

Landfill Gas Generation Assessment Procedure Guidelines Overview

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CONESTOGA-ROVERS
& ASSOCIATES

Landfill Gas Generation Models

- Why use a model?
 - Useful as a regulatory tool
 - Good for relative comparison of landfills
 - Appropriate for use in developing design criteria (maximum pipe sizing, etc)
- Limits
 - Empirical model – only as good as the information available
 - Performance against a modeled number is good for comparison but should be taken with a grain of salt

Importance of Operations

- Landfill is like a living thing
- Landfill gas collection is important but should be subservient & supportive of waste disposal in an environmentally sustainable manner
- Integration of filling and water management with landfill gas collection is key to successful operation
- LFG collection system operations are most successful when resources are dedicated to on-going operations

Biocovers

- Caution should be exercised in extrapolating flux box measurements over an entire cover system and over time periods
- Biocovers have a certain capacity to oxidize methane
- Channelization of lfg venting to the atmosphere is a challenge to biocover performance
- Can be used successfully at landfills with low lfg venting rates, ie shallow landfills or closed landfills

Fire Management

- Fire management should be part of any plan to install a lfg collection system
- Fire management guidance will be included in the lfg management facility design guidance

LFG Management Facility Design Guidance

- Currently being developed by CRA
- Provides an overview of LFG design components
- Will be a decision making tool for the design of LFG Management Facilities

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