



Modelling biogas production of solid waste: application of the BGP model to a synthetic landfill

Javier Rodrigo-Illarri and Francisco Segura-Sobrino

Universitat Politècnica de València, Departamento de Ingeniería Hidráulica y Medio Ambiente, Valencia, Spain
(jrodrigo@upv.es, +34 963877618)

Production of biogas as a result of the decomposition of organic matter included on solid waste landfills is still an issue to be understood. Reports on this matter are rarely included on the engineering construction projects of solid waste landfills despite it can be an issue of critical importance while operating the landfill and after its closure.

This paper presents an application of BGP (Bio-Gas-Production) model to a synthetic landfill. The evolution in time of the concentrations of the different chemical compounds of biogas is studied. Results obtained show the impact on the air quality of different management alternatives which are usually performed in real landfills.