

What even is a landfill?

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The Waste Minimisation Act 2008

The purpose of this Act
is to encourage waste minimisation
and a decrease in waste disposal...

...to protect the environment from harm
and provide environmental, social, economic and cultural benefits.



The Waste Minimisation Act 2008

Disposal means more than short-term deposit of waste into or onto land set apart for that purpose.

Or the incineration of waste to destroy it, but not to recover energy from it.

Waste means any thing disposed of or discarded.

Depositing things on land set aside for that purpose, or burning them.

Disposal facility means a facility, including a landfill, at which waste including household waste is disposed of, that operates as a business.

Or any other facility that is prescribed as a disposal facility.

A type of place where people leave things. Like landfills.



The Waste Minimisation (Calculation and Payment of Waste Disposal Levy) Regulations 2009

Prescribed disposal facilities (pay levy, keep records, and report)

Municipal disposal facility: class 1

- Includes landfills

- Operates as a business to dispose of waste

- Accepts household, commercial, industrial, institutional waste, and/or green waste

Construction and demolition fill disposal facility: class 2

- Includes landfills

- Does not accept class 1 waste

- Accepts solid waste from construction and demolition activity

Managed or controlled fill disposal facility: class 3 and 4

- Does not accept class 1 or 2 waste

- Accepts inert waste (not chemically or biologically reactive) from construction and demolition activities, earthworks or site remediation



The Waste Minimisation (Calculation and Payment of Waste Disposal) Regulations 2009

Other facilities (do not pay levy, keep records, report)

Cleanfill facility: class 5

Accepts only virgin excavated natural material

Industrial monofill facility

Accepts waste from a single industrial process that could discharge contaminants or emissions



Isn't there something about soil?

Despite the regulations, soil is characterised (levied, recorded, reported on) by its leachability or its virginity.

Soil that leaches a bit of contamination in dilute organic acid is Class 1 waste.

Soil that leaches hardly any contamination in dilute organic acid is Class 2 waste.

Soil that probably will only leach a bit of contamination in water is Class 3 waste.

Soil that probably will leach hardly any contamination in water is Class 4 waste.

Virgin excavated natural material is Class 5 waste, whether or not it leaches contaminants.

Soil that leaches more than a bit of contamination evidently cannot be disposed of.

Unless presumably it comes from a single industrial process in which case it can go to an industrial monofill.



Why isn't there anything about timber?

Timber is not characterised (levied, recorded, reported on) by its leachability or its virginity.

CCA-treated timber leaches lots of contamination in dilute organic acid, but none in water. It is Class 2 waste.

Boron-treated timber leaches lots of contamination in dilute organic acid or water. It is Class 2 waste.

PCP-treated timber exceeds Stockholm Convention persistent organic pollutant limits. It is Class 2 waste.

Timber treated with creosote, azoles, pyrethroids, copper etc doesn't leach much. It is Class 2 waste.

Virgin felled natural wood is not Class 5 waste. It is Class 1 waste.

Unless presumably the timber comes from a single industrial process, like timber processing or timber treatment, in which case it can go to an industrial monofill. Bark dumps for example.



Regional Plans under the Resource Management Act 1991

The regulations to protect the environment from waste don't actually take into account whether there is any environmental protection in place.

But in the WasteMINZ Technical Guidelines, and in practice under the Resource Management Act,

Class 1 landfills require a liner, leachate collection system, capping system, landfill gas management, comprehensive monitoring and reporting systems, and operational controls.

Class 2 landfills require a liner, leachate collection system, capping system, monitoring and reporting systems, operational controls,

and may have landfill gas management, monitoring and reporting.

Class 3 and 4 landfills require monitoring systems and operational controls.



What even is a landfill?

If it is an operating business that accepts solid household, institutional, construction or demolition waste into land, it's a landfill, pays waste levies and has engineered environmental protection.

Many things look like landfills, but don't seem to get levied as such:

Landfill caps

Closed landfills

Biosolids dumps, bark dumps, waste rock dumps, spent pot liner dumps, farm dumps

Containment cells

Cleanfills



Not landfills – but not even waste disposal facilities

Wastewater treatment plants

Waste to energy facilities

Anaerobic digestors

Quarry and mine rehabilitations, bunds, seawalls, reclamations, dams, embankments, platforms and valley fills

Waste disposal to land

Waste discharge to sea



Take-home

Regulations relating to landfills are incoherent, inconsistent and perverse.
Let's ask the Ministry for Regulation to scrap them and start again.

