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ENVIRONMENTAL IMPACT ASSESSMENT INDUCED BY AN INDUSTRIAL UNIT OF BASIC CHEMICAL ORGANIC COMPOUNDS SYNTHESIS USING THE ALTERNATIVE METHOD OF GLOBAL POLLUTION INDEX

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Abstract

The technological process of basic chemical organic compounds synthesis is included among the economic activities that can affect the environment quality. The environmental impact of chemical organic synthesis is evaluated using the alternative method of global pollution index that considers the concentric circles graphical methodology proposing a scale of the arithmetic mean values for the evaluation scores of each environmental components (e.g. water resources, gaseous emission, soil and subsoil etc.), correlated with the global state of the environment. The environmental components evaluated into this impact study were the final effluent into emissary (*i.e.* surface water) as a type of water resource – *water component*, and respectively the gaseous emission into air around the company, considered as *the air component*. Applying this assessment methodology, the evaluation score for water component is of 4.96, and respectively 5.20 for air. The value of global pollution index (I^*_{GP} = 3.869) corresponds to the situation of „an environment modified by industrial activities generating distress to life forms".

Key words: alternative methodology, global pollution index, environment impact assessment (EIA), environment quality, chemical organic synthesis

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