

## 20 Contaminated Sites

### 20.1 Significant Issues

Use or redevelopment of contaminated sites can present a hazard to human health and safety, and may increase the adverse effects of the contamination.

The dispersal of contaminants into the surrounding environment by movement of contaminants from sites.

### 20.2 Overview

A National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health 2011 (“NES”) took effect on 1 January 2012. The objective of the NES is to ensure that land affected by contaminants in soil is appropriately identified and assessed at the time of being developed and, if necessary, remediated or the contaminants contained to make the land safe for human use. In particular the NES:

- Establishes regulations for relevant activities ensuring that all district planning controls relevant to assessing and managing public health risks from contaminants in soil are appropriate and nationally consistent.
- Establishes soil contaminant values protective of human health for a range of land uses, requiring their use when decisions are made under the NES; and
- Ensures best practice and consistent reporting on land affected, or potentially affected by contaminants is applied that enables efficient information gathering and consistent decision-making.

Control of contaminated sites is shared between District and Regional Councils. The District Council has a responsibility to control the effects of contaminated sites on human health and a general duty to protect the environment. Other effects arising from the discharge of contaminants from a contaminated site are controlled by the Regional Council through regional plans.

Land use activities involving hazardous substances can lead to the contamination of land and therefore endanger the health and safety of people and communities. Many historical land use activities have led to the contamination of land. Potentially contaminated sites range from former landfill sites and gasworks sites through to oil terminals and areas contaminated with sewage. In many cases, the contamination is not confined to the site at which the activity took place.

Potential adverse human health effects typically arise where contaminated sites are redeveloped, and site construction workers, residents or occupiers are exposed to contaminants. Human health risks also need to be considered when contaminated matter is transported away to another site. Additional effects can arise from the contamination of surface watercourses resulting from direct run-off from sites, or point source stormwater discharges and groundwater contamination in areas with permeable soils. The movement of contaminants off-site can be by wind and leaching, but can also occur from land disturbances such as earthworks. These discharges from contaminated sites are the responsibility of the Regional Council. (Also refer to 21 Hazardous Substances).

## 20.3 Objectives

**20.3.1** The use, management and development of contaminated sites in a way that ensures that the adverse effects on the environment are avoided, remedied or mitigated to acceptable environmental levels.

**20.3.2** Minimisation of the adverse effects of contaminated sites on human health and safety.

*Explanation and Reasons: Land contamination can be very difficult to remedy. Highly technical methods have been developed to undertake the process of decontamination. It is important that the effects and extent of contamination be contained until such methods can be employed to decontaminate the site. Contaminated sites, and their redevelopment, can pose significant human health and safety effects. It is important that these be minimised.*

## 20.4 Policies

### 20.4.1 Identification

To identify contaminated sites that present a risk to human health and safety.

*Explanation and Reasons: The District Council has little information on contaminated sites. It is therefore necessary to develop an appropriate database on such sites. A joint initiative by some Regional Councils and District Councils in developing a consistent methodology for contaminated site information using the PIM and LIM information system will enable, over time, an appropriate classification of sites in the District. Labelling of sites has to be undertaken with care so land is not blighted unnecessarily.*

*As the database is developed, the Council will, in association with the landowner and the Northland Regional Council, promote an appropriate level of remediation relating to the anticipated land use, in accordance with land use classes. A change to a more sensitive land use may require a higher level of remediation. The level of remediation agreed for a site will be recorded on the relevant property files. Responsibility for the clean up of sites will generally be with the landowner or persons responsible for the contamination.*

### 20.4.2 Remediation

To avoid subdivision, use or development of contaminated land that presents a risk to health, safety or the environment, unless contamination is remedied or mitigated to acceptable environmental levels.

*Explanation and Reasons: The level of contamination of a site will influence which activities would be appropriate. Remedial or mitigation measures can decrease the level of risk associated with the site. The range of mitigation and remedial measures allows for rehabilitation to a number of levels of decreased risk, therefore a range of activities could be possible. The process of remediation may result in adverse effects on the environment and a resource consent may be required to control these effects.*

### 20.4.3 Removal of Matter

To contain the extent of contamination by avoiding the removal of soil or matter from a contaminated site, or where appropriate, to allow the excavation of contaminated material and to ensure that such material is stored, transported and disposed of in an appropriate manner.

*Explanation and Reasons: The containment of contamination is an important part of managing contaminated sites. It is imperative that there is no further risk of contaminating other parts of the District. Where there is a need for soil to be removed from a site, this should be disposed of in an appropriate facility that deals with hazardous waste.*

#### 20.4.4 Dissemination of Information

To keep information on known contaminated sites in the District on a database linked to the PIM and LIM information.

*Explanation and reasons: A database linked to the PIM and LIM information system will alert landowners, occupiers, buyers and sellers, and other involved parties of site contamination information. The database will distinguish between confirmed contaminated sites and those that have had a historical association with hazardous substances. The creation of such a database will enable data to be easily updated as new information becomes available and/or site remediation is undertaken.*

### 20.5 Methods

#### 20.5.1 Regulatory Methods

- Resource Area rules relating to activities on contaminated sites (Policies 20.4.1 to 20.4.3).
- Resource consent conditions (Policies 20.4.2 and 20.4.3).

#### 20.5.2 Information, Education and Advocacy

1. Dissemination of available information on the location and associated hazards from contaminated sites throughout the District, through PIM and LIM reports (Policy 20.4.1).
2. Liaison with the Northland Regional Council (Policies 20.4.1 to 20.4.3).
3. Promote and support appropriate voluntary, self-regulating codes of practice but not limited to:
  - Health and Environmental Guidelines for selected Timber Treatment Chemicals (MFE MOH);
  - Code of Practice for the Safe use of Timber preservatives and Anti sapstain Chemicals (OSH);
  - Code of Practice for Fertiliser Use (NZ Fertilisers Manufactures Association);
  - ANZECC Guidelines for the Assessment and Management of Contaminated Sites (ANZECC);
  - Landfill Guidelines (Centre for Advanced Engineering);
  - A Guide to the Management of Cleanfills (MFE);
  - Code of Practice for the Transport of Hazardous Substances on Land (NZS 5433);
  - The Storage and Handling of Toxic Substances (NZS 4452),
  - Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in NZ (MFE);
  - Guidelines for the Management and Handling of Used Oil;
  - Guidelines for the Assessment and Management of Gas Works Sites;
  - Guidelines for Contaminated Sites Management (MFE);
  - Guidelines for the Management of Hazardous Wastes in NZ (MFE) (Policies 20.4.1 to 20.4.3.);
  - Water and Soil Plan for Northland.

### 20.6 Anticipated Environmental Results

The following results are expected to be achieved by the foregoing Objectives, Policies and Methods. The means of monitoring whether the Plan achieves the expected outcomes are set out in the Whangarei District Council Monitoring Strategy.

- Contaminated sites within the District are identified, assessed, classified and entered into a database.
- Known contaminated sites are remedied to a standard appropriate to their future use, whilst ensuring they do not have adverse effects on the environment.
- Any subdivision, use or development of contaminated sites will ensure that the health and safety of people and communities are protected.

#### **Schedule 20A - Criteria for Contaminated Sites**

The following documents will be used to assess contaminated sites:

- Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011 (the 'NES');
- Users Guide for Assessing and Managing Contaminants in Soil to Protect Human Health (MfE, April 2012);
- Contaminated Land Management Guidelines No.s 1 to 5 (MfE, various);
- Hazardous Activities and Industries List (HAIL) (MfE, latest version);
- Methodology for Deriving Soil Guideline Values Protective of Human Health (MfE, 2011);
- Identifying, Investigating and Managing Risks Associated with Former Sheep-dip Sites: A Guide for Local Authorities (MfE, 2006);
- Australian and New Zealand Guidelines for the Assessment and Management of Contaminated Sites (ANZECC 1992);
- Health and Environmental Guidelines for Selected Timber Treatment Chemicals. Ministry for the Environment and Ministry of Health 1997. (Chapter 5);
- Guidelines for Assessing and Managing Contaminated Gasworks Sites in New Zealand. Ministry for the Environment 1997. (Section 4);
- Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand. Draft for Consultation. Ministry for the Environment 1997. (Module 4).

The NES criteria for individual compounds and substances will be used when assessing the contamination of any type of site.

## Updates and Sign-off Sheet

Date Updated	Paragraph	Change description	Decision date
4 December 2012	20.2 20.6 – Schedule 20A	Incorporation of the National Environment Standard for Assessing and Managing Contaminants in Soil to Protect Human Health into the District Plan - LB	Memo: 14 November 2012 TRIM: 12/73868

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