

What is a Dump and What is a Landfill

A *dump* is a site for the disposal of waste materials by burial and is the oldest form of waste treatment. Historically, old style dumps have been the most common methods of waste disposal and remain so in many places around the world. These dumps have a history of being badly managed and environmental disasters. Today modern high standard, properly managed landfills are replacing the old style dumps and providing proper waste disposal facilities with improved environmental protection.

Naboro Landfill — A High Standard Modern Landfill

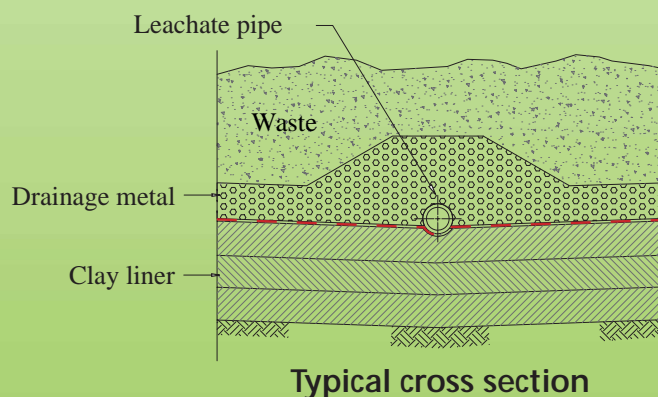
The Naboro Landfill is located on an ideal site, well away from central Suva and properly screened behind a natural barrier and not clearly visible from Queens Road. The location of this new landfill is a vast improvement from the old Lami dump site located at the entrance to Suva, within the mangroves on the foreshore. The old site was an eyesore and posed a high risk to the surrounding community. By comparison, the Naboro Landfill is engineered to a high standard to contain leachate which is the liquid residue produced by decomposing organic waste. The compacted clay liner and leachate collection system prevents leachate permeating down into the underlying ground water or nearby rivers or the sea as was the case at Lami. A high standard day to day operation ensures proper placement and compaction of the waste, along with daily cover and intermediate capping layers which minimise the fire risk and helps minimise odour issues, windblown refuse, vermin along with uncontrolled discharge of landfill gas.

Naboro Landfill Infrastructure

The landfill site infrastructure comprises: gate office, a certified weighbridge providing accurate measure and charging of all waste coming to the site, an administration block, workshop and main access roads along with the first stage protective clay liner, associated leachate drainage and treatment, stormwater control systems and soon a bin washing facility will be added for washing down bins used to carry special and odorous waste.

Compacted Clay Protective Liner

The current liner occupies an area of approximately 2.3ha (out of a total of 7.09ha for Stage 1) and is constructed using a 600mm compacted clay liner over the whole floor. The liner is then covered with a 500 mm thick drainage metal blanket, through which is a network of leachate collection pipes that connect to the main leachate pipe, draining into the leachate treatment system.

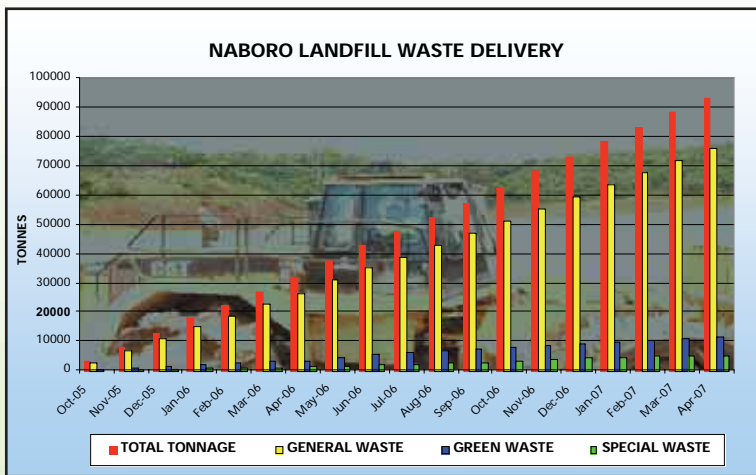


Leachate Treatment System

The leachate treatment system is currently a passive system consisting of one collection pond which flows to a multi cell partially aerated lagoon where micro-organisms break down the organic loading of leachate. This then flows into a wetland system where plants use this semi treated leachate for growth. The treated leachate discharging into the stream is of stock drinking quality.

Landfill Gas

When refuse decays in the absence of oxygen, such as in a landfill, then landfill gas is produced. The gas is typically 55 percent methane, 45 percent carbon dioxide with some nitrogen and other trace gases. Methane is one of the most harmful of the greenhouse gases and, although emissions reduce over time, it can seep out of landfills for many years. LFG can be harnessed from landfills and electricity produced from reciprocating gas engines. When the Naboro Landfill reaches 500,000 cubic meters of refuse it is likely that the gas will be collected through a gas collection network including gas wells and will be flared to minimise gas emissions. If sufficient gas is available, then it can be used to generate electricity.



Waste Acceptance

General municipal and commercial wastes are accepted at the landfill along with some wastes that require special consideration (special wastes).

No hazardous wastes are accepted.

Gate Fees

The gate fees are set by the Department of Environment and vary for green waste, general waste and special waste. The fees reflect the cost of owning and operating a high standard modern landfill, which provides maximum environmental protection whilst safely disposing of all the community's waste.

The site is projected to operate for the next 50 years and the gate fees will assist in funding development of the next stages of the landfill. An important aspect of the project is to ensure the availability of landfill space for the community in the years ahead, i.e. the ongoing development of the site for tomorrow and to ensure we don't leave an environmental disaster behind for the next generation to deal with!

GATE HOURS:

OPEN MONDAY TO FRIDAY

7:00am to 5:00pm

SATURDAY

7:00am to 4:00pm

SUNDAYS AND PUBLIC HOLIDAYS

CLOSED (OPEN BY SPECIAL
ARRANGEMENT ONLY)

FEE:

GENERAL WASTE

\$24.59 / tonne

SPECIAL WASTE

\$45.00 / tonne

GREEN WASTE

\$24.59 / tonne

** Prices VAT inclusive (VIP)*

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