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CONTAMINATED SITES WITH RISK-BASED APPROACH: TURKISH AND ROMANIAN PRACTICE

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ABSTRACT

A project was conducted by Turkish and Romanian researchers to investigate the scientific risk assessment processes applied in the management of contaminated sites in Romania and Turkey. The project included the steps of identifying the methodologies for assessment of risks to human health posed by the contaminated sites, conducting case studies with direct application in countries of origin of the researchers involved in the project development with the aim of understanding how to put into practice the concept of risk assessment and methods to minimize it, discussion of the uncertainties present in the risk assessment processes, and validation of the risk assessment model for the reduction of environmental pollution caused by the contaminated sites.

Results indicate that the consequences and assessments related to the generic risk assessment procedures are generally similar for both Turkey and Romania, while site-specific risk assessments performed through different exposure and modeling methodologies may produce different results and assessments for the same contaminated site. Therefore, the necessity for a parameter standardization and validation of models used in the risk assessment for setting a reliable risk-based contaminated site management is emphasized. Finally, studies relate to setting a contaminated-site database, development of statistical data for lifestyles and consumption habits of the receptors and application of proper models for pollutant transport are proposed for the future projects.



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