POS9. ASSESSMENT OF THE POLLUTION LEVEL OF THE SURFACE WATERS THAT CROSS THE CROWDED URBAN ENVIRONMENTS
CASE STUDY

Elena Stanescu¹, Daniel Scraeanu², Irina Lucaci¹, Mihaela Scraeanu², Catalina Stoica¹, Stefania Gheorghe¹, Bogdan Stanescu¹

¹National Research and Development Institute for Industrial Ecology - ECOIND, 71-73 Drumul Podu Dambovitei Street, 060652 Bucharest, district 6, Romania, dcpcalitate@gmail.com
²University of Bucharest, Faculty of Geology and Geophysics, Traian Vuia street 6, district 2, Bucharest, Romania

Abstract

This paper presents results obtained by a complex analysis in areas crossed by important water bodies under through impact of the existence of major pollution sources: industrial and domestic wastewaters specific of the large urban agglomerations and other sources of pollution, like as agriculture. Geographic location of the control sections for sampling in the investigated area was performed by the technique of positioning by satellite (GPS), a basic criteria in establishing the control sections for water bodies examined was that of positioning upstream and downstream of the potential pollution sources.

The results were compared with those from a database established with a few years ago when it was revealed that, from urban areas a large quantities of pollutants that induce a worst ecological status is discharged in downstream of the water bodies. It is due mainly of the domestic wastewater which are not treated in totality, due to the fact that the treatment plant that serves the entire urban area is not ready to be operated at maximum performance. It is important to mention that the operation of wastewater treatment plant that services the Bucharest Municipality has made its mark in a positive manner on the quality of the aquatic emissary studied.

Keywords: assessment, ecological status, urban ecology, water pollution