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New technique to study the Importance of protecting the environment, rivers, ground and sea water by avoiding oil spills, petrochemical and sewage leakages from contaminating groundwater and soil

Zaher M Zaafran
ZZ & Associates

This paper focuses mainly on how to protect the environment from polluting rivers, sea water, ground water and land that is intended for crop producing irrigation.

The size of the contaminated area of ground water is of great importance, especially in rural areas where most of the population depends entirely on ground water for their well-being.

Less developed countries as well as some that are more developed have contaminated their natural resources like rivers, sea water and ground water with toxic waste, crude oil and petrochemicals, and sewage water. Most fresh water in rivers and ground water is contaminated either by sewage water through damaged sewage pipes or none existence of sewage systems at all. Other contributing factors contaminating rivers and ground water include the dumping of toxic waste into rivers, underground, or both. Such contamination is responsible for serious health hazards and costs billions of dollars, if not more, around the world.

It is my intention to alert the world, including developed countries, of the consequences of polluting the environment and ground water.

In this paper, innovative techniques are suggested to investigate the extent of the damaged area together with the depth involved. These infected areas may be defined using shallow geophysical investigation together with some supportive log and core data from nearby wells closer to the area of interest.

Interpretation ambiguity may arise from the above mentioned techniques. Such ambiguity should be minimized by studying geological, geophysical, petrophysical and formation evaluation data from the area of interest.

It is concluded from this study the importance of using accurate data by checking its quality control for accuracy assurance. Also better describing the reservoirs which contain the infected material is of significant importance when rectification of the polluted areas takes place.

drzaafran@zzandassociates.com