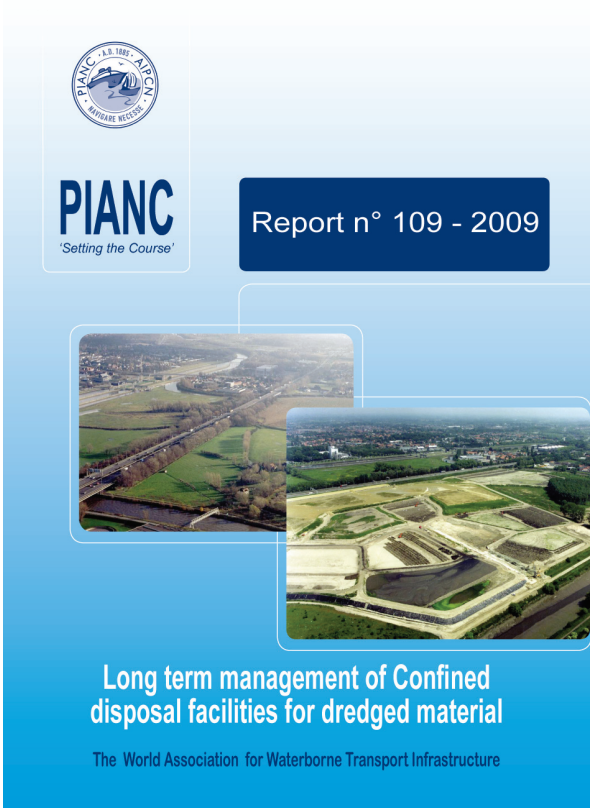
Title: # LONG TERM MANAGEMENT OF CONFINED DISPOSAL FACILITIES FOR DREDGED MATERIAL

Publication: EnviCom report 109

October 2009 issue

Author's: EnviCom Working Group 109

Price: 25 euro



Abstract:

During the latter part of the 20th century it became clear that another approach should be found for handling contaminated dredged material. Up to then it was common practise to dispose dredged material at sea or use it to raise the land or as fertilizer on land.

A new approach was to store contaminated dredged material in confined disposal facilities (CDF's). These CDF's are only meant for dredged material that is heavily contaminated and cannot be relocated into the water system or used for engineering or environmental purposes. Much effort was devoted to the design of CDF's and to the assessment and management of environmental risks. State-of-the-art documents with the technical guidance on the environmental impacts and design of CDF's have been produced by PIANC, CEDA., and USACE.

Despite the fact that stricter environmental pollution controls meant that sediments in rivers and harbours became less contaminated and options for use of dredged material became more available (PIANC EnviCom WG 14), there still is the need for more storage capacity for contaminated dredged material arising from certain capital, environmental remediation and sometimes maintenance dredging projects. It is especially difficult to decrease the influence of diffuse sources on contamination levels of sediments.

In general, there is an increasing pressure from the surrounding on the sites where CDF's are located. The tension between nature development, urbanisation and the need for infrastructure and industry makes it very difficult to claim space for CDF's and encourage planners and users to manage existing CDF's as good as possible.

PIANC recognises the growing importance of CDF's as a good sediment management tool and the need for optimising its capacity and "extending " their life span securing safe navigation and sustainability. Although there is no precedent as such for extending the life span of CDF's, in 2003 EnviCom decided that it would be beneficial to the Navigation Community to form a working group to provide technical guidance and state-of-the-art information on the long-term management, the use of dredged material already disposed of in a CDF aiming at achieving optimisation of its storage capacity and ultimately its transformation to an acceptable end use.