

"Gheorghe Asachi" Technical University of Iasi, Romania



ECOLOGICAL RISK PREDICTION IN RELATION TO THE POTENTIAL DETRIMENTAL CONSEQUENCES AT DISPOSAL OF DIFFERENT INDUSTRIAL WASTES

Lidia Kim, Georgeta Madalina Arama*

INCD-ECOIND Bucharest, 71-73 Drumul Podu Dambovitei, District 6, 060652, Bucharest, Romania

Abstract

The ecological risk related to the wastes disposal is that attached to functioning, closure and the post-closure phases of an ecological landfill lyfe cycle. The prediction of ecological risk in each of those three phases - i.e. the manifestation and evolution of possible negative consequences of different severities for different environmental targets - is an endeavor that organizations that possess and operate those ecological landfills should consider in order to ensure the maximum protection for environment and human health. However, it should be noted that there are not too many user friendly methods that an organization can use to estimate the evolution of the adverse effects arising during life time of a waste ecological landfill based on monitoring available data. Therefore, in present article we propose such a methodological instrument that can meet the new environmental management requirements standard EN ISO 14001:2015, related to the necessity that each organization, having in place a certified environmental management system should be able to determine the possible environment risk brought by its operations in order to take adequately management actions.

Key words: assessment, multi-criteria, prediction, risk, waste

Received: May, 2017; Revised final: November, 2017; Accepted: December, 2017; Published in final edited form: September, 2018

⁻

^{*} Author to whom all correspondence should be addressed: e-mail: madalina.arama@incdecoind.ro; evmt@incdecoind.ro; Phone: 04.021. 410.03.77-246/0787507337; Fax: 04 021 410 05 75