
Modelling of Greenhouse Gas Emissions of Şanlıurfa Landfill with Meteorological Data

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The last stage in solid waste management is the disposal of waste with methods that will not be harmful to the public and the environment. The disposal through storage, of waste that can not be recovered and recycled is still widely used today. The wild-uncontrolled storage of waste causes difficult to solve and sometimes permanent harm to the air, water and the soil. It is absolutely necessary to make landfills so that the liquids leaking from the waste storage do not contaminate the waters for hundreds of years, that the gases from the waste do not cause global warming by mixing with the atmosphere and that the pollution in the soil do not effect the flora and the fauna.

An average of 855 tons of solid waste is being disposed in Sanliurfa everyday without being subjected to a recovery process. Currently, the Sanliurfa Municipality stores the solid waste 7km in the southeast of Sanliurfa, in the Ikizce village in the west of the Sanliurfa-Akcakale road, uncontrolled and in violation of the solid waste control regulations. When the landfill goes into effect soon, the rehabilitation work of the old storage area will be started. In this study, the weekly analyses of the greenhouse gases N₂O, CH₄ ve CO₂ were made of the present situation at the uncontrolled storage area. Also, the meteorological data were followed during the course of the analyses. In light of these analyses, the gas amounts were recorded with the closed room method. A multi-regression modelling was made with the averages of the aforementioned gases in the solid waste area and the meteorological data and the changes in that data.

Keywords: Landfill, Wild Landfill, Gas Analysis, Greenhose Gasses, Modelling

Analysis and Evaluation of Agri-Environmental Indicators of Republic of Macedonia

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Indicators represent a powerful tool to measure and/or simply describe specific state or in a dynamic frame. According to Organisation for Economic Co-operation and Development (OECD) an agri-environmental indicator is a summary measure, combining raw data, used to describe the state of the environment, a risk to the environment, a change in the environment, or a driving force behind such change, that can be attributed wholly or in part to an agricultural activity or activities.

This paper will focus on current situation and analysis of agri-environmental indicators of Republic of Macedonia according to Organisation for Economic Co-operation and Development (OECD) classification, thus estimation and evaluation of sustainable development of the country.

Key Words: Agri-environmental indicators, Sustainable development, Republic of Macedonia