## Confined Disposal Facility Slufter: a perfect solution for contaminated sediment in Northwest Europe

## **Ronald Rutgers**

Port of Rotterdam Authority, P.O. Box 6622, 3002 AP Rotterdam, The Netherlands

Phone: +31(0)10-2522140;

R.Rutgers@portofrotterdam.com

**Introduction:** Confined Disposal Facility (CDF) Slufter was constructed in the year 1987 in order to create a solution for the storage of contaminated sediments from the basins of the port of Rotterdam and surrounding fairways. Later on the Slufter became the solution for the storage of contaminated sediment from the whole of The Netherlands.

Since the construction of the CDF, the quality of the water in the port basins and fairways improved enormously due to the measures taken at the source of the contamination in the Rhine basin. Due to this the yearly volume of contaminated dredged material from the port of Rotterdam stored at the Slufter dropped from 5 million m<sup>3</sup> in 1990 to 1.2 million m<sup>3</sup> in 2015, prolonging the lifecycle of the Slufter from an operational period until 2002 to 2050.

**Methods:** Due to this surplus of capacity the Port of Rotterdam Authority has looked into the possibilities to store contaminated sediments from outside of The Netherlands into the CDF Slufter. The main reason for this is that upstream of the major rivers in The Netherlands, there are still several locations with historically contaminated sediments. These sediments can potentially contaminate large areas of the Dutch waterways if they get released into the rivers.

To allow contaminated sediments from outside of The Netherlands to be stored in the Slufter, the environmental permit of the Slufter had to be changed. Since November 2010 CDF Slufter the environmental permit of the Port of Rotterdam Authority has been revised accordingly.

For contaminated sediments originating from outside of The Netherlands to be accepted for storage in the Slufter, first an official application by the applicant has to be entered that has to comply with the prevailing Acceptance Conditions. If this is the case the application can be accepted.

Before transport of the sediment to the Slufter can start, the holder of the sediment, called notifier in this procedure, has to submit a notification in accordance with EU Regulation (EC) No. 1013/2006 (EVOA) to receive the ex- and import permits. This notification has to be sent to the competent authorities in the

country where the sediments originate. If the notification meets the requirements, the notification file is subsequently send by the authority of the country of origin to the competent authority in The Netherlands, and if necessary, to the authority or authorities of transit countries. The transport of the sediment can only start when all authorities agree with the transport and all permits are issued.

**Results:** Since November 2010 the Slufter has been used on three occasion to store contaminated sediments from Germany and Belgium.

From the whole of Europe interest has been shown to use the Slufter as storage location.

**Discussion:** Getting all the different authorities to agree with the transport takes time. Storing contaminated sediments in a CDF of another country has rarely been done. In some cases legislation in the country of origin makes transport challenging.

Authorities from other countries don't have any knowledge of the CDF Slufter and how it is operated. Therefore they can be unwilling to issue a permit for transport. To overcome this, the Port of Rotterdam Authority informs, in collaboration with its competent authorities, the authorities from other countries about the operation of the CDF Slufter as an environmental safe solution for the storage of contaminated sediments from Europe (www.slufter.com).

This shows that sediment management does not stop at borders and could best be viewed in a European perspective. Sometimes a solution for contaminated sediments can be found in another country, but without communication this does not become apparent.