



Closed Landfill Sites

HOW THEY CAN AFFECT YOUR LAND

A landfill is an area that has been used for the disposal of a variety of wastes from household, industrial, agricultural or hazardous sources. This includes farm rubbish pits.

Some landfills are no longer operating. They may have been capped (covered with clean compacted materials) and there are no obvious signs that the areas were once landfills.

Historically, landfills were mostly located in areas that needed to be filled, such as pits, gullies or depressions in the ground. In Canterbury, numerous pits were created by gravel extraction and these became landfills. Some waste disposal may also have occurred above ground and raised the natural ground level.

Closed landfill sites have been redeveloped for a variety of uses, including parks, sports fields, reserves and streets. Many sites have also been subdivided and developed for industrial and residential use.

Living on a closed landfill site

The risks of living on former landfills include: contact with waste material and contaminated soil if there is no barrier preventing contact (i.e. concrete capping; compacted clean soil); the build-up of methane and other gases produced by decomposing organic material; and the ground sinking as decomposing waste settles.

Because we don't have information on individual properties where the land use is unverified, we can only provide general guidance about your land. Not all land which has been used for landfill will be contaminated. The only way to find out is to have the soil tested by a suitably qualified and experienced practitioner.

Taking care

There may be no danger to the health of anyone living on a closed landfill site. Any risk will depend on the original contents of the waste, the age of the site and how carefully it was closed and capped.

The Canterbury District Health Board advises anyone with a garden, regardless of whether the property is on the Listed Land Use Register, to follow some common sense precautions to minimise potential health risks when gardening or when children are playing outside.

Visit www.cph.co.nz/your-health/contaminated-land/ for more information.

If you are weighing up whether to have soil tested, think about the way you use your garden. If you follow the health board's common sense precautions, the risks are likely to be low. The following activities may place you at slightly higher risk:

- You eat the eggs of your free range chickens
- You grow and eat root vegetables
- Young children play in and may eat your garden soil.

If these activities apply, you may like to change your garden activities, or have the soil tested.

Drinking water quality

Residents in main towns in Canterbury are mostly on a reticulated water supply which means we use piped tap water for drinking and garden watering. All district council drinking water wells are monitored in accordance with the National Environmental Standard for Sources of Human Drinking Water, and by Environment Canterbury.

If you have a well supply, Environment Canterbury can provide advice about whether your water should be tested.

Responsibility for contaminated land

According to New Zealand property laws, if you own a property, you are responsible for any contamination problems with it, even if you did not cause them, or weren't aware of them when you bought your land. This is called the 'buyer beware' principle. If you are renting a property you can ask your landlord to ensure your health and safety which he/she is bound to do under the Residential Tenancies Act 1986.

The history of landfills

Landfills have not always been managed as well as they are today. Waste was often dumped in an uncontrolled manner and there were no records kept about what was dumped where within the landfill area. When landfills were full or reached the end of their use, they were closed or abandoned. However, some old landfills were not closed properly and did not have enough capping or shaping of the ground for their future uses. Most had no long-term plan for the management of the cap and no monitoring of the impact on the environment. Unfortunately, these were the standards of the time.

Nowadays, the location and construction of landfills has become much more regulated and there are restrictions on the types of wastes that can be deposited. Landfills, like Canterbury's main landfill at Kate Valley, are now well designed so that they hold waste properly and prevent liquids from the waste (leachate) leaking into ground water. Gas generated by the decomposition of landfill materials is also monitored and plans are put in place for monitoring landfills once they are closed.



Environment Canterbury identifies land which may be contaminated from current or historical uses

Land uses which may be hazardous include former orchards and market gardens, landfills, timber treatment and other industrial sites where harmful chemicals were often used, stored or disposed of. Environment Canterbury records these sites on the Listed Land Use Register www.llur.ecan.govt.nz.

Not all land which has been used for these hazardous activities or industries will be contaminated. The only way to find out is to have the soil tested. For more information, visit www.ecan.govt.nz/HAIL.