Danish, E.Y.

Ecological impact from chemicals in the Arabian Gulf due to Gulf oil spill

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Chemistry Department, King Abdulaziz University, Jeddah, Saudi Arabia

Abstract

This paper presents a systematic methodology to assess ecological impact from chemicals released because of oil spills in the Arabian Gulf. The methodology proposed here compiles data on chemical behaviour and their partitioning in water and sediment and their impact on ecological entities present in the Arabian Gulf region. The proposed methodology is supported through a case study. This paper also evaluates marine impact of chemicals in the Arabian Gulf from the oil spills and their toxicity data. The main emphasis in the paper is on how to best use the available data for decision-making purposes. A case study of the Gulf Oil spill of 1991 was used to demonstrate the methodology with limited parameters but it can be generalized if more concentration data and their partitioning numbers are available. © 2009 The Author. Journal compilation © 2009 CIWEM.

Author Keywords

Ecological impact; Oil spill; Risk assessment; Saudi Arabia