



SEDIGEST

A METHODOLOGICAL GUIDE TO THE SUSTAINABLE MANAGEMENT OF HARBOUR-DREDGED SEDIMENTS

The aim of the SEDIGEST project, officially recognised in 2007, was the sustainable, land-based management of sediments produced from harbour dredging. Involving a group of nine partners, the project set out to produce a guide to Environmental Risk Assessment, as part of an initiative to find innovative ways of managing these materials by using them, after they have been pre-treated in a variety of ways, for the physical and environmental restoration of land cavities.

This methodology for evaluating risks, widely employed across the world for managing polluted materials in other contexts, is still little used in France. There is now, however, genuine interest being shown in it by government departments (DREAL - regional environment, planning and housing directorates, etc.), by ADEME (national environment and energy management agency), by central technical agencies (CETMEF - Centre for maritime and waterways research, SETRA - Centre for transport and road research and planning, etc.) and by industrial companies.

The methodology guide was drawn up on the basis of results obtained from studies undertaken as part of the project, notably on characterising sediments, identifying the preferential flow paths encountered when marine sediments are stored in land-based cavities and the transfer of pollutants in soils and groundwater using ground-penetrating radar, and evaluating the effects of pollutants on terrestrial ecosystems and peripheral aquatic ecosystems.

The two and a half posts created for carrying out the project have been retained and nine student engineers were also involved in the work. SEDIGEST has been the subject of papers delivered to 6 international conferences, including Biomarine 2008, Ramoge 2008 and Wascon 2009, and of French and international publications.

Attention should also be drawn to new, collaborative work undertaken with research labs at the universities of Marseille, Lyon and Nancy.

During the project, the two industry partners, In Vivo Environnement and Insavalor SA, carried out pilot-scale tests on several cubic metres of materials, aimed at reproducing the industrial conditions of land-based storage as accurately as possible.

The methodology guide can be used as a reference document by different stakeholders involved in the land-based management of harbour-dredged sediments: CETMEF, port authorities, the

Partners

Companies

Insavalor, Villeurbanne
Setec in vivo, La Forêt-Fouesnant

Research centers

École Nationale des Travaux Publics de l'État, Vaulx-en-Velin [\[Project Developer\]](#)
BRGM, Direction Risques et Prévention, Orléans
CETMEF, Brest
INERIS, Verneuil-en-Halatte
INSA, Lyon

Local authorities

Conseil départemental du Finistère
Conseil départemental du Var

Funder

- Agence Nationale de la Recherche

Labelisation

23/11/2007

Overall budget

1 620 K€

navy, the coastal conservation agency, DREAL, the water authority, etc.