



STABILISATION OF DREDGED SEDIMENTS

Stabilisation of dredged materials is an environmentally friendly solution for the fills and foundations of harbour fields.

Activities like the development and maintenance of harbours and fairways due to continuous sedimentation and more deep draught ships are the underlying reasons for the dredging.

The sediment of harbours and fairways is often contaminated due to contaminants of anthropogenic origin from the operations of shipyard, industry and agriculture. The treatment and placement of contaminated sediment is a big challenge as the contaminated dredged sediments mostly cannot be dumped back into the sea.

Significant benefits

The contaminated dredged sediment can be used beneficially

when stabilised and solidified in an environmentally safe and economical way.

The stabilised and solidified materials can be used, for example, for the fills and foundations of the field structures of harbours. The costs of transports and waste treatment will be reduced: the dredged sediment masses are not transported from the harbour area into deposit sites.

Significant cost savings can be obtained by using industrial by-products as component of the binder admixtures.

Sustainable development: saving of natural resources and decreasing environmental impacts.

Our reference project

Life Environment project STABLE in the Port of Turku 2006-2009

- a new environmentally friendly process stabilisation method was developed for the treatment of contaminated sediments
- binder recipe development
- environmental and stabilisation investigations
- quality control of the pilot
- consultation of the project

FURTHER INFORMATION

Pentti Lahtinen,
Juha Forsman,
Harri Jyrävä
firstname.lastname@ramboll.fi

THE TOTAL PLANNING SERVICE OF A DREDGING PROJECT

- Geotechnical planning
- Consultation

- Our laboratory services
- binder recipe development
- technical testing
- environmental testing
- cost assessment
- life-cycle assessments

- Our services on the dredging and stabilisation site
- quality control
- follow-up studies and tests