



INTEGRATED ENVIRONMENTAL IMPACT AND RISK ASSESSMENT OF EMISSIONS RESULTED FROM OIL DISTRIBUTION

Brindusa Robu^{1*}, Victor Petruc², Matei Macoveanu¹

¹*Technical University of Iasi, Department of Environmental Engineering and Management,
D.Mangeron Blvd, 71 A, 700050 Iasi, Romania,*

² *"Virgil Madgearu" High School, Saint Andrei Street, No. 70, Iasi Romania*

Abstract

Environmental impact and risk assessment, as a tool of environmental management becomes very important in decision making process (especially in the case of new projects) as well as for implementation of integrated pollution prevention and control principles. In order to assess the environmental impacts and risks, a new integrated procedure, as a combination of *global pollution index* and *importance scale* matrix methods was proposed, while the soft *SAB* was developed in order to automatically quantify the impact and risk. The integrated method for environmental impact and risk assessment was applied for an oil distribution station, and proved to have some advantages: it is very easy to be used by non environmental experts; it calculates the impacts and risks, correlated with the measured concentrations related to the quality indicators for any environmental components, considered representative in the assessment process; the experience of evaluator doesn't influence the final results because the method involves mathematical steps performed by *SAB* software and these results reflect the actual situation from the evaluated site. This new integrated method, through *SAB* soft was applied for activities involved in oil distribution, in order to assess the impact and risk induced in the environment by emissions from related activities.

Keywords: environment, impact and risk assessment, integrated method, oil distribution.

* Author to whom all correspondence should be addressed: Phone: 0040-232-271759,
fax: 0040-232-271311, e-mail: brobu@ch.tuiasi.ro.