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## Geotechnical-Environmental Risk Assessment in Iranian Healthcare Centers

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**Abstract :** Nowadays, one of the major environmental challenges is hospital waste, which, due to the presence of hazardous, toxic, and infectious agents, is of particular concern. The expansion of cities and population growth has significantly accelerated the establishment of various healthcare institutions. In this paper, the geotechnical-environmental risks in healthcare centers have been examined. The Iranian Leopold Matrix method was used to analyze the data. According to the study results, the greatest impact was related to socio-economic, environmental factors, particularly waste and wastewater management. Additionally, the most significant geotechnical-environmental risks at hospital were hospital hazardous waste, chemicals, and waste disposal. In conclusion, the most beneficial geotechnical-environmental measures were determined to be wastewater collection, waste collection, and recycling.

**Keywords:** risk, geotechnics, environment, Leopold Matrix

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