

秦皇岛入海河口区近岸沉积物污染特征与评价

刘宏伟, 杜东, 杨吉龙, 马震, 杨君, 王小丹

中国地质调查局天津地质调查中心 天津 370170

CONTAMINATION FEATURES AND EVALUATION OF NEAR-SHORE SEDIMENTS IN QINHUANGDAO ESTUARIE

LIU Hongwei, DU Dong, YANG Jilong, MA Zhen, YANG Jun, WANG Xiaodan

Tianjin Center of China Geological Survey, Tianjin 370170

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摘要 入海河口是秦皇岛市海洋污染物输入的主要通道,污染物进入海洋后优先富集至沉积物中并发生二次释放,因此开展沉积物污染现状分析与评价工作及其重要。本文旨在查明沉积物污染特征,评价污染程度,为城市海洋治理和环保工程提供科学依据。结果显示:污染物含量较高的为硫化物和总氮,污染浓度空间上由深到浅呈增大趋势;河口表层沉积物综合质量处于清洁-较清洁等级,剖面沉积物综合质量处于较清洁-轻度污染等级;河口表层沉积物重金属潜在危害处于轻度偏高-中等偏低等级,剖面沉积物潜在危害处于轻度-中等危害等级。

关键词: 污染 评价 沉积物 入海河口 秦皇岛

Abstract: Estuaries are the primary gates for pollutants entering into sea. It is important to analyze the distribution and assess the pollution of sediments, because pollutants can settle into the sediments and repeat release after flowing into sea. This paper aids to provide a scientific basis for ocean remediation and marine environmental protecting project by the way of finding out the pollution characters and assessing the polluted degree. The results show the following. Contamination content has a trend of higher from top to bottom in space, while sulfide and total nitrogen are main pollutants. Sediments in estuaries are at a level of clean-cleaner based on synthetic index(p), while they are at the level of cleaner to light-polluted in profiles. At the same time, sediments in estuaries are at a level of low to lower-moderate based on potential ecological risk index(i_p), while they are at a level of low to moderate in profiles.

Key words: Pollution Evaluation Sediments Estuaries Qinhuangdao

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作者简介: 刘宏伟,主要从事水文地质、地下水同位素与水化学研究.Email: liuheny022@163.com


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