

CLOSED LANDFILLS POLICY 2003

Section 4

Mitigation Actions

Objective:	To reduce or mitigate the potential hazards or risks for sites			
	which have been assessed as posing a high risk to the			
	environment or the community.			

- Require appropriate mitigation measures (such as landfill gas control systems or alarm systems) as appropriate, for any new development, which may be at risk from landfill gas.
- Assess Wellington's closed landfill sites to determine which sites (if any) may require a Regional Council resource consent for discharges to land, air or water, and apply for the appropriate consents, where necessary.

Wellington Regional Council is responsible for regulating any off-site discharges from closed landfills to air, water and land.

The provisions of the Regional Air Quality Plan for the Wellington region apply to the management of landfill gas discharges. Small-scale production, storage, transfer and flaring of hydro-carbons and bio-gas from industrial and trade premises is permitted provided that flaring of hydrocarbons and bio-gas is less than a combined rate of 2 MW. This provision may allow for flaring of landfill gas as a way of managing the effects of closed landfills and recognises the likely low environmental impacts of such an activity.

In addition, the passive venting of landfill gas from closed landfills is permitted provided that "no dust, gases (including carbon dioxide and methane gases), or odour from the process which is offensive, objectionable, noxious or dangerous at or beyond the boundary of the premises or property".

It is probable that several of the closed landfills do not meet this condition, and thus may possibly require resource consent for passive venting of gas. This requires further assessment of each individual situation, as well as a detailed consideration of the statutory position.

Develop Landfill Management Plans according to the following order of priority:

Each plan will have the following indicative structure:

- Plan Objectives
- WCC (Management) Responsibility
- General site characteristics: natural and built environment
- Landfill engineering information
- Resource Consents Issues
- Potential Hazards (Risks and Risk Mitigation)
- Institutional controls
- Engineering closure requirements
- Permitted and Restricted Activities
- Monitoring
- Emergency response plan

Contaminated soils, leachate and subsidence management investigation and action planning will occur subsequent to the establishment of the gas management components of each plan.

It must be recognised that the Management Plan will have to be reviewed periodically to meet any new performance procedures and standard or regulatory and statutory changes throughout the post-closure period for the landfill.

Landfills	Information	Assessment	Action Plan

Where the risk from landfill gas to residential or high occupancy buildings is high, then landfill gas control measures will be considered. Their installation will be staged so that the effect of each increment of engineered gas control can be assessed and once an adequate level of protection is achieved, further measures other than monitoring become unnecessary.

Gas management plans need to be site specific, and can be based on a generic model. They should include plans for ongoing maintenance and monitoring. The development and implementation of these gas management plans will be easier whilst Council is the owner of the site. Other elements of the plan would require Council communications/liaison with other organisations such as utilities operators.