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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 30980-2014

Assessment procedure for marine dumping of dredged material

海洋倾倒物质评价规范 疏浚物

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Foreword

The standard Chapter 4, Section 5, Chapter 6 and Chapter 9 is mandatory, the rest are recommended. This standard was drafted in accordance with GB/T 1.1-2009 given rules. This standard by the National Standardization Technical Commission for Oceanography (SAC/TC283) centralized. This standard was drafted. National Marine Environmental Monitoring Center, State Oceanic Administration, Marine Consulting Center. The main drafters of this standard. Korean Dragon, Kai Lun Yan, Han Jianbo, Wang Lijun, to the Friends of the right, Red Star Chen, Ma Yuyan, Linxin Zhen, Jingze. Ocean dumping of dredged material substance Assessment Protocol

1 Scope

GB 30980-2014 is the Chinese national standard on assessment procedure for marine dumping of dredged material, in the field of environment and health protection, safety. It carries no /T suffix, which in the Chinese system means compliance is mandatory: a product or a practice within its scope has to meet it to be lawfully made, sold or carried out in China. It was issued on 24 July 2014 by the General Administration of Quality

Supervision, Inspection and Quarantine of the People's Republic of China; Standardization Administration of China, and has been in force since 1 June 2015. Classification: ICS 13.020.30, CCS Z17. This page is published from the official record of the standard held by the Chinese standards administration: the identification, the dates, the classification and the issuing body are taken from there. The clause text, the tables and the numeric limits are in the document itself, which is delivered complete in English translation.

This standard specifies requirements for evaluation of ocean dumping of dredged material, evaluation limits, classification, chemical and biological testing methods, and dredged material at Set mode. This standard applies in the People's Republic of China waters, territorial sea, contiguous zone, exclusive economic zone, continental shelf and under the jurisdiction of People's Republic of China Marine dredged material other waters of dumping.

1.0 GB 17378.5 BHC a capillary gas chromatography

0.129 GB 17378.5 DDT b capillary gas chromatography

0.11 GB 17378.5 PCBs capillary gas chromatography

0.461 GB 17378.5 TP spectrophotometry - GB 17378.5 TN Kjeldahl titration - GB 17378.5 BHC and DDT and PCBs limits of detection unit 10-9. BHC refers to a detection limit of its four isomers of alpha-666, beta-666, gamma-666, delta-666 and the detection limit; b DDT detection limit refers to its three isomers pp'-DDE, pp'-DDD, pp'-DDT and the detection limit of.

8 biological tests of dredged material

8.1 General Contamination and contaminated dredged material dredging, biological testing should be done. Biological tests include the following three categories.

--- The aqueous phase dredged material toxicity test. determining the dumping at sea of dredged material in the initial mixing, dissolved and suspended contaminants of raw water The potential impact thereof;

--- Solid dredged material toxicity test. After determining dumping deposition potential impact on the surrounding area and its dumping of dredged material benthos;

--- Dredged material in the chemical composition of biological accumulation test. to assess the cumulative Benthos from the proposed dumping of dredged material in the relevant pollutants potential. For contamination and contaminated dredged material dredged samples should also be three kinds of biological tests.

2 Normative references

The following documents for the application of this document is essential. For dated references, only the dated version suitable for use herein Member. For undated references,

the latest edition (including any amendments) applies to this document.

GB 17378.1 marine monitoring Part 1. General

GB 17378.2 specification for marine monitoring Part 2. Data processing and quality control analysis

GB 17378.3 specification for marine monitoring Part 3. Sample collection, storage and transportation

GB 17378.4 specification for marine monitoring Part 4. Seawater Analysis

GB 17378.5 specification for marine monitoring Part 5. Sediment analysis

GB 17378.6 specification for marine monitoring Part 6. Analysis of the organism

GB 17378.7 specification for marine monitoring Part 7. Ecological survey of offshore pollution and biological monitoring

GB 18421 Marine life quality

2.0 GB 17378.5 Copper flameless atomic absorption spectrophotometry

0.5 GB 17378.5 Lead flameless atomic absorption spectrophotometry

3 Terms and Definitions

The following terms and definitions apply to this document.

3.1 Environmentally sensitive areas environmentalsensitivearea Coastline and beach, sea or scenic area of great cultural and historical significance, having a particular scientific or ecological value Meaning area.

Note. The specific example of protected areas, spawning grounds, seed breeding field, swimming animal migration routes, seasonal and temporary habitat, a closed military zone, seabed mining areas, Submarine cable area, area of water desalination, energy conversion area.

3.2 Dredged material dredgedmaterials For the protection of ports, terminals, waterways, use smooth passage of anchorage, port facilities and meet other sea-related construction projects need to dig out from under Deposits.

3.3 Dredged material bioassay dredgedmaterialbiologicaltesting By biological experiments directly exposed to the aqueous phase and solid phase method for dredged material to determine the biological effects of contaminants in the dredged material, according to Biological test results of dredged material to predict whether the toxicity of dredged material will harm planktonic and benthic communities.

3.4 Overlying water overlyingwater Dredged material bioassay test vessel was added solid

cover experimental sea of dredged material.

4 Ocean dumping of dredged material evaluation requirements

Before ocean dumping of dredged material should be carried out physical and chemical testing, the concentration of dredged material in the main chemical components and chemical categories dredged material Evaluation limit comparison, according to the classification of dredged material, dredged material to be classified. Dredged material into three categories. clean dredged material, dredging contamination And contaminated dredged material. Identified as contamination and contaminated dredged material dredging dredged material shall be three biological tests, including aqueous phase of dredged material Biological toxicity testing, biological solid dredged material toxicity testing and dredged material in the chemical composition of the cumulative test. According to the type of dredged material and Biological test results to determine the ocean disposal of dredged material. Ocean dumping of dredged material classification and evaluation process shown in Figure 1. Figure 1 ocean dumping of dredged material classification and evaluation workflow

5 Categories dredged material chemical evaluation limits

Evaluation of ocean dumping of dredged material chemical limits in Table 1. Table

6 The lower limit DDT sulfide 300.0 800.0 0.020

0.10 Total 500.0 1500.0 0.020

0.60 PCBs oils BHC 0.50

1.50 a unit of organic carbon 10-2.

6 dredged material classification

6.1 clean dredged material (I class) One of the following conditions of clean dredged material dredged material.

a) the content of dredged material in all chemical components does not exceed the lower limit of the evaluation of the chemical;

b) dredged material in cadmium, mercury, BHC, DDT, PCBs the total does not exceed the lower limit chemical evaluation, dredged sediments arsenic, chromium, Copper, lead, zinc, organic carbon, sulfides, oils, wherein the lower limit of no more than two of them chemical content exceeds the limits of the evaluation, but not more than The average of upper and lower limits, and a particle size of less than 4 μ m component content of not more than 5%, less than 63 μ m particle size fraction containing Not more than 20%.

6.2 contamination dredged material (II type) Dredged material in the main chemical