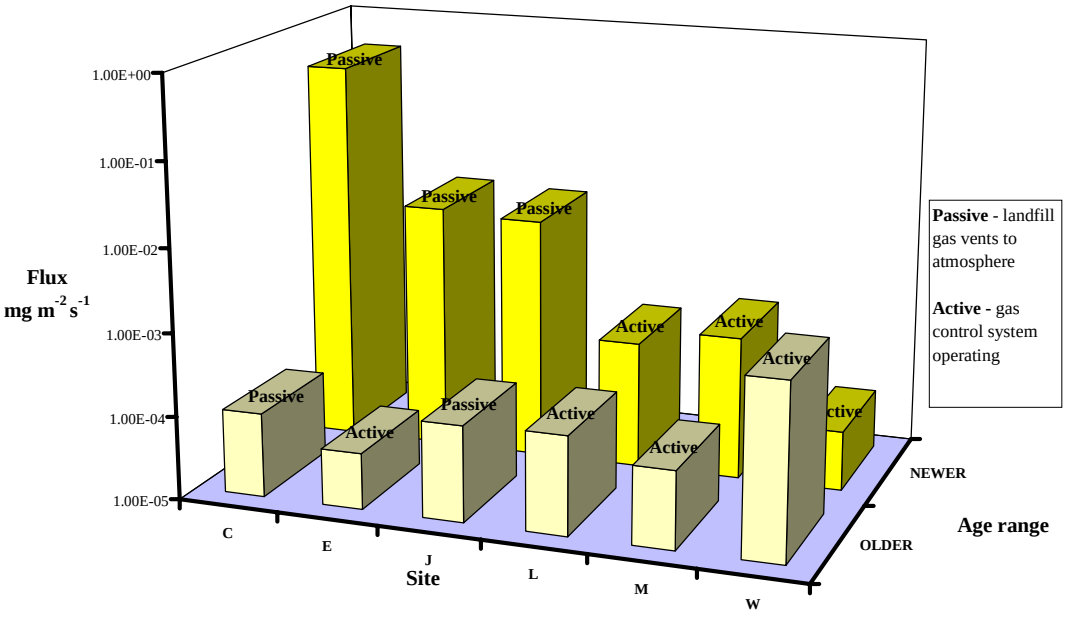
Project Profile

Sector: **Waste Policy, Methane Emissions**

Project: **Landfill methane measurement protocols**

Client: **Environment Agency and WS Atkins**

Period: **1998-99**



Variation of flux with age of site and presence of gas collection system. From the Environment Agency Report 'Methane emissions from different landfill categories' (1999).

This is the second of two projects by the Environment Agency to evaluate methane emissions from landfills.

This project takes the first study a step further, by studying the flaws in landfill caps and other discontinuities where methane emissions might be elevated, compared with the integral cap. These features include:

- Differential settlement cracks
- Edge effects
- Open area effects
- Leakages around gas wells etc

Dr Bob Gregory, formerly the project director at WS Atkins for this work, has also been responsible for developing the scientific rationale behind the proposed sampling protocol (including sampling errors). Dr Paul Nathanail has been responsible for developing the geostatistical rationale behind the sampling protocol (including sample spacing and frequency of monitoring).

When this protocol is complete, the results will be a simple method for methane flux measurement for regulator and waste management industry alike.