

Project Profile

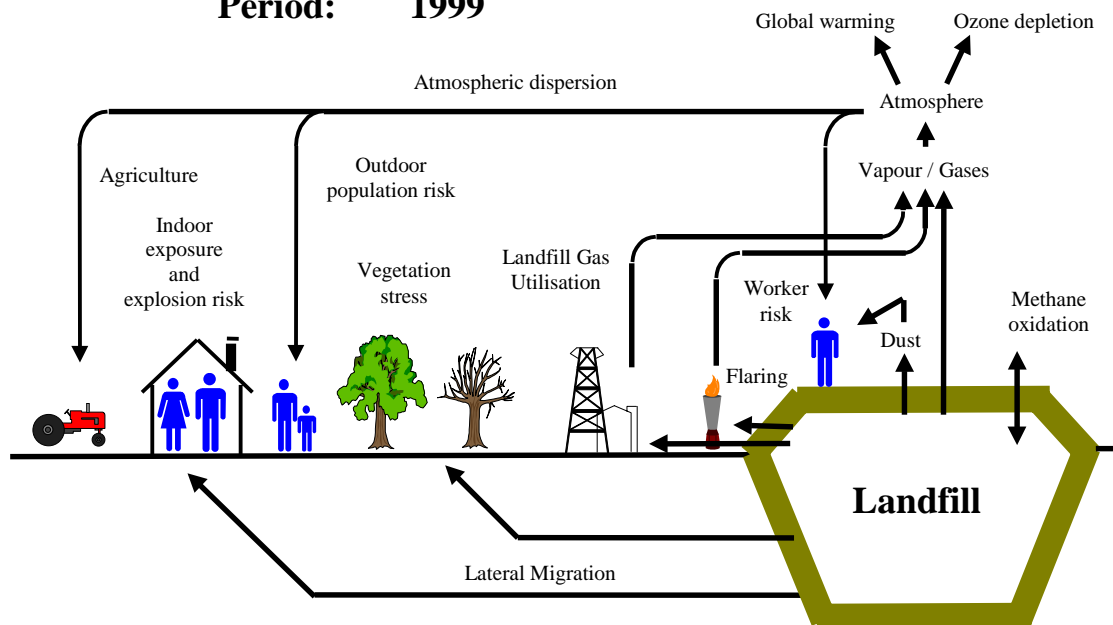
Sector: Waste Policy, Risk Assessment

Project: *HELGA* - Health and Environmental Risk Effects from Landfill Gas.

Presentation of model capabilities

Client: Environment Agency and ETSU

Period: 1999



The conceptual model, from the paper presented at the UK Landfill Gas Conference: from Research to Policy, Kenilworth, March 1999.

From 1997 to 1999, whilst at WS Atkins, Dr Bob Gregory was project manager for the Environment Agency project to develop the HELGA model. He was commissioned to make the first public presentation of the model at the Landfill Gas Conference: from Research to Policy on 24 March 1999 at Kenilworth.

The HELGA model was developed to:

- help assess health and environmental risks from current or planned landfills;
- help the Agency and other relevant organisations compare the relative risks associated with different waste management options; and
- provide a framework that will contribute to the assessment and valuation of the inventory of burdens associated with the life cycle of landfilling.

HELGA comprises a number of modules that describe emissions of landfill gas or its combustion products, and the subsequent exposure pathways for human and environmental targets. In addition to methane, the model includes a number of other bulk and trace landfill gases, volatile organic compounds (VOCs) and particulates. HELGA addresses the uncertainties in input data by evaluating emissions probabilistically.

A copy of the full paper may be obtained from LQM on request.