevrel, S/S Technology Expert; otevrel@dekonta.cz

Address: Dretovice 109, 273 42 Stehelceves, Czech Republic phone: +420 312 292 960; e-mail: dretovice@dekonta.cz