

Cleanfills

■ Introduction

This factsheet provides information for contractors, earth working crews, developers and resource management consultants/planners on how to prevent cleanfills from becoming contaminated sites.

■ What is a cleanfill site?

Any commercial operation/site that accepts only cleanfill material.

■ What is cleanfill material?

Material that will have no adverse effects on people or the environment after it is buried. Cleanfill material includes virgin materials such as clay, soil and rock.

■ Cleanfill does not include:

- combustible, putrescible, degradable or leachable components
- hazardous substances
- products or materials derived from hazardous waste treatment, hazardous waste stabilisation or hazardous waste disposal practices
- materials that may present a risk to human or animal health such as medical and veterinary waste, asbestos or radioactive substances
- liquid waste



For a complete list of acceptable, conditionally acceptable and non-acceptable waste materials, see the Ministry for the Environment's "Guide to Cleanfill Management", available online at <http://www.mfe.govt.nz/publications/waste/cleanfills-guide-jan02.html>

■ The Challenge

The term cleanfill has been modified over time. Many cleanfills throughout New Zealand mistakenly accept inappropriate construction and demolition waste, contaminated soil, green waste and many other materials that can have an adverse affect on the environment.

Cleanfill sites that have accepted non-cleanfill materials may have to obtain long-term discharge consents that could require on-going monitoring.

■ How can I tell if material is unsuitable for cleanfill disposal?

Odours and discolouration:

Does it look or smell contaminated e.g. diesel or household refuse?

Find out the former land use(s)

- Check the history of the source site (e.g. a former service station/ industrial or horticultural land use) before starting earthworks and excavations
- Contact the Marlborough District Council to check for records of former land use, spills or pollution incidents
- Look at old aerial photos to help identify the former land use.

■ If you suspect contamination of potential cleanfill material

Stop work in the area and investigate the extent of contamination, noting location and possible sources etc.

If you suspect that the material you are disposing of does not meet the definition of cleanfill you should contact the Marlborough District Council. Otherwise talk to an environmental consultancy for advice about testing for contaminants and the appropriate action to be taken.

■ Testing for acceptability to cleanfill

The Marlborough District Council suggests that, “as a minimum, at least one sample per 250m³ of fill material should be taken and analysed.”

As a guideline, testing should be undertaken by an experienced contaminated site investigator and should screen for a range of potential contaminants depending on where the material has been sourced. This should include:

- heavy metals such as arsenic, cadmium, chromium, copper, lead, nickel, zinc
- total petroleum hydrocarbons (TPH)

Depending on the land use history of the source site, and identified risk factors, additional tests may also be required:

- semi-volatile organic compounds
- volatile organic compounds
- polyaromatic hydrocarbons
- organochlorine pesticides
- boron, cobalt, mercury and tin

