

## **Contaminated Land Practice Note**

Soil contamination has been largely caused by historic practices in which chemicals were manufactured, used, stored and disposed of in ways that are unacceptable today. Contaminated sites are often associated with industrial activities, but can also be caused by commercial, agricultural and residential land uses or activities. The long-term use of lead-based paints on buildings can also cause soil contamination.

### **What is a contaminated site?**

A contaminated site is defined in the Regional Plan: Waste as:

*a site at which hazardous substances occur at concentrations above background levels **and** where assessment indicates it poses, or is likely to pose an immediate or long term hazard to human health or the environment.*

There are two parts of this definition which must be met for it to apply. It is important to note that there are some sites in Otago with naturally occurring levels of substances that may exceed [soil guideline values](#) (indicating a hazard to human health or the environment). However, these sites are not defined as contaminated sites under our Waste Plan because the substance doesn't **also** occur at concentrations above background element levels.

### **What rules apply to contaminated sites?**

Some activities are allowed under the National Environmental Standard for Contaminated Soils, but you will need a resource consent for a controlled, restricted or discretionary activity.

The NES does not affect regional council functions. Even if the NES requires a resource consent from a city or district council, you may also need a regional resource consent for the same activity if it is required by section 15 or section 9 of the RMA or a relevant regional plan.

This table shows when regional or district consents are required:

	Site meets HAIL site definition only	Site meets HAIL site definition plus Waste Plan 'contaminated site' definition
Meets <a href="#">8(3) of the NES</a> Regulation 8(3) allows for relatively small-scale soil disturbance that may occur on land that is not associated with either soil sampling or removing or replacing fuel systems.	No consent required	Regional council consent required
Does not meet clause 8(3) of the NES	District council consent required	Both regional council and district council consent required

A [HAIL site](#) is a piece of land that has either been confirmed to be contaminated or has the potential to be contaminated due to past or present activities or industries that are likely to cause land contamination.

If you are unsure whether you need resource consent, please contact [consent.enquiries@orc.govt.nz](mailto:consent.enquiries@orc.govt.nz).

### Environmental guidelines

Policy 5.4.4 of the Waste Plan applies the ANZECC guidelines for assessing and managing contaminated sites. However, since the Waste Plan became operative, these guidelines are largely superseded by a series of guideline documents published by MfE in 2001, called the Contaminated Land Management Guidelines. We expect that industry best practice will be followed when investigation and reporting on contaminated land.

### What consent application form to use and information to supply

An application must<sup>1</sup> include all the information about contaminated land that would be required to comply with best industry practice i.e. the Ministry for the Environment Contaminated Land Management Guidelines (CLMG) such as CLMG No. 1 (reporting) and CLMG No. 5 (investigating). The level of information provided should match the level of risk of the activity.

The table below sets out some common activities that may occur on contaminated land, grouped in terms of risk. It should be remembered that all applications and sites are different, and activities that are generally considered low risk, could pose a higher risk depending on various site-specific factors, such as proximity to sensitive receptors.

Grouping (lower to higher risk)	Type of activities	Application form to use
Typically low risk	Drilling on a contaminated site	Form 9b - Drilling on a contaminated site
	Work on a residential property with lead paint	Small scale combined contaminated and residential earthworks form 60b (as long as no more than 25 m <sup>3</sup> per 500 m <sup>2</sup> , less than 10 degrees slope 20 metres away from sensitive receptors and no groundwater encountered) OR disturbance of a contaminated site form 60c
	Trenching work on a commercial or industrial site	Small scale contaminated form 60a (as long as No more than 25 m <sup>3</sup> per 500 m <sup>2</sup> , less than 10 degrees slope 20 metres away from sensitive receptors and no groundwater encountered) OR disturbance of a contaminated site form 60c

<sup>1</sup> In addition to containing the information required by Schedule 4 of the RMA.

	Small-scale residential earthworks on a contaminated site or an un-investigated HAIL site.	Small scale combined form 60a (as long as no more than 25 m <sup>3</sup> per 500 m <sup>2</sup> , less than 10 degrees slope 20 metres away from sensitive receptors and no groundwater encountered) OR disturbance of a contaminated site form 60c
Typically medium risk	Commercial or industrial site redevelopments, or large residential developments.	Disturbance of a contaminated site form 60c
Typically higher risk	Large scale contaminated land with earthworks	Disturbance of a contaminated site form 60c

As well as filling in the consent application form, you will need to include technical information from a Suitably Qualified and Experienced Practitioner with your application. For contaminated land, types of reports include the below.

- Stage 1 – Preliminary site inspection (PSI) report
  - This is often referred to as a desktop study because it does not usually involve sampling and analysis. The main objective of a PSI is to gather information about a piece of land to determine whether it could be contaminated.
- Stage 2 – Detailed site inspection report
  - Further investigation, including soil sampling and analysis within areas of concern identified by stage 1.
- Stage 3 – Site remedial action plan
  - Documenting the remediation (actions taken to stop or reverse environmental effects) and management strategy to mitigate the risk posed by contaminants
- Stage 4 – Site validation report
  - This demonstrates that objectives in the remedial action plan have been achieved and documents the site's mitigation status following remedial action.
- Stage 5 – Ongoing monitoring and management plan
  - If contamination remains, this plan sets out how will it be monitored and managed.

A Detailed Site Investigation (DSI) should be undertaken in accordance with CLMG no. 5 and reported on in accordance with CLGM no. 1. In almost all situations, a DSI is required to ensure that there is enough information available to understand the risks associated with the proposal. If, in the opinion of a SQEP, a DSI is not required to comply with best industry practice and you wish to submit your application without a DSI, then we recommend that you schedule a pre-application meeting to discuss this.

In addition to a DSI, your application should contain a site management plan (SMP), an assessment of remedial options, and a remedial action plan (RAP). For smaller sites, it is acceptable to combine the SMP and RAP into one document, provided the requirements of each individual report are met. This will generally apply to those who use our application forms 9b, 60a, and 60b.



Post-works, you will need to provide a site validation report (SVR). This is to verify whether remedial works were set out in accordance with the RAP and set out any variations where these occurred. As noted in CLMG No. 1, the scale and scope of these reports should reflect the complexity of the site setting, including contamination present, the identified risks and the remediation objectives.

## Frequently Asked Questions

### How do we know what background levels of contaminants are?

Naturally occurring background element concentrations can be difficult to accurately determine, given the amount of development that has happened in NZ. Industry (discharges of contaminants), farming (fertiliser application), and even runoff from roads (heavy metals) can all affect the concentrations measured in soils today. Background concentrations can be determined by sampling other nearby “clean” sites to determine what an acceptable level in soil should be.

### Does any disturbance require resource consent?

There is no permitted activity pathway associated with contaminated site disturbance under the Regional Plans.

In some instances, Council may consider an activity to be *de minimis* (“too small to be meaningful or taken into consideration.”) and does not need a consent. *De minimis* is an extremely low threshold of effect. This may include things such as hand sampling at a site, planting or removing a tree (but not removal of a plantation of trees), digging holes (by hand) to build a fence and soil sampling using hand tools such as trowels of hand.

A decision on if something is *de minimis* is on a case by case basis, so you should have confirmation from Council in writing that we do not consider resource consent is required before starting works.

### Do I also need a discharge permit?

A discharge permit is required if the proposal involves the discharge of hazardous waste to land or to water or to air. If you are excavating contaminated soils and discharging them elsewhere on the same site or a different site (excluding any licenced facility such as a landfill) then you will need a discharge permit in addition to the land use consent for disturbance. If you are disturbing a site where that disturbance will result in ground gasses being emitted, then you will need a discharge permit. Examples may include disturbance of landfills or sites where petroleum hydrocarbons have contaminated the soils.

### **What guidelines are considered acceptable to assess effects?**

Any guidelines can be used to assess effects. These will just need to be justified by your SQEP.

### **Do I need resource consent from just the Regional Council?**

ORC have rules in our Regional Plan Waste to manage contaminated sites. The District Councils are required to administer the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health. It sets out planning controls around the disturbance, subdivision and land use change of potentially contaminated land. You may need consent from your City or District Council as well as ORC. For more information see the Ministry for the Environment's website or contact your city or district council planning team.

### **What does the ORC look at that is different to the City and District Councils?**

As both Councils have functions in respect of the use of land, there are often rules from District Councils and Regional Councils which control the same activity. However, for contaminated land the purpose of which each council is controlling it stems from the respective council's functions in sections 30 and 31 of the RMA. Regional Councils have the function to control discharges of contaminants into water and to land and look at the effects relating to this only. Once contaminated land is identified, the Regional Council has a responsibility to control any discharge of contaminants originating from this contaminated land.

Otago has over 2,000 contaminated/potentially contaminated sites which are identified in the HAIL register.

### **How does ORC work with City and District Councils to avoid duplication?**

To reduce cost and complexity for applicants and consent holders, ORC staff (Consents and Compliance) work together with City and District Councils where possible while appreciating that each Council has different areas of focus and requirements. This includes ensuring processing planners from Regional and District Councils are talking when processing applications, aligned consent conditions, cross training of teams, using the same technical auditor where we can.

### **Got more questions?**

Please be aware that you should always check with ORC directly if permitted rules will be met or if consent is required. ORC has a consent enquiries team and it is recommended that you contact them before lodging your application, or engaging a consultant to do work for you.

