



Marlborough has a legacy of soil contamination largely due to past practices in the storage and use of hazardous substances and disposal of hazardous waste. Some examples:

- Timber treatment
- Production of gas and coal products
- Storage of petroleum products
- Landfills
- Chemical storage
- Vehicle workshops
- Engineering workshop and metal fabrication
- Asphalt manufacture or bulk storage
- Scrap yards
- Service stations
- Livestock dipping
- Glasshouses
- Market gardens
- Orchards and vineyards
- Sports fields and sports greens
- Lead paint (old houses, shed, demolished buildings)

The contaminants associated with these activities and industries include organochlorines such as DDT, lindane and dieldrin; heavy metals/metalloids such as arsenic, cadmium, copper and lead; and various hydrocarbon compounds. These contaminants are a problem when they are found at levels which may affect human health or the environment.

HAIL and land disturbance

Past or current use of land may have created the potential for contamination. This may apply to sites where there is soil disturbance and excavation. The Ministry for the Environment (MfE) has a list of 53 activities and industries (see Page 2) that have a high probability of causing contamination because they typically use, store or dispose of hazardous substances. The list is called the Hazardous Activities and Industries List, or **HAIL** (MfE 2011). Listed sites with any current or historic activity are called HAIL sites.

If HAIL activities have occurred on the land you need to address the NESCS.

Environmental Standard for assessing and managing contaminants in soil to protect human health

Recent legislation, Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (**NESCS**), outlines activities that require consent due to contamination risk. This includes the following activities:

- soil disturbance activities
- subdividing land
- changing land use
- removal or replacement of fuel storage systems and associated soil, and associated subsurface soil sampling
- soil sampling.

Soil disturbance

When working at any site please check the HAIL list before going ahead with soil disturbance or soil movement. Soil or material received from another site should be checked to ensure it is from a clean source. A soil test may be necessary. Please contact Council to get further information or make your own independent enquiries. Please note that any site assessment required by the NESCS must be carried out by a suitability qualified practitioner (SQEP). Check the Council website for further information <https://www.marlborough.govt.nz/environment/hail-contaminated-land/environmental-consultants>

Cleanfills

Any soil taken to cleanfills must comply with the cleanfill guideline acceptance criteria. Note that these criteria may be lower than the guidelines used to remediate a development site. If in doubt, please check with Council or your SQEP.

Table of cleanfill acceptance criteria for Marlborough (see the Council's website for associated report).

Element	Cleanfill Guideline (mg/kg)
Arsenic	12
Cadmium	0.9
Chromium	88
Copper	147
Lead	92
Nickel	75
Zinc	260

Database

Councils have a responsibility under the Resource Management Act 1991 to investigate, identify and monitor contaminated land. For that reason, the Marlborough District Council maintains a database of sites that have, or may have, been used for activities and industries on the Hazardous Activities and Industries List. This database is continually updated by property file reviews, historic aerial photos and information on resource consent applications.

More information about the HAIL and each of the categories in the database is on the Council's website (see below).

Disclaimer: This factsheet is a summary of NESCS and requirements with respect to HAIL and potential contaminated soil. Full information is available on the MfE, MDC and WasteMINZ websites. All persons should refer to these and make their own independent enquires to assess their specific situation.

Additional Information: Go to the WasteMINZ and Ministry for the Environment websites for further information.

<https://www.wasteminz.org.nz/sector-groups/contaminated-land-management/contaminated-land-factsheets/>

<http://www.mfe.govt.nz/land/nes-assessing-and-managing-contaminants-soil-protect-human-health/about-nes>



The Hazardous Activities and Industries List (MfE) outlines activities and industries considered likely to cause environmental contamination resulting from hazardous substance use, storage or disposal and includes:

A. Chemical manufacture, application and bulk storage

1. Agrichemicals including commercial premises used by spray contractors for filling, storing or washing out tanks for agrichemical application
2. Chemical manufacture, formulation or bulk storage
3. Commercial analytical laboratory sites
4. Corrosives including formulation or bulk storage
5. Dry-cleaning plants including dry-cleaning premises or the bulk storage of dry-cleaning solvents
6. Fertiliser manufacture or bulk storage
7. Gasworks including the manufacture of gas from coal or oil feedstocks
8. Livestock dip or spray race operations
9. Paint manufacture or formulation (excluding retail paint stores)
10. Persistent pesticide bulk storage or use including sport turfs, market gardens, orchards, glass houses or spray sheds
11. Pest control including the premises of commercial pest control operators or any authorities that carry out pest control where bulk storage or preparation of pesticide occurs, including preparation of poisoned baits or filling or washing of tanks for pesticide application
12. Pesticide manufacture (including animal poisons, insecticides, fungicides or herbicides) including the commercial manufacturing, blending, mixing or formulating of pesticides
13. Petroleum or petrochemical industries including a petroleum depot, terminal, blending plant or refinery, or facilities for recovery, reprocessing or recycling petroleum-based materials, or bulk storage of petroleum or petrochemicals above or below ground
14. Pharmaceutical manufacture including the commercial manufacture, blending, mixing or formulation of pharmaceuticals, including animal remedies or the manufacturing of illicit drugs with the potential for environmental discharges
15. Printing including commercial printing using metal type, inks, dyes, or solvents (excluding photocopy shops)
16. Skin or wool processing including a tannery or fellmongery, or any other commercial facility for hide curing, drying, scouring or finishing or storing wool or leather products
17. Storage tanks or drums for fuel, chemicals or liquid waste
18. Wood treatment or preservation including the commercial use of anti-sapstain chemicals during milling, or bulk storage of treated timber outside

B. Electrical and electronic works, power generation and transmission

1. Batteries including the commercial assembling, disassembling, manufacturing or recycling of batteries (but excluding retail battery stores)
2. Electrical transformers including the manufacturing, repairing or disposing of electrical transformers or other heavy electrical equipment
3. Electronics including the commercial manufacturing, reconditioning or recycling of computers, televisions and other electronic devices
4. Power stations, substations or switchyards

C. Explosives and ordnance production, storage and use

1. Explosive or ordnance production, maintenance, dismantling, disposal, bulk storage or re-packaging
2. Gun clubs or rifle ranges, including clay targets clubs that use lead munitions outdoors
3. Training areas set aside exclusively or primarily for the detonation of explosive ammunition

D. Metal extraction, refining and reprocessing, storage and use

1. Abrasive blasting including abrasive blast cleaning (excluding cleaning carried out in fully enclosed booths) or the disposal of abrasive blasting material
2. Foundry operations including the commercial production of metal products by injecting or pouring molten metal into moulds
3. Metal treatment or coating including polishing, anodising, galvanising, pickling, electroplating, or heat treatment or finishing using cyanide compounds
4. Metalliferous ore processing including the chemical or physical extraction of metals, including smelting, refining, fusing or refining metals
5. Engineering workshops with metal fabrication

E. Mineral extraction, refining and reprocessing, storage and use

1. Asbestos products manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition
2. Asphalt or bitumen manufacture or bulk storage (excluding single-use sites used by a mobile asphalt plant)
3. Cement or lime manufacture using a kiln including the storage of wastes from the manufacturing process
4. Commercial concrete manufacture or commercial cement storage
5. Coal or coke yards
6. Hydrocarbon exploration or production including well sites or flare pits
7. Mining industries (excluding gravel extraction) including exposure of faces or release of groundwater containing hazardous contaminants, or the storage of hazardous wastes including waste dumps or dam tailings

F. Vehicle refuelling, service and repair

1. Airports including fuel storage, workshops, washdown areas, or fire practice areas
2. Brake lining manufacturers, repairers or recyclers
3. Engine reconditioning workshops
4. Motor vehicle workshops
5. Port activities including dry docks or marine vessel maintenance facilities
6. Railway yards including goods-handling yards, workshops, refuelling facilities or maintenance areas
7. Service stations including retail or commercial refuelling facilities
8. Transport depots or yards including areas used for refuelling or the bulk storage of hazardous substances

G. Cemeteries and waste recycling, treatment and disposal

1. Cemeteries
2. Drum or tank reconditioning or recycling
3. Landfill sites
4. Scrap yards including automotive dismantling, wrecking or scrap metal yards
5. Waste disposal to land (excluding where biosolids have been used as soil conditioners)
6. Waste recycling or waste or wastewater treatment

H. Any land that has been subject to the migration of hazardous substances from adjacent land in sufficient quantity that it could be a risk to human health or the environment.

I. Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment.

For further information on the HAIL: <http://www.mfe.govt.nz/land/hazardous-activities-and-industries-list-hail>