广东大亚湾海洋地质环境与潜在地质灾害 李学杰^{1,2}冯志强³ 林进清¹ 夏 真¹ 梁 开¹ (1.广州海洋地质调查局海洋环境与工程地质调查所,广东 广州 510760; 2. 同济大学海洋地质重点实验室,上海 200092;3. . 广州海洋地质调查局,广东 广州 510075)

亚湾是国家重点开发的海湾,通过对其大量实测资料的综合分析和研究表明,大亚湾有9种底质类型,除沿岸及岛屿周围颗粒较粗外,湾内浅海区主要为粘土质粉砂和粉砂质粘土,工程地质条件较好。大亚湾目前底质总体污染较小,以轻微污染为主,但湾内水体交换能力差,污染易而治理难,应倍加保护。大亚湾潜在地质灾害包括活动性地质灾害因素和限制性地质条件,主要有海岸侵蚀、沙波、断层、不规则埋藏基岩、埋藏脊、航道沟、异常堆积区和陡坎等。

关 键 词:大亚湾;海洋地质环境;地质灾害

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Marine geological environment and potential geohazards in the Daya Bay off the Guangdong coast

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Abstract: Integrated analysis and study of voluminous geophysical, geological and drilling data suggest that there are nine types of substrate on the sea bottom of the Daya Bay off the Guangdong coast. Except along the coast and around the islands where the grains of the substrate are coarser, the substrate in the shallow-sea area consists dominantly of clayed silt and silty clay, which has good engineering geological conditions. On the whole, the substrate in the bay is only slightly polluted at present, but because of the poor exchange capacity of waters in the bay, the substrate is easy to pollute and difficult to control; so efforts should be made to protect it. The potential geohazards in the bay include active factors, such as coastal erosion, sand waves and faults, and restricted geological conditions, such as irregular buried bedrocks, buried sedimentary ridges, sea-route gullies, abnormal accumulation areas and steep slopes.

Key words: Daya Bay; marine geological environment; geohazard