



HYDRODYNAMIC MODELLING OF POLLUTION WITH LNAPL GENERATED BY WASTE DUMP FROM METAL WORKING INDUSTRY

Elena–Doinita Carlig*, Matei Macoveanu

*"Gheorghe Asachi" Technical University of Iasi, Faculty of Chemical Engineering and Environmental Protection,
Department of Environmental Engineering and Management, 71 Mangeron Blvd., 700050, Iasi, Romania*

Abstract

In the present article, some models conceptually and mathematically applicable to the LNAPL transitory transport process through ground water were discussed. Subsequently, by using a personal computer program of pre-processing basis data combined with MOVER 2.0, the levigation process of oily dross/scale stored in the waste dump, which produces steel rolled tubes, was numerically simulated, in adequate scenarios. The results of the simulations will be useful at the evaluation of the impact of the waste dump on underground water catching for the water alimentation of the town of Roman.

Key words: ground water, LNAPL, pollution, pollutants transport problem.

* Author to whom all correspondence should be addressed: e-mail : edcarlig@yahoo.co.uk; Phone : 0040-744869860