

Tirohia Landfill Factsheet

Total site area	102 hectares
Landfill area	5 hectares (within quarry area)
Quarry area	10 hectares
Total airspace	1.2 million cubic metres
Design life	15 – 20 years
Final use of site	Restored to farmland/forestry
Post closure monitoring period	30 years
Employees	Landfill: 5 – 10, Quarry staff: 30
Gatehouse	Computerised weighbridge
Additional plant and machinery	Truck and trailer units, tanker trucks, excavators, dump trucks and compactors
Waste acceptance	Non-hazardous solid waste
Landfill hours of waste acceptance	Mon - Fri 7.00am - 4.00pm Sat - by special arrangement Sun - closed
Landfill hours of operation	As per quarry hours
Contact	Eric Souchon, General Manager H.G. Leach & Co. Ltd, P.O. Box 108, Paeroa Phone - 0800 108 727 or 07 862 8727 Facsimile - 07 862 7940
Consulting engineers	Meritec Limited - Auckland Sub-consultants: <ul style="list-style-type: none"> • Brian T. Coffey & Associates Ltd • Engineering Geology Ltd • Hegley Acoustics Consultants • Waste Services NSW • Pattle Delamore Partners • Priest Mansergh Landscape Architects Ltd
Legal advisors	Jim Milne, Barrister McCaw Lewis Chapman - Hamilton
Communications advisor	Hubbard Public Relations - Hamilton
Regulatory bodies	Regional Authority - Environment Waikato District Authority - Hauraki District Council

Landfill Operator is a Family Company

H.G. Leach & Co. Ltd is a privately owned family company with a 50 year history in the Thames Valley.

All shareholders live and work in the area and are committed to maintaining a safe and healthy working environment for their staff, neighbours and nearby communities.

The company operates four quarries at Tirohia, Matatoki, Tahuna and Waitawheta and manages refuse transfer stations and landfill disposal for local authorities.

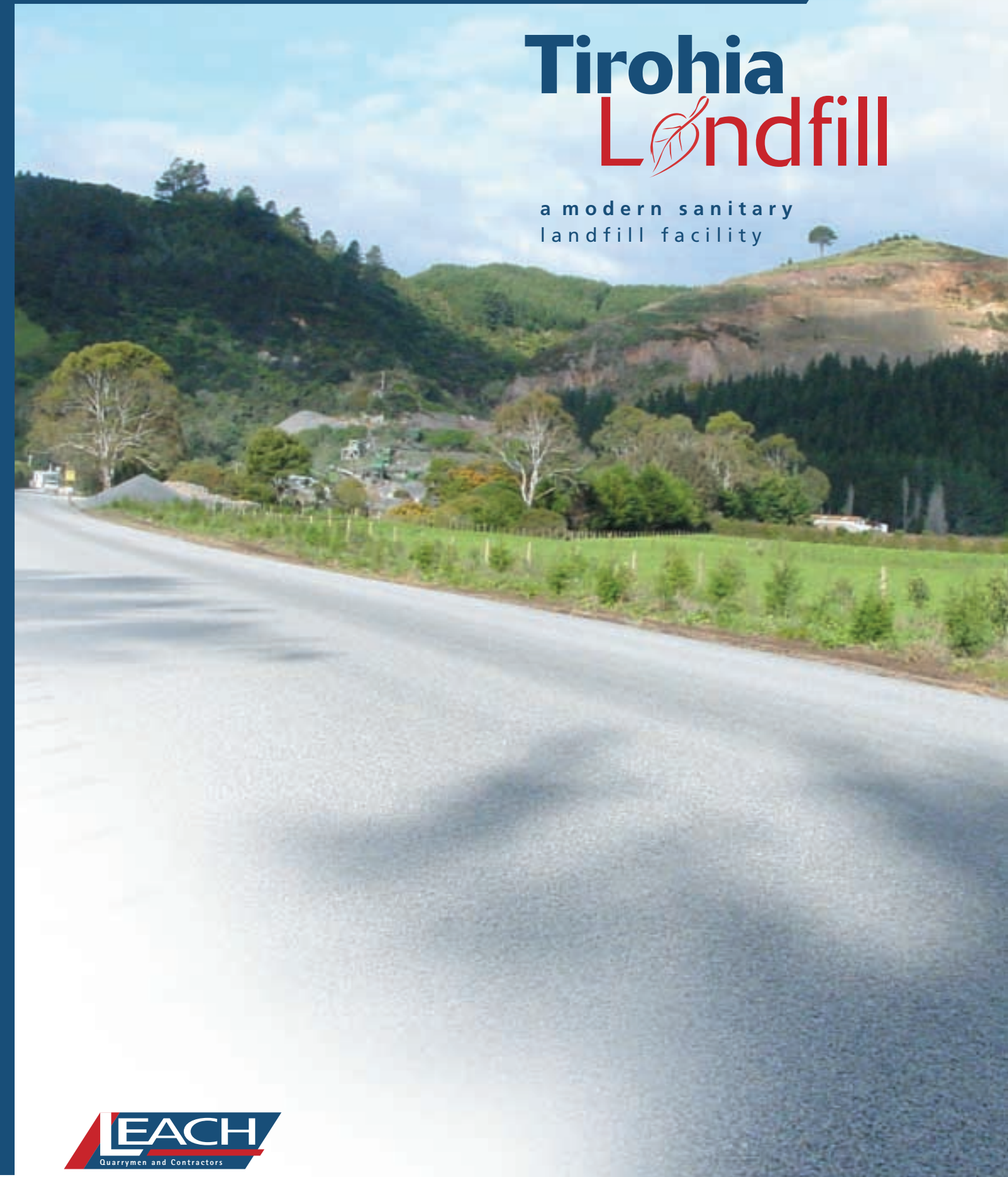
Developing a modern sanitary landfill at Tirohia has required a multi-million dollar investment by H.G. Leach & Co. Ltd.

Roads and facilities at the Tirohia site have been substantially upgraded to meet strict industry and environmental standards. The company's investment also included the cost of obtaining planning and environmental consents and dealing with court appeals, which began in 1996 and ended in 2001.

Welcome to

Tirohia Landfill

a modern sanitary
landfill facility



FOR FURTHER INFORMATION PLEASE TELEPHONE 0800 108 727 OR 07 862 8727

OWNED AND OPERATED BY H.G. LEACH & CO. LTD.

Meeting the needs of local communities

Tirohia Landfill is the first modern landfill facility to effectively service the needs of communities in the Eastern Waikato, Western Bay of Plenty, Thames Valley and Coromandel Peninsula.

Over the last decade, smaller community tips and dumpsites have progressively been closed as communities became aware of the dangers of dumpsite leachate polluting surrounding environments.

Until Tirohia Landfill opened in 2001, local authorities and industry have increasingly been forced to transport waste to remote landfill sites. This has been inconvenient and expensive, and has encouraged illegal dumping of some waste in unlicensed sites.

Tirohia Landfill now provides a modern landfill facility to meet the needs of those communities for at least 12 years.

Ideal location for a modern sanitary landfill

Tirohia Landfill is located on Quarry Rd off State Highway 26, some 7km south of Paeroa.

This is the ideal location for a landfill site. It is located on a private road and well shielded from view. The owner/operator owns the site surrounding the landfill and the nearest neighbours are more than 1km away, minimising the effects of dust, noise and odour on the local community.

This modern, environmentally sound landfill facility has been constructed in the exhausted pit area of the Tirohia Quarry operated by H.G. Leach & Co. Ltd.

The landfill will be developed in phases, filling quarry areas that are exhausted of useful rock.

Designed for a long life

Phase A has capacity to receive 1.2 million cubic metres of waste, which is expected to take 12 years to fill. This site has been granted resource consents to operate, under the provisions of the Resource Management Act

Phase B has a nominal capacity of 1.6 million cubic metres, with a life of approximately 15 years. Phase B will require additional resource consents.

If community waste minimisation measures prove successful, the life of the landfill may be extended.

Leachate collected

Leachate is the liquid residue which drains from waste material as it breaks down in a landfill. The Tirohia Landfill is designed to collect all leachate for removal and treatment offsite. A 500mm composite liner comprising geotextile fabric, clay and high density polyethylene covers the landfill floor and walls and allows leachate to gravitate to a holding pond, where it is collected and removed for processing. Sand and drainage metal are laid over the liner to protect it from damage.

Separate collection system for Stormwater

Stormwater from the remainder of the site is channeled to a stormwater settling pond where suspended solid material settles out before water is released into water systems. Stormwater will be prevented from draining into the landfill site.

The stormwater system is completely separate from the leachate collection system. However, as a precaution, stormwater is electronically monitored every 30 minutes for any sign that leachate may have entered the stormwater system.

Flaring disposes of Gas

Decomposing waste produces flammable gas. This is vented and burned by controlled "flaring".

Planting and Erosion Protection

Upgrading of Quarry Rd to accommodate increased truck traffic has involved considerable earthworks. All new earth slopes have been protected from erosion by laying biodegradable matting over the slopes and planting with native species.

The banks of the Owihakatina Stream, which drains the area below the quarry and landfill, have been fenced to keep stock out and planted with native species to improve water quality and stabilise stream banks to protect them from erosion.

In all, more than 11,000 native plants have been planted on site.

Dust and Dirt Controlled

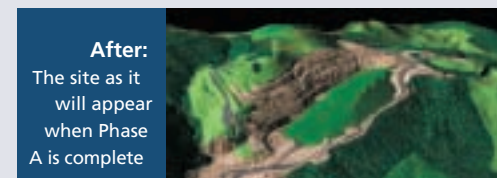
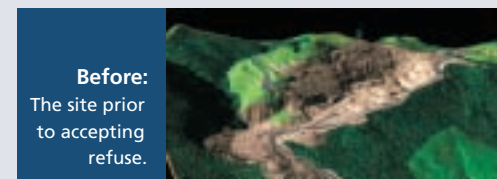
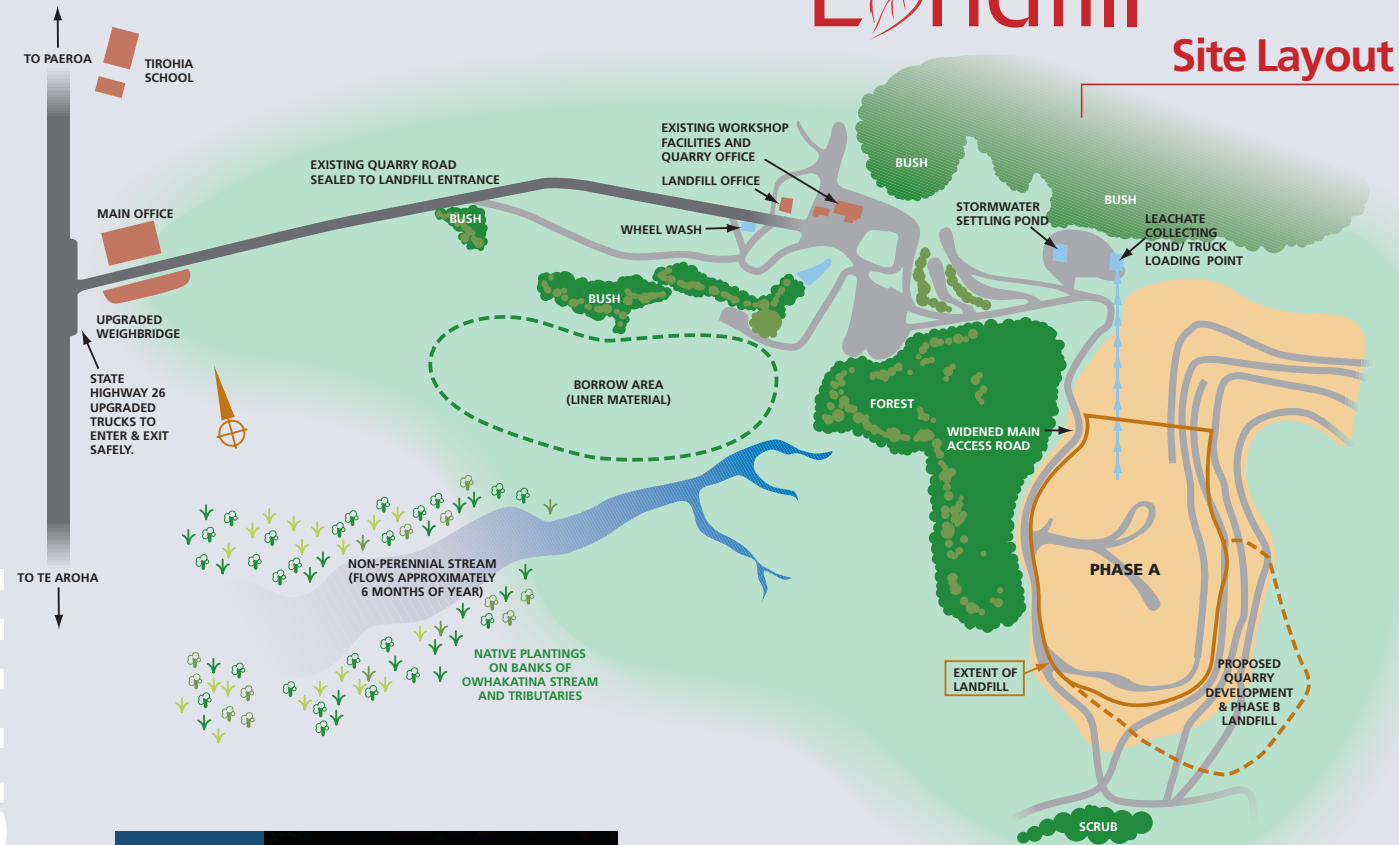
A wheel wash facility cleans dust and dirt from the wheels of vehicles before they exit the site. Quarry Rd is sealed up to the landfill site.

Ongoing Monitoring

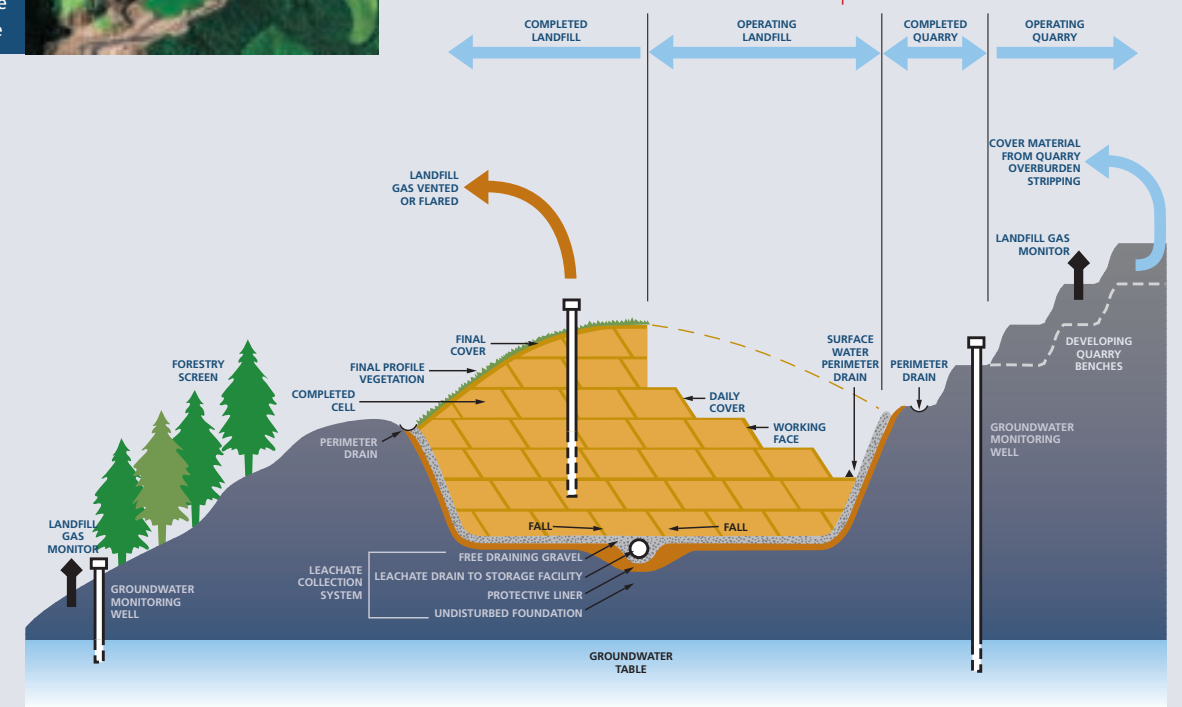
Landfill operator H.G. Leach & Co. Ltd has committed to environmental monitoring of the site for a period of up to 30 years after the landfill is closed.

Tirohia Landfill

Site Layout



Landfill Construction



Tirohia Landfill