

## 曹妃甸新区居住及公共设施用地地质环境风险评价

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## GEOLOGICAL ENVIRONMENT RISK ASSESSMENT FOR RESIDENTIAL LAND AND PUBLIC FACILITIES LAND AT CAOFEIDIAN NEWLY-DEVELOPED AREAS

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**摘要** 发展沿海经济新区是我国经济建设的一项重大举措,为了在新区发展过程中降低地质环境问题的风险,合理地规划新区建设,针对曹妃甸新区无承灾实体的特点,提出了适合沿海经济新区地质环境风险评价的方法体系。在曹妃甸新区地质安全评价和地质环境适宜性的基础上,综合考虑基础地质条件、功能用地重要程度和新区总体规划指标因素,采用综合指数评价模型,完成了新区居住及公共设施用地的风险评价。评价结果显示:(1)风险低的区域占研究区总面积的7.269%,区内地质环境问题较少,适合作为居住及公共设施用地。(2)次低风险区占77.178%,该区总体上地质环境适宜性好,局部地区可采取简单工程措施处理。(3)次高风险区占14.487%,区内地质环境问题较严重,建设前需进行专门特殊处理。(4)高风险区占1.066%,该区不适合建设,建议作为生态保留用地。评价结果为曹妃甸新区用地规划建设提供了重要地学参考。

**关键词:** 曹妃甸新区 地质环境风险评价 滨海地区

**Abstract:** Development of new coastal economic zones is a great movement for economical construction in China. In order to reduce the risk of geological environment problems and to construct the newly-developed area rationally, this paper proposes a technological system that can be adapted for risk assessment of geological environment of newly-developed areas along shoreline at Caofeidian district. Based on the geological safety assessment and geological-environmental suitable assessment system, the follow factors are considered: basic geological condition, the level of importance of the function land and general plan of newly-developed area, and finally adopt composite index assessment model to finish the geological environment assessment for residential land and public facilities land. The results indicate that:(1)the lowest risk areas make up 7.269% of all the areas. They are suit for residential land and public facilities and have little geological environmental problems.(2)the lower risk areas make up about 77.178%.In general, the geological environment suitability in these areas is good. Part of them should take some engineering measures before construction.(3)the higher risk areas make up 14.487%.There are serious geological environmental problems in these areas. These areas need special measures to deal with the poor geological conditions.(4)the highest risk areas make up 1.066%.These areas are not suit for construction and we recommend them to be used as ecological reservation land. The assessment results provide important geosciences evidence for the planning and construction of Caofeidian newly-developed areas.

**Key words:** Caofeidian newly-developed area Geological environment risk assessment Coast area

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