近岸海域生态地球化学调查评价方法及内容探讨 ——海底沉积物一水一底栖生物系统调查评价

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提 要:近岸海域生态地球化学调查,是中国地质调查局实施的多目标地球化学调查项目的重要内容之一。本文提出和探讨了关于开展 "海底沉积物一水一底栖生物系统" 调查评价的内容、方法及其工作要求。建议对系统的3种组成介质进行同站位、同步和近原始状态(未扰动)、密度网格采样,辅助开展海洋地球物理剖面测量,分析评价海底表层环境系统内重金属元素来源、运移的地球化学作用及其生态效应。

关键词: 沉积物一水一底栖生物系统; 生态地球化学调查评价; 方法及内容

Research for eco—geochemical investigation and evaluation in China's coastal area—Investigation and evaluation for submarine sediments—water—organism system

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Abstract: The eco—geochemical investigation and evaluation in China's offshore areas are one of the important subjects of the multi—objective regional geochemical investigation project carried out by the China Geological Survey. This paper proposes and probes into the content, methods and requirements for the "submarine sediment—water—benthic organism system". The authors suggest that near—original (undisturbed) samples of the three components of the system should be taken simultaneously at the same station on a density grid, supplemented by marine geophysical profiling, analysis and evaluation of the source of heavy metals in the sea—bottom environment system and geochemical processes of their transport and their ecological effects.

Key words: sediment—water—benthic organism system; eco—geochemical investigation and evaluation; method and content