

Burwood Landfill soil acceptance criteria

Special Waste Class A

- Material from HAIL designated sites, or other sites where it is considered contaminants could be present, that has tested and has contamination levels that are below the National Environmental Standards for soil in recreation areas.
- Requires a **special waste permit** issued by the Council Environmental Health Team
- Soils must be free of:
 - combustible, putrescible, degradable or leachable components
 - hazardous substances
 - materials that may present a risk to human health
 - liquid waste
 - rocks stones or other objects that are larger than 60 mm
 - asbestos

Table 1. Soil Contamination Standards for Burwood Landfill

Parameter	Criterion	Units	Standard/Source
Arsenic	80	mg/kg	NES SCS
Boron	>10,000	mg/kg	NES SCS
Cadmium	400	mg/kg	NES SCS
Chromium III	>10,000	mg/kg	NES SCS
Chromium VI	2700	mg/kg	NES SCS
Copper	>10,000	mg/kg	NES SCS
Lead	880	mg/kg	NES SCS
Mercury	1800	mg/kg	NES SCS
Nickel	600	mg/kg	NEPC
Zinc	14000	mg/kg	NEPC
TPH C7 - C9	120	mg/kg	Petroleum Guidelines (revised 2011)
TPH C10 - C14	6500	mg/kg	Petroleum Guidelines (revised 2011)
TPH C15 - C36	10000	mg/kg	Petroleum Guidelines (revised 2011)
Benzene	3	mg/kg	Petroleum Guidelines (revised 2011)
Toluene	94	mg/kg	Petroleum Guidelines (revised 2011)
Ethyl benzene	670	mg/kg	Petroleum Guidelines (revised 2011)
Xylene	150	mg/kg	Petroleum Guidelines (revised 2011)
BaP Equivalent	40	mg/kg	NES SCS
DDT	400	mg/kg	NES SCS
Dieldrin	70	mg/kg	NES SCS

Soil acceptance criteria are described in Environment Canterbury's resource consent issued to Christchurch City Council:

Resource Consent Number: CRC264093

Relevant conditions:

Waste Acceptance Criteria

2. Only materials meeting the following Waste Acceptance Criteria must be accepted for temporary stockpiling and/or permanent deposition at the site:

- a). Natural materials including soil, clay, gravel, and rock that have been investigated by a Suitably Qualified and Experienced Person (SQEP) and assessed as having contaminant concentrations that are below the acceptance criteria (human health-based criteria for recreational land use referred to in Condition (3) of this resource consent);
- b). Maximum inert manufactured materials (e.g. concrete, brick, tiles) of no more than 5 percent volume per load; and
- c). Maximum incidental or biodegradable materials (e.g. vegetation) of no more than 2 percent volume per load.

Advice Note: Incidental means items or material that are present in small quantities and cannot practicably be segregated from the load.

3. Contaminated soils stockpiled and/or deposited on the site must not exceed the human health-based criteria for Parks/Recreation land use contained within the following published guidelines:

- a). Ministry for the Environment (April 2012) Users' Guide National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health. Appendix B (recreation);
- b). For nickel and zinc contaminated soils, the National Environment Protection (Assessment of Site Contamination) Measure 1999, updated 2013. Table 1A(1), (recreational C); and
- c). For hydrocarbon contaminated soils, the Ministry for the Environment (August 1999) Guidelines for assessing and managing petroleum hydrocarbon contaminated sites in New Zealand. Table 4.19 (sand).

4. Only materials that have been pre-approved in accordance with the procedure within the approved Operational Management Plan (OMP) referenced in Condition (10) of this resource consent and demonstrated by soil testing undertaken by a SQEP on contaminated land that meet the acceptance criteria in Conditions (2) and (3) of this resource consent may be accepted and deposited at the site.

5. Any material must not be accepted and deposited at the site after 30 June 2031.