THE WEST COAST
REGIONAL COUNCIL

Management strategy for sites associated with hazardous substances and contaminated land

September 2009

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Reviewed and approved for release by:

Simon Moran

Manager, Planning and Environment
West Coast Regional Council

Chris Ingle

Chief Executive Officer
West Coast Regional Council

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Executive summary

Effective management of contaminated sites is the responsibility of both regional and district councils on the West Coast. This responsibility is in two parts:

1. Identifying and providing information about contaminated sites

2. Managing contamination to avoid, mitigate, or remedy significant effects on human health and the environment

This document outlines the strategy proposed by the West Coast Regional Council for ensuring that a coordinated and effective approach is taken.

The strategy covers:

- Relevant regional and national legislation and policy
- The framework for how contaminated land issues are identified and assessed
- How provision of information on sites associated with hazardous substances/activities/industries, and contaminated land is managed
- Prioritisation of work given limited resources
- Future initiatives and goals

A risk-based approach to contaminated site management is recommended for reasons of pragmatism as the community cannot afford to manage or remediate too many sites at once. By prioritising this Council's response to specific contaminated site issues on the basis of risk it has achieved the greatest environmental gain earlier in the programme. A focus on prevention of future contamination of land through the Council's Environmental Education Strategy is a key component of a cost-effective programme in the long term.

This strategy should provide a useful guide to members of the public, and staff of regulatory bodies within the West Coast Region, who are involved with issues relating to hazardous substances, activities, industries, and/or contaminated land.

1 Introduction

The goal of this Strategy is to provide direction and structure to Council for managing information about sites associated with hazardous substances, activities and industries, and contaminated land management. Through the implementation of the strategy it is anticipated that Council will:

- Meet its statutory obligations more effectively and efficiently
- Improve integration, coordination and communication of what Council is doing with stakeholders in the region

This strategy aims to ensure that information the Council holds about the contamination status of land parcels is managed in a clear and consistent manner, and that the information can readily be made available to appropriate parties involved in decision-making and management of sites. The strategy enables the West Coast Regional Council to address statutory responsibilities under the Resource Management Act 1991, Local Government Official Information and Meetings Act 1987, Privacy Act 1993 and the Local Government Act 2002.

In 2006, the Ministry for the Environment released Contaminated Land Management Guideline 4; Classification and Information Management Protocols (CLMG#4)(MfE 2006a). The guideline promotes best practice for identifying and classifying sites, and for providing information to landowners and other interested parties. The protocols of this Strategy are aligned with the protocols described in CLMG#4.

1.1 Hazardous substances, and activities and industries where hazardous substances involved

Certain types of land use activities are associated with contaminated land due to manufacture, use, storage or disposal of hazardous substances. The Ministry for the Environment has compiled a list of 53 activities and industries that have a higher 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 2004a).

By identifying and recording details of sites where such activities have occurred or are occurring, potential contamination can be managed. There are approximately 500 sites in the West Coast region that are currently (September 2009) known to have accommodated land use activities that may cause contamination, and there are likely to be many unknown sites.

A substance is classified as hazardous if it has one or more of the following intrinsic properties: explosive, flammable, capacity to oxidise, corrosive, toxic or ecotoxic. While industrial activities are the predominant users of hazardous substances and therefore lead to greater likelihood of contamination, certain commercial, agriculture/forestry or mining activities can cause contamination. Contamination of groundwater and surface water can result from contaminants leaked, spilt or discharged to land which in turn can cause adverse

human health and environmental effects. Such contamination can reduce the value of land and reduce the potential range of future uses of the land.

Many factors can affect the risk of such effects occurring, such as volume, concentration, degree of hazard and persistence of the contaminants discharged to the site, as well as soil and hydro-geological conditions on-site. Some contaminants, such as those associated with gasworks and timber treatment sites, are very toxic and persistent potentially leading to very long lasting effects on the environment.

2 Legislative and policy context

2.1 The Resource Management Act

The West Coast Regional Council's involvement in the identification and management of contaminated sites arises from its responsibilities defined in Section 30 of the RMA.

The West Coast Regional Council also has responsibilities under section 35 to gather information, monitor and keep records so that it can effectively carry out its functions under the Act. This strategy details how the information gathered in accordance with these statutory functions will be managed.

Contaminated land is defined in the RMA 1991 as follows:

a) if there is an applicable national environmental standard on contaminants in soil, the land is more contaminated than the standard allows; or

b) if there is no applicable national environmental standard on contaminants in soil, the land has a hazardous substance in or on it that

   (i) has significant adverse effects on the environment; or

   (ii) is reasonably likely to have significant adverse effects on the environment

2.2 Other central government policy

Below is a broad range of central government policy relevant to the management of contaminated land and hazardous substances. Some are not directly applicable to council roles and responsibilities, but have been included. This is because some people using this strategy may be dealing with a broad selection of issues associated with hazardous substances, and the range of references below may contain helpful information for them.

- New Zealand Waste Strategy (MfE 2002)
- Contaminated Land Management Guidelines (MfE & MoH 1997, MfE 1997, 1999, 2003a, b, c, 2004a, b, 2006a, b)

- New Zealand Drinking Water Guidelines (MoH 2005)

- Occupational Safety and Health, Department of Labour (OSH 1992 a, b, 1994, 1995 a, b)

- Privacy Act 1993; Local Government Official Information and Meetings Act, 1987; Local Government Act, 2002.

2.3 West Coast Regional Council policy

The West Coast Regional Council's Regional Plans have sections that deal with management of hazardous substances and contaminated land, and which contain detail on the West Coast Regional Council's approaches to this issue.

2.4 Territorial authorities

The RMA, section 31(1)(b)(ii)(a), provides territorial authorities with the function of:

…the prevention or mitigation of any adverse effects of the development, subdivision, or use of contaminated land.

In order to fulfil this function, territorial authorities need to know the location of contaminated land, and collection of information about contaminated and HAIL sites is therefore required.

Section 35 of the RMA (the duty to gather information and to carry out research) also applies to territorial authorities. Similar requirements to gather information and monitor are placed on territorial authorities by the Building Act 2004. The Building Act, sections 31 and 32, requires territorial authorities to provide, upon request, project information memoranda (PIM). A PIM provides information likely to be relevant to the design, construction or alteration of a building including, amongst other things, "...the likely presence of hazardous contaminants (section 35(2) Building Act 2004)." A PIM is issued for specified building works and can only be sought by an applicant for a building consent.

A similar provision exists in section 44a of the Local Government Official Information and Meetings Act 1987 (LGOIMA) requiring territorial authorities to provide, upon request, land information memoranda (LIM) for any land in its district. A LIM is issued for a specified piece of land identifying any special features or characteristics of that land including, amongst other things, the "…likely presence of hazardous contaminants…". A LIM may be requested by any person, about any piece of land. There is no need for that person to establish a legitimate interest in the land.

2.5 Other agencies

Other government agencies that also have responsibilities for contaminated land management on the West Coast are: Community and Public Health (CPH); Occupational Safety and Health Services (OSH); and the Ministry for the Environment (MfE).

3 Site identification and information management

3.1 Investigation of land: identification of HAIL sites

The types of activities and industries that are associated with the potential for contamination are listed in MfE's Hazardous Activities and Industries List (HAIL) (MfE 2004a) (Appendix 1)

The Ministry for the Environment's Waste Strategy (MfE 2002) set December 2008 as a target by which "all sites on the Hazardous Activities and Industry List will have been identified". The West Coast Regional Council has undertaken a regional survey of HAIL sites that forms the bulk of sites on the register. New hazardous activities and industries are always occurring, thus adding new sites, and updating information regarding existing sites is an ongoing job.

3.2 The Sites Associated with Hazardous Substances (SAHS) register

To enable the West Coast Regional Council to administer and effectively use site information, it has developed an electronic register (the Sites Associated with Hazardous Substances (SAHS) register). A sites association with 'hazardous substances' (as contained within the SAHS title) should be considered synonymous with the term 'hazardous activities or industries' (as contained within the MfE term 'HAIL'). The SAHS register is a tool to enable efficient administration and management of information about HAIL sites, and to ensure that relevant information can be readily sourced and provided in response to enquiries. The electronic storage of the information allows for quicker verification and cross-referencing of information.

Maintaining the SAHS register and the process of registration of sites allow the WCRC to perform its functions under the Resource Management Act related to contaminated sites. However, the council might expose itself to possible legal claims in relation to the information contained within the SAHS register. Therefore in compiling and maintaining the register, the WCRC must ensure that the stored information is both accurate and defensible and the council has fully met its duty of care.

3.3 Site classifications

The overall purpose of an information management process is to provide a best practice means of gathering and managing information about sites and providing that information to interested parties. The classification should reflect what is known about a site, the degree of risk it may pose, and provide a tool for prioritisation of sites for further investigation. Contaminated Land Management Guideline #4: Classification and Information Management Protocols (MfE 2006a) recommends the use of three site categories:

Land-use information – for sites where some information is known about the land use history, or the presence or absence of hazardous substances, or both

Contaminated land – for sites that meet the RMA definition of contaminated land

Error – for sites that have been entered onto the register in error

These categories can be broken down further. The WCRC use categories adapted from both the MfE Contaminated Land Management Guideline #4, and those used by the Canterbury Regional Council. The categories used by the WCRC to classify sites are as follows:

Unverified HAIL: <HAIL>	The relevant land-use history has not been confirmed. The site has been reported as one that appears on the Hazardous Activities and Industries List, but the reported use has not been confirmed.
Entered in error	The site has been entered on the register based on information that subsequently was found to be incorrect. Information held at the time of this listing showed that this site had never been associated with any of the specific activities or industries on the Hazardous Activities and Industries List.

Partially investigated:	The site has been partially investigated. Investigations have been conducted that – (i) demonstrate that there are hazardous substances present at the site; however, there is insufficient information to quantify any adverse effects or risks to people or the environment; or (ii) do not adequately verify the presence or absence of contamination associated with all HAIL activities that are and/or have been undertaken on the site.
Below guideline values for <land use>:	The site has been investigated. The investigation sample results demonstrate that there are hazardous substances present at the site, but indicate that any adverse effects or risks to people and/or the environment are considered to be so low as to be acceptable. The site may have been remediated to reduce contamination to this level, and post remediation validation samples confirm this.
Managed for <land use>:	The site has been investigated. Investigations demonstrate that there are hazardous substances present at the site in concentrations that have the potential to cause adverse effects or risks to people and/or the environment. However those risks are considered managed because – (i) the nature of the use of the site prevents human and/ or ecological exposure to the risks; and/or (ii) the land has been altered in some way and/or restrictions have been placed on the way it is used which prevent human and/or ecological exposure to the risks.
At or below background concentrations:	The site has been investigated or remediated. The investigation or post remediation validation results confirm that there are no hazardous substances above local background concentrations. Local background concentrations are those that occur naturally in the area. The investigation or validation sampling has been sufficiently detailed, in terms of locations sampled and analytes tested, to characterise the site.
Not Investigated:	A site whose past or present use has been reported and verified as one that appears on the *Hazardous Activities and Industries List* (HAIL); and, The site has not been subjected to investigation including, but not limited to, sampling and analysis of site related soil, water and/or ambient air, and assessment of the associated analytical data. This category is for sites for which it is known that an activity or use as defined in the HAIL has taken place on the site, but there is insufficient information to characterise any risks to human health or the environment from those activities undertaken on the site. Contamination may have occurred, but should not be assumed to have occurred.

Contaminated (for <land use>):	The site has been investigated. Results demonstrated it is **land** of one of the following kinds: (a) if there is an applicable national environmental standard on contaminants in soil, the **land** is more contaminated than the standard allows; or (b) if there is no applicable national environmental standard on contaminants in soil, the **land** has a hazardous substance in or on it that – (i) has significant adverse effects on the environment; or (ii) is reasonably likely to have significant adverse effects on the environment (s2 RMA 1991)
Significant Adverse Environmental Effects:	The site has been investigated. Results demonstrated that **sediment, groundwater or surface water** contains hazardous substances that – (i) have significant adverse effects on the environment; or (ii) are reasonably likely to have significant adverse effects on the environment

It is worth noting that at the time this strategy was completed, there was no National Environmental Standard on contaminants in soil.

3.4 Site owner notification and site registration

The process for site owner notification and site registration for new sites where information is obtained indicating a past or present HAIL land use, and sites where analytical information from a site investigation has become available, are explained in Figure 1 and 2.

It is important that the affected site owner/occupier has a mechanism through which they can contest the classification on the SAHS register. Once information about a site has been obtained and entered into the register, the site owner will be advised if changes are proposed to the classification of that site. If the owner objects, the objection must state clearly: what information is contested, proposed changes, and any evidence supporting the objection. The West Coast Regional Council will consider the objection through a review panel (made up of no less than the Resource Scientist and the Environmental Services Manager). If the objection is successful, the classification and any other information on the database will be changed. If the site was incorrectly included, then it will be placed under 'Entered in Error'. Sites will not be removed completely from the database because if the question about the site arises again in the future, the course of events are then clear.

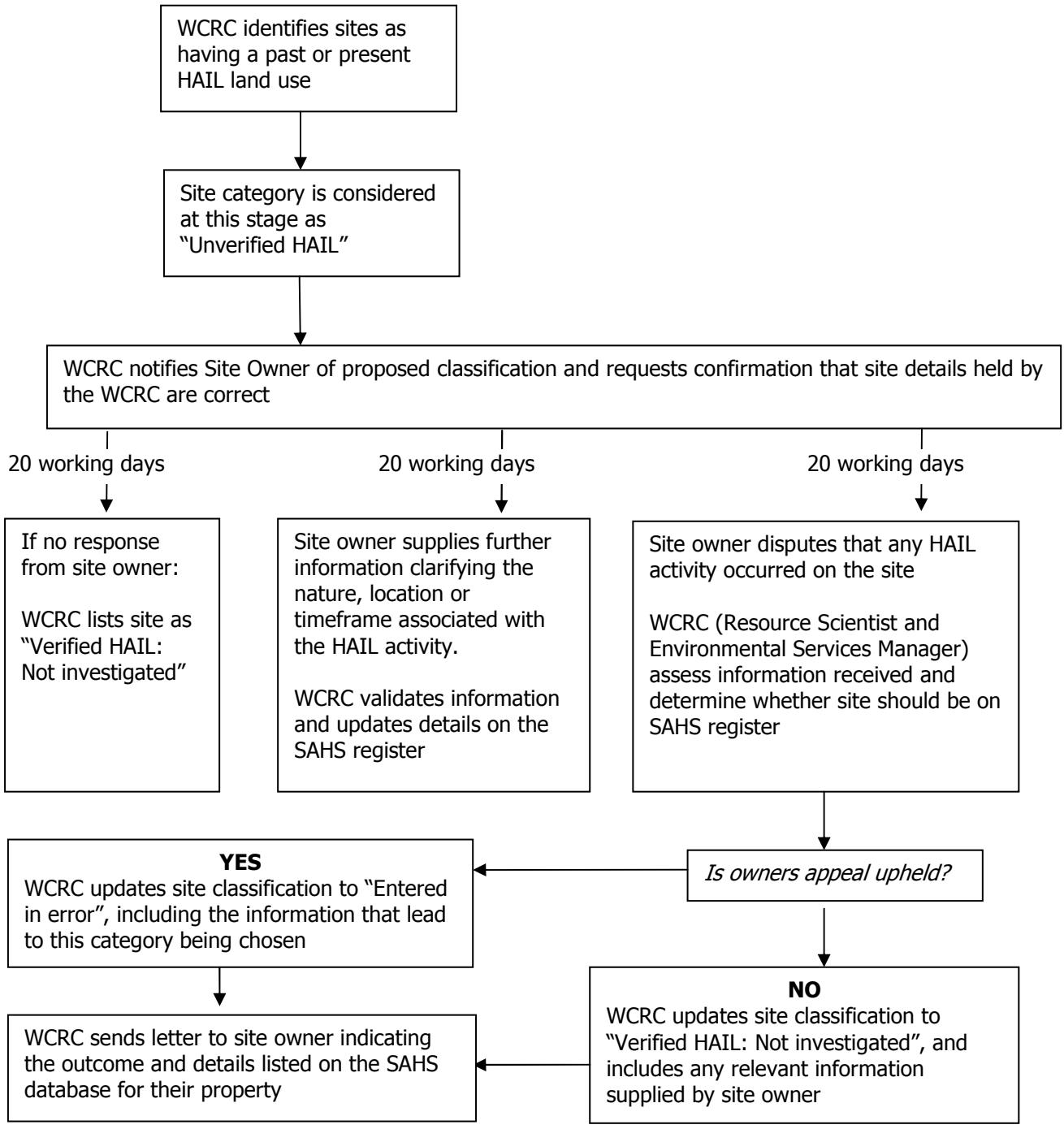

Figure 1: Procedure for registration of a site where information is held indicating a past or present HAIL land use

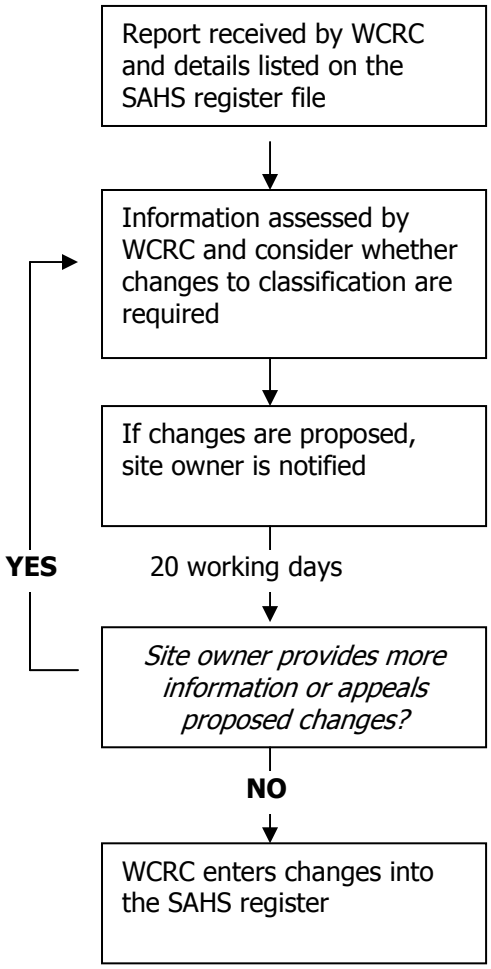

Figure 2: Procedure for the registration of a site where analytical information from a site investigation is available

3.5 Investigations

3.5.1 Enforcement driven investigations by the West Coast Regional Council

Enforcement Officers (using Enforcement mechanisms where necessary) will require investigations on sites that have clear evidence of RMA 1991 non-compliance associated with land contamination. Those responsible for the RMA 1991 non-compliance have responsibility for conducting the investigation, in accordance with their duty under s17 RMA 1991. Protection or Enforcement Officers will investigate sites for contamination on a cost-recovery basis if the following conditions apply:

- The WCRC has become aware of a non-compliance with s15 of the RMA, e.g. a spill or spills have resulted in an un-authorised discharge to land, or multiple discharges to land, and
- An Infringement or Abatement Notice has been issued, and follow up visit is undertaken, and

- The party responsible is unwilling to conduct an appropriate investigation, and
- An investigation is required to ascertain the risk to the environment, and
- The party responsible is still associated with the site and still engaged in the industry that caused the contamination.

3.5.2 Investigations using the Contaminated Sites Remediation Fund (CSRF)

The Ministry for the Environment has made funding available from the Contaminated Sites Remediation Fund to assist regional councils to encourage investigation and remediation of contaminated sites. To qualify, the sites must pose a known or potential risk to human health and the environment within their regions (MfE website 2007). The WCRC will facilitate applications to the Ministry for the Environment's Contaminated Sites Remediation Fund as required. The WCRC will facilitate applications on behalf of site owners and occupiers.

3.5.3 Investigative work

Those conducting site investigations are responsible for obtaining all necessary authorisations (bore permits, excavation, discharge to groundwater) before activities associated with investigative work are conducted.

3.5.4 Investigation guidelines

Data quality objectives and sampling and analysis of media should be conducted in accordance with best practice procedures, as detailed in the following documents:

- Ministry for the Environment and Ministry of Health 1997. *Health and Environmental Guidelines for Selected Timber Treatment Chemicals.* Ministry for the Environment, Wellington.
- Ministry for the Environment 1997. *Guidelines for Assessing and Managing Contaminated Gasworks Sites in New Zealand.* Ministry for the Environment, Wellington.
- Rosen MR, Cameron SG, Taylor CB, Reeves RR 1999. *New Zealand Guidelines for the collection of groundwater samples for chemical and isotopic analyses*. Institute of Geological & Nuclear Sciences Science Report 99/9.
- Oil Industry Environmental Working Group 1999. *Sampling Protocols and Analytical Methods for Determining Petroleum Products in Soil and Water*. Ministry for the Environment, Wellington.
- Ministry for the Environment 1999. *Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand*. Ministry for the Environment, Wellington.
- MfE 2003c. *Contaminated Land Management Guideline Number 5: Site Investigation and Analysis of Soils*. Ministry for the Environment, Wellington.
- Ministry for the Environment 2006b. *Identifying, Investigating and Managing Risks Associated with Former Sheep-dip Sites. A Guide for Local Authorities*. Ministry for the Environment, Wellington.

3.6 Subdivision of sites

The classification and management of sites on the register is complicated by sites that have been subdivided. There are a number of different scenarios that can occur with the subdivision of sites, each of which may require different management on the register.

Scenario 1: No information is known about the specific location of known HAIL activities on a verified parent site, therefore all subdivided sites must still be associated with the HAIL activity of the parent. In this scenario all newly created child sites would be given a new SAHS record, linked back to the parent and all information from the parent transferred to the child site records.

Scenario 2: A verified parent site is subdivided and it is clear where on the site the HAIL activity occurred. Only those subdivided lots that correspond to the location of the HAIL activity will be given child site records on the SAHS register.

Scenario 3: Analytical information is received about a parent site that has been subdivided prior to the subdivided lots being registered on the SAHS register. Child sites are registered according to the results of the investigation.

Scenario 4: Analytical information is received about a parent site that has been subdivided and all child sites registered as Verified. If investigation reveals that any of the child sites were not associated with the original HAIL activity, then those child sites should be re-classified as "Entered in Error".

3.7 Assessment of investigation reports by the West Coast Regional Council

When the WCRC receives site investigation reports, they are assessed to identify whether they accurately describe the risk presented to the environment and human health by any contaminants identified on the site, and to identify if the land meets the RMA definition of contaminated (section 2 RMA 1991). In assessing any investigation, the WCRC considers:

- All past uses of the site, and possible associated hazardous substances
- On-site and off-site receptors, both human and environmental
- All relevant media (soil, groundwater, sediment, surface water, air)
- The level of information obtained, and whether it is satisfactory
- The current and likely future use of a site
- The statutory role of the WCRC, and other agencies, in addressing any contamination

3.7.1 Environmental guideline values

Environmental guideline values are concentrations of contaminants in specified media that have been established as conservative indicators of risk under standard exposure scenarios.

Environmental guideline values are used in 'tier 1 assessments' of analytical results for sites where generic (conservative) assumptions are used. When values are exceeded, action is required. This action can include further investigation and assessment of risk in the form of a 'tier 2 assessment', or remedial work to address exceedances.

In New Zealand, there is currently no national environmental standard detailing environmental guideline values to be applied to contaminated site investigation results. However, the Ministry for the Environment has published a guideline Hierarchy and application in New Zealand of environmental guideline values (MfE 2003b). The WCRC will use the hierarchy established in this guideline as a first step to identify appropriate environmental guideline values. Care will be used to ensure selection of guideline values within the hierarchy that are appropriate for protection of relevant receptors (i.e. humans, plant or animal life) at the site.

The WCRC expects all contaminated site investigation reports to reference relevant environmental guideline values and background concentrations when assessing analytical results. Where no environmental guideline values are available for a contaminant, they should be calculated in accordance with the methodology as set out in MfE 2003b. This methodology is used for the calculation of guideline values for protection of human health only. In the future the Ministry for the Environment may produce methodologies for calculation of guideline values protective of specified receptors (human health, ecological, groundwater protection). These methodologies will be considered once they are available.

The WCRC will give consideration to ecological receptors on and off site for residential and agricultural land uses and areas of open space (i.e., parks, etc.). However, consideration is not generally required for on-site terrestrial ecological receptors (i.e. existing plant or animal life) in industrial sites due to the significant modification of these environments inherent in urban industrial zoned land.

3.7.2 Background concentrations of contaminants

In order for a site to be classified as 'At or below background concentrations', site investigative results must demonstrate that there are no hazardous substances present on the site. This may be a result of remedial activity or an absence of discharges of hazardous substances into land. In both cases, the background concentrations of contaminants in the area need to be measured because certain contaminants are naturally present in the environment at low concentrations.

3.7.3 Limits of detection and uncertainty of measurement

The limit of detection and uncertainty of measurement of concentration for a contaminant depends on the contaminant and the analytical technique chosen. The limits of detection for analytical work conducted on

water, soils and sediment should be both below the relevant environmental guideline values for the hazardous substances being analysed and, below the relevant background concentrations for the hazardous substances being analysed.

4 Information release and sharing

This strategy is aligned with the guidance provided in the Ministry for the Environments guideline Classification and Information Management Protocols (MfE 2006a), which recommends the following principles for information management:

- Transparency – the purpose and procedures of site information collection, storage and management are clearly documented
- Consistency – the procedures described in this strategy are applied in all situations
- Fairness – site owners are given the opportunity to review, and object to or correct, information about to be placed on, or already held on, the register
- Quality – information will be verified in a timely manner
- Security – access to the register to view, add, alter or release information will only be given to appropriate local authority officers
- Accountability – an audit trail will be kept of additions and changes to the register, information sharing with territorial authorities, and release to other parties.

4.1 Information transfer between District Councils and the WCRC

Updates of contaminated site information should be provided by District and Regional Councils subject to a LIM or PIM request or application to the district council for a permit, consent or zone change.

District Councils should compile and routinely transfer information to West Coast Regional Council. Routine transfer of information should occur at not less than annual intervals. Routine transfer of data to the regional council should include:

- Notification of applications to the district council for permits or consents and information transferred, for sites associated with hazardous substances
- Information on spills or unauthorised releases that come to the attention of staff
- Applications for resource consents, subdivision consents or zoning changes in circumstances where such changes might affect the sites associated with hazardous substances database

In order to make this strategy successful and to provide a good service to the public it is imperative that District and Regional Councils work together. District Councils need to be provided quality information in order to tag property files with the relevant information about contamination on a site.

The process relating to a change in land use or zoning where a more sensitive land use is particularly important with respect to sites remediated to a certain standard (eg industrial) which now may be inappropriate for a more sensitive land use (eg residential or agricultural). The district council, when receiving a plan change request or a resource consent application will determine if a more sensitive land use is now involved. If this is the case, the district council will seek additional information from the applicant, such that, in consultation with West Coast Regional Council, a decision can be made as to the potential risk posed to human health and the environment. If this is not the case then the application can proceed as normal. It is noted that because some developments or subdivisions can occur over extensive areas of land, it may be possible to develop or subdivide some land as per the original application and remediate other portions of it. In this way a development can proceed even if in a restricted manner. In the process of zoning change there is no real obligation on the landowner to demonstrate that the land is suitable for the intended land use.

4.2 Information requests

All requests for information and responses to requests are kept and filed. All requests for information about sites must include the following information:

- street address of site;
- legal description and valuation number of the site; and
- requesters name and contact details.

Property enquiries are directed to a WCRC staff member who manages SAHS register information. Relevant staff at the regions three District Councils have access to WCRC cadastral property mapping that is linked to the WCRC SAHS register. The District Councils use this software to determine whether a property is listed on the SAHS register, for example, when they are compiling LIM and PIM reports. If the property is listed, or if they wish for any reason, they can contact the WCRC for more information, or direct others to do so. The latter is the case with LIM and PIM reports, where those being issued the report are notified of the fact that the property is listed on the SAHS register and they are advised within the document to contact the WCRC for more information. District Councils do not have a duplicate copy of the SAHS register. There is a 10 working day time limit for the WCRC to respond to a property enquiry.

The Privacy Act gives the right to an individual for their personal information to remain confidential. It also gives them a right to have access to, and to correct information, held by an agency about them, and limiting the use and disclosure of personal information.

The Local Government Official Information and Meetings Act 1987 (LGOIMA) places requirements on the Regional Council to make available information that it holds. Issues of privacy and public interest are some of the only factors that can be considered to withhold information that we hold about sites associated with hazardous substance and contaminated land. Protocols are used by this Council and the District Councils to handle this information, as it may have implications for commercial value of properties, and peoples wellbeing. Section 6 and 7 of LGOIMA outline justifiable reasons for withholding information including:

- The need to preserve the free flow of information during an investigation process
- Early disclosure may give a misleading impression and may cause unnecessary public or private anxiety
- Potential for mischievous release of information

However, this needs to be balanced by:

- The public's "right to know" to avoid dangers about contaminated sites
- Legitimate interest by potential purchasers, financiers or others regarding contaminated sites
- Disclosure may encourage investigation or remediation of contaminated sites to improve property values or public reputation

4.3 Requests for bulk site information

The release of information about specific properties on the SAHS register that individuals or organisations are interested in (e.g. because of a potential purchase, or a concern about their local environment) is encouraged. When information is requested on more than one site, this is termed a bulk information request. The requests are considered on a case-by-case basis and may be declined in accordance with the provisions of Section 7 LGOIMA 1987.

Release of bulk information must be carefully managed to avoid inaccurate assumptions being made about the area or a type of industry that the bulk request refers to. Information contained within the SAHS register is potentially sensitive. All persons requesting bulk information from it are asked to provide the reason why the information is being sought. This is to satisfy the WCRC that the release is not likely to a) unreasonably prejudice the position of the person who originally supplied the information, or who is the subject of the information, or b) be used for improper gain or improper advantage (section 7(2)(b) and (e) LGOIMA 1987).

All bulk information releases must be accompanied by a signed Memorandum of Understanding between the West Coast Regional Council and the recipient covering the reason for the information request, and restrictions on the use of the information. Refer Appendix 2.

4.4 Disclaimer

The West Coast Regional Council can reduce or mitigate its potential liability for the release of information by qualifying the release of information with a disclaimer. The disclaimer identifies the limitations of the accuracy and reliability of the information released. The following disclaimer is sent out with all responses to requests for information about sites on the Register:

"The enclosed information is derived from the West Coast Regional Council's 'Sites Associated with Hazardous Substances' Register and is made available to you under the Local Government Official Information and Meetings Act (1987), and The West Coast Regional Council's Contaminated Land Management Strategy (WCRC 2009).

This information reflects The West Coast Regional Council's current understanding of this site, which is based only on the information thus far obtained by it and held on record concerning this site. It is released only as a copy of those records and is not intended to provide a full, complete or totally accurate assessment of the site. As a result, The West Coast Regional Council is not in a position to warrant that the information is complete or without error and accepts no liability for any inaccuracy in, or omission from, this information. Any person receiving and using this information is bound by the provisions of the Privacy Act 1993"

4.5 Liability

A Council may expose itself to possible legal claims in relation to the operation of a register of sites associated with hazardous substances in a number of ways:

- Claims from the owners of land that incorrect information was supplied by the Council directly to third persons concerning their property that has caused them some form of "unreasonable" loss.
- Claims against the Council by persons other than the present landowner that incorrect information has caused some economic or physical loss (eg from a previous site owner or adjacent site owner).
- Claims arising from the failure to include information on a database or register (eg economic loss suffered by a purchaser subsequent to sale).

Section 41(1) of LGOIMA protects the Council from any civil claim made as a result of disclosure of information made in good faith. This would protect Council if disclosure about a certain site caused a potential purchaser to cancel a purchase agreement or the value of the site was reduced because of the information being released. This assumes the information released is correct. Section 41 (2) protects the Council from defamation action but does not protect anyone receiving the information and then making that publicly available.

For the Council to be liable for disclosing incorrect information it would also have had to be negligent in compiling the information. Potential liabilities need to be limited by ensuring that the accuracy of the information in the database is thoroughly checked, regularly maintained and carefully released.

The Council's insurers (Riskpool) described Council liability in regard to management of contaminated sites: "Any Regional Council would be liable for damages if they did not act to manage environmental effects caused by a contaminated site in a way that any reasonable Regional Council would" (Paul Carpenter, pers.comm. 2000). Although the definition of 'reasonable' in this context has not been tested in court, there are a large number of Regional Councils who have taken a lead role in assessing risk at contaminated sites and in investigating and remediating high risk contaminated sites (Environment Canterbury, unpublished questionaire 2001). Regional Council liability is therefore from persons claiming negligence because Council did not discharge a duty of care to protect people and the environment from discharge of contaminants from the site. These discharges include discharge to air into dwellings on the site or to discharges to land, air or water beyond the property boundary.

5 Risk management

5.1 Risk Screening of Sites

As part of the process of determining whether a property should be entered onto the SAHS register, information is collected about the nature of the activities carried out on the site and the sites physical characteristics. This information can be used to assess the possible risk to human health and the environment from likely contaminants. The initial assessment of risk is made using the Risk Screening System (RSS), a methodology developed by the Ministry for the Environment (MfE 2004b). This tool has been produced to assist regional councils and unitary authorities in managing contaminated land issues. It is used to rank HAIL sites so that they can be prioritised for further investigation.

By September 2009, the West Coast Regional Council had risk screened 123 sites on the SAHS register that were deemed as being of the highest likely priority. The RSS is a coarse screening tool based on the use of readily available information that allows desktop classification of sites according to the theoretical risk to the environment and human health present at a site.

The New Zealand Waste Strategy has set targets for contaminated sites as follows:

- By December 2010, all sites on the Hazardous Activities and Industries List will have been subject to a rapid screening system in accordance with Ministry guidelines, and a remediation programme will have been developed for those that qualify as high risk
- By December 2015, all high risk contaminated sites will have been managed or remediated. A timeframe will also have been developed to address the management or remediation of remaining sites

The portion of the first target '*50 percent will have been subject to a rapid screening system in accordance with Ministry guidelines*' has not been achieved in the timeframe proposed due to a lack of resources. It is anticipated that the second and third targets will be met by the WCRC in the timeframes given.

6 References

Benn, JL: 1995. Potentially Contaminated Sites in the West Coast region. Confidential Report commissioned by West Coast Regional Council.

Carpenter, P; 2000. Presentation to a Workshop on Contaminated Site Information and Site Management, WCRC offices May 2000.

Environment Canterbury, 2001. Summary of questionnaire responses from New Zealand Regional and Unitary Authorities.

Local Government Official Information and Meetings Act, 1987

Local Government Act, 2002.

Ministry for the Environment, 1997. Guidelines for Assessing and Managing Contaminated Gasworks sites in New Zealand.

Ministry for the Environment & Ministry of Health, 1997. Health and Environmental Guidelines for Selected Timber Treatment Chemicals.

Ministry for the Environment, 1999. Guidelines for Assessing and Managing Petroleum Hydrocarbon Contaminated Sites in New Zealand.

Ministry for the Environment, March 2002. The New Zealand Waste Strategy; Towards zero waste and a sustainable New Zealand.

Ministry for the Environment (MfE) 2003a: Contaminated land management guideline,number 1. Reporting on contaminated sites in New Zealand. ISBN 0-478-18909-5.

Ministry for the Environment, Wellington, New Zealand. 25p.

Ministry for the Environment (MfE) 2003b: Contaminated land management guideline, number 2. Hierarchy and application in New Zealand of environmental guideline values. ISBN 0-478-18912-5. Ministry for the Environment, Wellington, New Zealand. 26p.

Ministry for the Environment (MfE) 2003c: Contaminated land management guideline, number 5. Site investigation and analysis

Ministry for the Environment (MfE) 2004a: Contaminated land management guideline – Schedule A. Hazardous Activities and Industries List (HAIL). Ministry for the Environment, Wellington, New Zealand. 4p

Ministry for the Environment (MfE) 2004b: Contaminated land management guideline, number 3. Risk screening system. ISBN 0-478-18922-2. Ministry for the Environment, Wellington, New Zealand. 35p.

Ministry for the Environment (MfE) 2006a: Contaminated land management guidelines No. 4. Classification and information management protocols. ISBN 0-478-25977-8. Ministry for the Environment, Wellington, New Zealand. 59p.

Ministry for the Environment (MfE) 2006b: Identifying, Investigating and Managing Risks Associated with Former Sheep-dip Sites. A Guide for Local Authorities. ISBN 0-478- 25977-8. Ministry for the Environment, Wellington, New Zealand. 59p

Ministry of Health (MoH) 2005: Drinking-water standards for New Zealand 2005. ISBN 0-478-28392-X. Ministry of Health, Wellington, New Zealand. 181p.

Occupational Safety and Health, Department of Labour , 1992a. Code of Practice for the Design, Installation and Operation of Underground Storage Systems.

Occupational Safety and Health, Department of Labour , 1992b. Code of Practice for the Safe Use of Timber Preservatives and Antisapstain Chemicals.

Occupational Safety and Health, Department of Labour , 1994. Health and Safety Guidelines on the Cleanup of Contaminated Sites.

Occupational Safety and Health, Department of Labour , 1995a. Code of Practice for the Transportation and Disposal of Petroleum Storage Tanks and Related Wastes.

Occupational Safety and Health, Department of Labour , 1995b. Code of Practice for the Design, Installation and Operation of Underground Storage Systems – Supplement 1: Management of Existing Underground Storage Systems.

Oil Industry Environmental Working Group 1999. Sampling Protocols and Analytical Methods for Determining Petroleum Products in Soil and Water. Ministry for the Environment, Wellington.

Rosen MR, Cameron SG, Taylor CB, Reeves RR 1999. New Zealand Guidelines for the collection of groundwater samples for chemical and isotopic analyses. Institute of Geological & Nuclear Sciences Science Report 99/9.

7 Appendices

Appendix 1 Hazardous Activities and Industries List

1. Abrasive blasting – carrying out abrasive blast cleaning (other than cleaning carried out in fully enclosed booths) or disposing of abrasive blasting material.

2. Acid/alkali plant, formulation and bulk storage.

3. Agrichemical spray contractor's premises used for filling and washing out tanks for commercial agrichemical application.

4. Airports – fuel storage, workshops, washdown areas, stormwater runoff from hardstanding.

5. Analysts – commercial analytical laboratory sites.

6. Asbestos products production, use, and disposal. Also sites with buildings containing asbestos products known to be in a deteriorated condition.

7. Asphalt or bitumen manufacture or bulk storage – manufacturing asphalt or bitumen, or bulk storage of these products, other than at a single-use site used by a mobile asphalt plant.

8. Battery manufacture or recycling – assembling, disassembling, manufacturing or recycling batteries (other than storing batteries for retail sale).

9. Brake lining manufacturers, repairers and recyclers.

10. Cement or lime manufacturing – manufacturing cement or lime from limestone material using a kiln and storing wastes from the manufacturing process.

11. Cemeteries

12. Chemical manufacture and formulation and bulk storage such that land use consent is required.

13. Coal and coke yards.

14. Concrete manufacture and bulk cement storage

15. Defence works and defence establishments, including ordinance storage and training areas where live firing is carried out.

16. Drum and tank reconditioning or recycling.

17. Dry cleaning plants – restricted to premises where dry cleaning is carried out and solvents are stored.

18. Electrical transformers – manufacturing, repairing or disposing of electrical transformers or other heavy electrical equipment.

19. Electronics – manufacturing & reconditioning

20. Engine reconditioning – use of solvents and degreasers

21. Explosive production or bulk storage

22. Fertiliser manufacture – manufacturing or bulk storage of agriculture fertiliser.

23. Foundry operations – commercial production of metal products by injecting or pouring molten metal into moulds and associated activities.

24. Gasworks – manufacture of town gas from coal or oil feedstocks.

25. Gun, pistol or rifle ranges or areas with lead shot deposition Contaminated land information management strategy

26 Iron and steel works

27. Landfill sites

28. Livestock dip or spray race operations

29. Market gardens, orchards, glass houses or other areas where the use of persistent agricultural chemicals occurred.

30. Metal treatment or coating – including polishing, anodising, galvanising, pickling, electroplating, heat treatment using cyanide compounds and finishing. curing works or commercially finishing leather.

31. Mining and extractive industries and mineral processing – including chemically or physically extracting metalliferous ores, exposure of faces or release of groundwater containing hazardous contaminants and storing hazardous wastes, including waste dumps and tailings dams, but not gravel extraction (just note that these areas can be included because of fuel storage).

32. Motor vehicle workshops

33. Paint manufacture and formulation

34. Pest control – commercially operating premises (or former pest destruction board, now regional council sites) where storage and preparation of pesticide occurs, including preparation of poisoned baits and filling or washing of tanks.

35. Pesticide manufacture (including animal poisons, insecticides, fungicides and herbicides) – commercially manufacturing, blending, mixing or formulating pesticides.

36. Petroleum or petrochemical industries or storage, including oil production and operating a petroleum depot, terminal, blending plant or refinery, retail or commercial refuelling facility, and facilities for recovery, reprocessing or recycling petroleum based materials and bulk storage above and below ground.

37. Pharmaceutical manufacture - commercially manufacturing, blending, mixing or formulating pharmaceuticals, including animal remedies and illicit drug manufacturing.

38. Port activities – including dry docks and ship and boat maintenance facilities.

39. Power stations and switchyards

40. Printing – commercial printing, using metal type, inks and dyes, or solvents.

41. Railway yards – operating a railway yard including goods-handling yards, workshops, refuelling facilities and maintenance areas.

42. Sawmills – use of antisapstain chemicals during milling

43. Scrap yards – operating a scrap yard including automotive dismantling or wrecking yard or scrap metal yard.

44. Service stations

45. Smelting or refining – fusing or melting metalliferous ores or refining the metal.

46. Tannery, fellmongery or hide curing – operating a tannery or fellmongery or hide curing works or commercially finishing leather.

47. Transport depots

48. Storage tanks and drum storage for fuel, chemicals and liquid waste.

49. Waste storage, treatment and/or disposal including land disposal of wastes, but not the use of biosolids as soil conditioners.

50. Wood treatment and preservation and bulk storage of treated timber. Contaminated land information management strategy

51. Wool, hide and skin merchants (e.g. drying, scouring).

52. Any site that has been, or could be, subject to the migration of hazardous substances from hazardous substances present in soil or water on adjacent sites.

53. Any other facility or activity that stores, uses or disposes of hazardous substances, in sufficient quantity that intentional or accidental discharge of the substance could be a risk to human health or the environment.

Appendix 2 Memorandum of Understanding – Bulk information requests

MEMORANDUM OF UNDERSTANDING: USE OF INFORMATION FROM THE WEST COAST REGIONAL COUNCIL'S SITES ASSOCIATED WITH HAZARDOUS SUBSTANCES REGISTER

BETWEEN: THE WEST COAST REGIONAL COUNCIL (WCRC) AND *< PARTY REQUESTING INFORMATION>*

PREAMBLE:

a) As part of its functions and responsibilities as a local government environmental agency the WCRC collects and stores information on various areas of land for the purpose of assessing the extent if any to which the site is contaminated and for addressing the effects of any contamination ("the register");

b) The WCRC has a Contaminated Land Management Strategy (WCRC 2009) that guides the collection of information about land parcels, and its release in response to requests about single land parcels.

c) *<Party requesting information>* has, on *<insert date of request>,* requested that WCRC provide them with information from its database relating to land parcels within the *<define area>.*

d) The information is to be used in the following way: *<define use of the information, including any benefit of this to environmental management>.*

e) This bulk information request has been considered on the basis of the sensitivity of the information and on the benefit of its use.

f) The WCRC proposes to release to *< Party requesting information >* the information it holds on land parcels in the *<define area>* subject to restrictions on use of the information.

IT IS THEREFORE AGREED BETWEEN THE PARTIES as follows:

1. The information will be supplied in hard copy and/or electronically, on request.

2. The information reflects the Council's understanding of the site on the date of its download from the database. The WCRC shall not be liable for any inaccuracy in, or omission from, this information.

3. The information is for use by *< Party requesting information >* solely for the *<defined use>.* It shall not be used for any other purpose or made available to persons.

4. All reporting by *< Party requesting information >* for the project that uses the information supplied by the WCRC in accordance with this memorandum of understanding will be marked as "Confidential".

5. Where available, supplementary (hard-copy) details on the sites can be viewed by *< Party requesting information >* at the WCRC at a mutually convenient time.

6. The conditions of this Memorandum of Understanding apply to the hard copy and electronic information, and to supplementary details.

SIGNATURES & DATES

< *Party requesting information* **>**
Position
COMPANY

<Manager name**>**
Manager Planning and Environmental
THE WEST COAST REGIONAL COUNCIL