

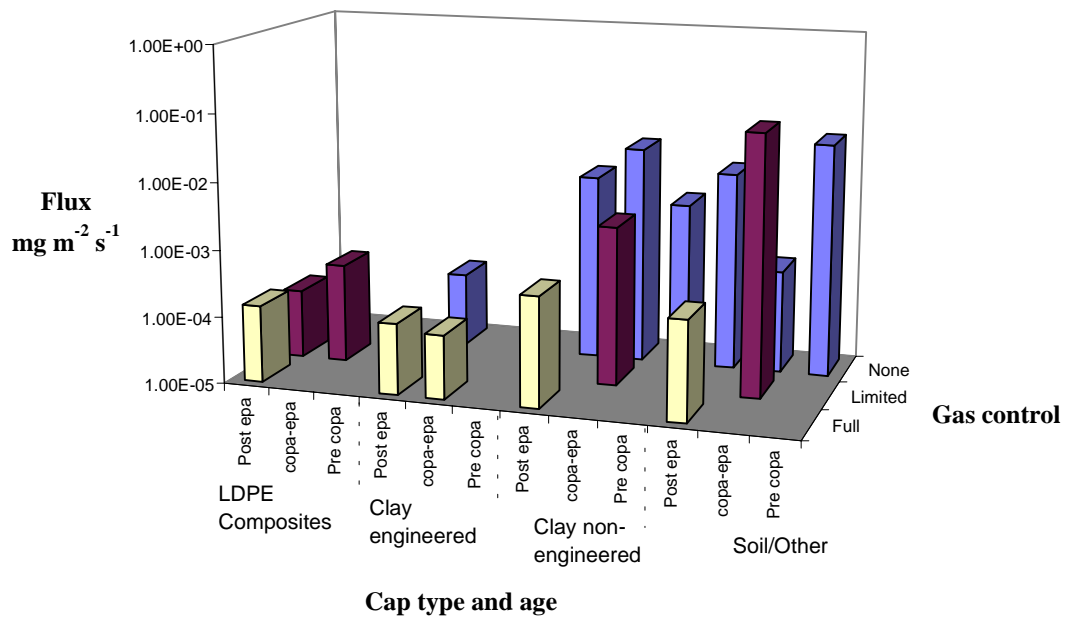
Project Profile

Sector: Waste Policy, Methane Emissions

Project: Methane emissions from different landfill categories

Client: Environment Agency and WS Atkins

Period: 1995-98



Taken from the Environmental Agency Report 'Methane emissions from different landfill categories' (1999).

This was the first of two projects by the Environment Agency to evaluate methane emissions from landfills. This first study started by examining the parameters that were considered to affect emissions from different landfill types. These included:

- Cap type and thickness
- The presence of gas collection and flaring/utilisation
- Age and nature of the waste
- Seasonal or climatic effects

Dr Bob Gregory, formerly the project manager at WS Atkins for this work, was responsible for developing this initial sampling protocol and investigating the 26 sites studied in this survey. Dr Paul Nathanail examined the geostatistical variation between the sample probes and flux boxes used to measure emissions, and demonstrated, for example, that sampling at spatial distances more than 40m nullified any statistical relationship between the flux data.

The second study (see the relevant project profile) sets out to study flaws in landfill caps and other discontinuities where emissions might be elevated, and from this survey approach, develops a more sophisticated sampling protocol.