The Application of DRASTIC Model in Waste Rural Landfill Site Selection
(Case Study: Villages of Karun County)

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Extended Abstract
1- INTRODUCTION
One of the problems that is important in the waste management is the topic of waste rural landfill site selection and Latex resulting from that in rural areas. The Latex can be because groundwater pollution the contamination vulnerability and groundwater protection assessment has proved to be an effective tool for the delineation of protection zones in area affected by groundwater contamination. So the main objective of this study is waste rural landfill site selection, this study also deals with examining the application of DRASTIC model to determine Potential aquifer pollution in rural areas and zoning maps of vulnerable areas.

2- THEORETICAL FRAMEWORK
During everyday lives to resolve their variety of needs, people use materials found in nature in various ways. Always a part or most of the materials cannot be used which recalled unusable waste. The villagers produced the materials in a state of a variety of material, including liquid, solid or gas that is said the waste.
If the solid materials are more than the other types of materials, they are called solid waste or garbage. All solid materials that are useless to their owners or the general public, are useless waste, waste and non-value of maintaining is called solid waste. In the context the aquifer vulnerability concept, the definition by the National Committee of America in 1993 can be noted. This committee knows the groundwater vulnerability to pollution, the desire or possibility of reaching groundwater pollutants to a specified location on the system after they came into being in some places above the aquifer level. The term of the vulnerability in terms of conceptual in the hydrogeology are divided to two forms of intrinsic vulnerability and specific vulnerability. Inherent vulnerability Refers to the possibility of contamination in an area without considering specific pollutants. This type of vulnerability depends on the geological features, a region hydrology and hydrogeology and human activities and is independent of the nature of the pollutant. Methods such as Drastic and Sintacs are used to evaluate this type of vulnerability. The particularly vulnerable also refers to the vulnerability of groundwater to pollutants or a particular group of pollutants. That depends on the characteristics of the contaminant and its relation to various factors inherent vulnerability.
DRASTIC model is an empirical model that the first time was raised in 1987 by the United States Environmental Protection Agency to assess the vulnerability of groundwater of the United States and is based on the concept of hydro geological situation. This model has been formed from the combination of seven hydro geological parameters affecting the groundwater contamination that includes water table depth, aquifer net recharge, aquifer media, soil media, topography, unsaturated region and hydraulic. Drastic word also refers to the initials of the seven effective and main parameters in this method.

3- METHODOLOGY
The method of this study is the documentation (library), the field and analytic method. In this study, the DRASTIC model is used for aquifer vulnerability zoning. This model is formed from combining seven hydro geologic parameters. These parameters appear as seven layers in the GIS software that required analyses are performed on. Through preparation of these maps in GIS, we can combine different layers and prepare vulnerability zoning map.

4- DISCUSSION
In order to create a healthy and clean environment for villagers, comprehensive management of the collection and disposal of waste is required. The Basis of health and hygiene in villages is their cleanliness, and collecting and wasting landfills is
considered the first of its interest in the cleanliness that a proper system of waste management will pay to this issue. A correct cycle waste management includes elements responsible for reducing the production, gathering, transportation, processing, recycling and disposal of the production to burial place, that implementation of each of the above steps requires careful planning and design.

One of the important points which should be considered in environmental design of landfill site is the management of leachate and preventing the underground water from being polluted. In this article, given that the drastic method is considered as one of most practical methods of rating in comparison with other methods to determine the potential vulnerability of aquifers to pollution, and uses more parameters in the preparation of model, it is used to assess the potential contamination of underground aquifers to leachate of the waste by the DRASTIC model.

5– CONCLUSION
Aquifer vulnerability zoning study area map which is obtained from the combination of raster map of seven DRASTIC parameters with respect to the weight of each parameter in GIS, shows that, that the parameters of the water table depth (D), and Nutrition Network (R) are the most effective ways in determining vulnerability. In this map, it has been found that about 88 percent of the desired area vulnerabilities are low and only 2% of the land (total), has had high and very high vulnerability. And 5% have moderate vulnerability and 6% of vulnerabilities are very low. Therefore, it can beside that most of leachate contamination of groundwater in the studied area is in the North and North West. Due to unfavorable disposal sites and how to landfill and by taking the final map (aquifer vulnerability) it is expected that with the support of managers and cooperative people of the area, collection and disposal practices are improved to prevent environmental pollution. Also, this method is useful as a tool for planners and designers for landfill site selection and evaluation of the vulnerability of groundwater aquifer by infiltration leachate from the waste.

Key words: Waste, DRASTIC, hydro geologic, water table, net recharge, hydraulic conductivity.

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