



ENGEO

Preliminary Environmental Site Investigation

130 Dunns Crossing Road

Rolleston

Submitted to:

Hughes Developments Limited
21 Worcester Boulevard
Christchurch Central
Christchurch 8011

ENGEO Limited

124 Montreal Street, Sydenham, Christchurch 8023
PO Box 373, Christchurch 8140, New Zealand
Tel +64 3 328 9012
www.engeo.co.nz

27.05.2021
12903.000.011_01



Contents

1	Introduction	1
1.1	Objectives of the Assessment.....	1
1.2	Approach	1
1.2.1	Review of Site Information	1
1.2.2	Site Inspection	1
2	Site Description and Setting	2
3	Site History.....	3
3.1	Discussions with Site Occupier	4
3.2	Selwyn District Council Property File Review	4
3.3	Listed Land Use Register.....	4
3.4	Certificate of Titles	4
3.5	Historical Aerial Photograph Review.....	4
4	Current Site Conditions.....	6
5	Potential HAIL Activities.....	7
6	Conceptual Site Model.....	7
7	Conclusions	8
8	Limitations.....	9
9	References.....	10

Tables

Table 1:	Site Information
Table 2:	Site Setting
Table 3:	Historical Aerial Photograph Review
Table 4:	Site Conditions
Table 5:	Conceptual Site Model

Figures

Figure 1:	Site Location Plan
-----------	--------------------

Appendices

Appendix 1:	CRC LLUR
Appendix 2:	Certificate of Titles
Appendix 3:	Site Photographs

ENGEO Document Control:

Report Title	Preliminary Environmental Site Investigation - 130 Dunns Crossing Road, Rolleston			
Project No.	12903.000.011	Doc ID	01	
Client	Hughes Developments Limited	Client Contact	Alan Grove	
Distribution (PDF)	Hughes Developments Limited			
Date	Revision Details/Status	Author	Reviewer	WP
27/05/2021	Issued to Client	NF	DR	VB

1 Introduction

ENGEO Limited was requested by Hughes Developments Limited (Hughes) to undertake a Preliminary Environmental Site Investigation (PSI) of the 4 ha site at 130 Dunns Crossing Road, Rolleston (herein referred to as 'the site'). The purpose of the assessment was to assess the property's suitability for consent for a change of land use and subdivision under the Resource Management (*National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health*) Regulations 2011 (NES) to satisfy the requirements of Selwyn District Council (SDC).

Figure 1 indicates the location of the property. This PSI was undertaken in accordance with the Ministry for the Environment (MfE) 2001, *Guidelines for Reporting on Contaminated Sites*.

1.1 Objectives of the Assessment

The objective of this PSI was to evaluate and identify conditions indicative of releases and threatened releases of hazardous substances on, at, in or to the subject properties and report on the potential risk posed to future site users.

1.2 Approach

To satisfy the objectives, ENGEO sought to gather information regarding the following:

- Current and past property uses and occupancies;
- Current and past uses of hazardous substances;
- Waste management and disposal activities that could have caused a release or threatened release of hazardous substances;
- Current and past corrective actions and response activities to address past and on-going releases of hazardous substances at the subject property; and
- Properties adjoining or located near the subject property that have environmental conditions that could have resulted in conditions indicative of releases or threatened releases of hazardous substances to the subject property.

1.2.1 Review of Site Information

During this assessment, a number of sources of information were contacted for information relating to the site regarding its past and present uses. This included contacting Canterbury Regional Council (CRC) to determine if there were any records on the Listed Land Use Register (LLUR) and reviewing records held by Selwyn District Council (SDC) including the property file and dangerous goods file (if available). A review of a number of historical and current aerial photographs was also undertaken using images from Canterbury Maps. The certificate of titles for the site were also attained by LINZ and reviewed for any information relating to the past and current use of the site.

1.2.2 Site Inspection

A site walkover was undertaken on 25 May 2021 by Natalie Flatman. Anecdotal evidence was collected through a discussion with the current site owner on 25 May 2021.

2 Site Description and Setting

Site information is summarised in Table 1.

Table 1: Site Information

Item	Description
Location	130 Dunns Crossing Road, Rolleston, Canterbury
Legal Description	LOT 1 DP 70352 BLK III LEESTON SD
Property Owner	Under contract to Hughes Developments Limited
Current Land Use	Mixed use – residential / agricultural grazing / crop growing (bailage)
Proposed Land Use	Residential 10% produce land use
Site Area	4 ha
Territorial Authority	Selwyn District Council

The site setting is summarised in Table 2 on the following page.

Table 2: Site Setting

Item	Description
Topography	The site is predominantly flat, with an approximate elevation of 40 m above sea level.
Local Setting	The surrounding area is predominantly agricultural with some residential housing.
Nearest Surface Water & Use	There are no surface water bodies within 250 m of the site.
Geology	GNS maps the site as Late Quaternary alluvium and colluvium. Unconsolidated to poorly consolidated mud, sand, gravel and peat of alluvial and colluvial origin.
Hydrogeology	The site is overlying an unconfined / semi-confined aquifer, with groundwater flowing in a southeast direction.
Groundwater Abstractions	There is one active groundwater abstraction located on the site: M36/5038: Kajens Trading Development Limited, active well on-site for domestic supply. There are two active groundwater abstractions within 100 m of the site: M36/5041: Kajens Trading Development Limited, active well on-site for domestic supply. M36/5040: Kajens Trading Development Limited, active well on-site for domestic supply.
Discharge Consents	There are no active discharge consents located on the site or within 100 m of the site.

3 Site History

A number of sources were used to investigate the past uses of the site. The findings of these information searches have been summarised in this section.

3.1 Discussions with Site Occupier

A discussion was held during the site walkover with the site occupier who has owned the site since 1997 and has been used for agricultural grazing and storage of equipment since 2003 when the garages were built on the site. The occupier said that the area of bare land towards the north of the southern paddock was where a burn pile was previously located. The owner stated that only green waste from tree trimmings were burnt. The occupier also, when asked, stated that the only sprays used on the fruit trees to the southwest of the site were copper sulphate and a product called Move-It which was used to remove lichen from the trees. The safety data sheet (SDS) for Move-It indicates that it 100% biodegradable and not classified as a dangerous good under NZS 5433:2007 Transport of Dangerous Goods on Land. Based on available information, the product is not classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001. The site occupiers also mentioned that the four shipping storage containers on-site are being used to store scaffolding and household furniture.

3.2 Selwyn District Council Property File Review

The property file for the site held by Selwyn District Council was reviewed on 25 May 2021 as part of this PSI. The below information was gathered relating to the site:

- Building consent – 26 November 2003 – Storage building 54 m²
- Building consent – 18 November 2004 – Farm building 81 m²

3.3 Listed Land Use Register

Canterbury Regional Council (CRC) maintains a Listed Land Use Register (LLUR) of past and current land uses within the Canterbury Region. The LLUR documents properties on which potentially hazardous activities have been undertaken. The potentially hazardous activities are defined on the Hazardous Activities and Industries List (HAIL). The listing of a property on the LLUR triggers the requirement for a contaminated land assessment prior to development.

The CRC LLUR was requested on 17 May 2021 for the site and is appended in Appendix 1. No areas of concern were identified on the CRC LLUR for the site.

3.4 Certificate of Titles

A review of the certificate of title was completed with no information related to potential contaminating activities identified. The Certificates of Title are attached in Appendix 2.

3.5 Historical Aerial Photograph Review

Aerial photographs obtained from Canterbury Maps from 1940 to 2018. The relevant visible features are summarised in Table 3.

Table 3: Historical Aerial Photograph Review

Date	Source	Description
1940-1944	Canterbury Maps	<p>The site is undeveloped and appears to be a part of a larger paddock area which is likely grassed.</p> <p>The area to the north, east and south of the site are undeveloped and appear to be used for agricultural grazing. The site across Dunns Crossing Road to the west is a large forestry plantation.</p>
1960-1965	Canterbury Maps	<p>The site is unchanged from the previous aerial photograph.</p> <p>The surrounding area is mainly unchanged, the plantation across Dunns Crossing Road is sparser.</p>
1970-1974	Canterbury Maps	<p>Animals (presumably sheep) are visible on the site which is still a part of a larger paddock with the site at 138 Dunns Crossing Road.</p> <p>The surrounding area is mainly unchanged from the previous aerial photograph.</p>
1980-1984	Canterbury Maps	<p>The site and surrounding area are mainly unchanged from the previous aerial photograph.</p>
1990-1994	Canterbury Maps	<p>The site and surrounding area are mainly unchanged from the previous aerial photograph.</p>
2000-2004	Canterbury Maps	<p>The site is mainly unchanged from the previous aerial photograph.</p> <p>Dwellings have been constructed at 138 and 3/144 Dunns Crossing Road and a horse track is present on the site at 108 Dunns Crossing Road.</p>
2010-2015	Canterbury Maps	<p>Two structures are present along the north-western boundary line of the site. Planting is present around these two structures. The site appears to have been recently cropped with hay bales present across the site. A line of vegetation is present towards the north of the site which splits the site into two paddocks.</p> <p>A dressage area is present on the site at 138 Dunns Crossing Road to the northwest of the site. An orchard is present at 3/144 Dunns Road to the northeast of the site. The horse track is still present at 108 Dunns Crossing to the southeast of the site.</p>
2018	Canterbury Maps	<p>Storage containers are present to the northeast of the on-site structures. An area of planting has been developed to the south of the on-site structures. The remainder of the site is grassed and appears to be used for grazing.</p> <p>The surrounding sites are mainly unchanged from the previous aerial photograph.</p>

4 Current Site Conditions

A site inspection was undertaken on 25 May 2021 by Natalie Flatman of ENGEO. The information gathered is summarised in Table 4. Photographs taken during the site inspection are included in Appendix 3.

Table 4: Site Conditions

Site Condition	Description
Visible signs of contamination	No visible signs of contamination were noted during the time of the walkover.
Surface water appearance	No surface water was observed during the time of the site walkover.
Current surrounding land use	The land use in all directions around the site is a mix of agricultural grazing and residential. A small orchard was present at 3/144 Dunns Crossing Road which has been previously investigated by ENGEO.
Local sensitive environments	There were no identified local sensitive environments within 200 m of the site.
Visible signs of plant stress	No visible signs of plant stress noted, with the grass appearing to be in good condition at the time of the walkover.
Ground cover	The site was grassed during the time of the visit.
Buildings present	Storage Garage – Concrete foundation and open earth floor, timber framing, metal cladding and roof. Garage – Concrete foundation, metal cladding and roof. Four metal shipping storage containers – used to store scaffolding and household furniture.
Additional Information	A small area of bare earth was observed towards the north of the southern paddock on-site. Small amounts of charcoal were present. This area was anecdotally used for greenwaste burn off. No inorganic materials were identified within the surface soils of this area. A small area of planting of fruit trees was present in the south-western corner of the site. The fruit trees were being used for domestic growing only.

5 Potential HAIL Activities

Activities included on the HAIL trigger the requirement for a contaminated land investigation prior to development. During the site walkover it was concluded that no activities undertaken at the site would be included on the HAIL. Therefore, it is highly unlikely there is a potential for soils at the site to have been adversely impacted. There has been small scale storage and use of weed killer on the site but the amount stored is considered highly unlikely to have adversely impacted the soils to an extent which could harm human health.

6 Conceptual Site Model

A conceptual site model has been developed to assess the potential exposure pathways present at the site. A contamination conceptual site model consists of four primary components. For a contaminant to present a risk to human health or an environmental receptor, all four components are required to be present and connected. The four components of a conceptual site model are:

- Source of contamination;
- Pathway(s) in which contamination could potentially mobilise along (e.g. vapour or groundwater migration);
- Sensitive receptor(s) which may be exposed to the contaminants; and
- An exposure route, where the sensitive receptor and contaminants come into contact (e.g. ingestion, inhalation, dermal contact).

The potential source, pathway and receptor linkages at this subject site are provided in Table 5.

Table 5: Conceptual Site Model

Potential Sources	Contaminants of Concern	Exposure Route and Pathways	Receptors	Acceptable Risk?
Household Orchard	Heavy metals Organophosphorus pesticides	Dermal contact with the impacted soil, incidental ingestion and inhalation of dust during earthworks	On-site redevelopment workers Future subsurface maintenance workers	Highly unlikely, the anecdotal evidence given by the site occupants was that only cooper sulphate and a lichen remover product had been used on the small number of trees and were only used for domestic growing.
		Dermal contact with impacted soils, incidental ingestion and inhalation of wind-blown dust	Future residential land users	

7 Conclusions

ENGEO Ltd was engaged by Hughes Developments Ltd to undertake an environmental assessment for a 4.0 ha site, situated at 130 Dunns Crossing Road, Rolleston, Canterbury, which is likely to change in land use, be subdivided and have soil disturbed as part of the development. Information was gathered and reviewed regarding the current and past uses of the site that could have resulted in releases or potential releases of hazardous substances to the subject property.

The review of information identified that the site has been used for agricultural grazing from circa 1940 and storage of scaffolding and household furniture since 2003 when garage structures were constructed on-site.

No activities were identified on Canterbury Regional Council's Listed Land Use Register (CRC LLUR). The property file for the site was viewed at Selwyn District Council, and contained no information related to potential hazardous activities having occurred at the site.

During the site walkover a small number of fruit trees were identified in the south-western corner of the site. Anecdotal evidence given by the site occupant was that only copper sulphate and a product called Move-It (lichen remover) was used on the trees. Move-It is described as a bio-degradable alkaline moss and mould killer which is non-toxic and bleach free. It is considered that the amount of trees present and type of spray being used, that is unlikely to have an adverse effect on the sites soils which would affect site workers or user and therefore are not considered to be of concern.

Based on the information gathered, we consider that it is highly unlikely for the soils to have been impacted from past and current uses of the site. As per regulation 7 of the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011, it is highly unlikely that an activity included on the HAIL has or is being carried out on the site therefore the site is not covered by this piece of legislation.

8 Limitations

- i. We have prepared this report in accordance with the brief as provided. This report has been prepared for the use of our client, Hughes Developments Limited, their professional advisers and the relevant Territorial Authorities in relation to the specified project brief described in this report. No liability is accepted for the use of any part of the report for any other purpose or by any other person or entity.
- ii. The recommendations in this report are based on the ground conditions indicated from published sources, site assessments and subsurface investigations described in this report based on accepted normal methods of site investigations. Only a limited amount of information has been collected to meet the specific financial and technical requirements of the client's brief and this report does not purport to completely describe all the site characteristics and properties. The nature and continuity of the ground between test locations has been inferred using experience and judgement and it should be appreciated that actual conditions could vary from the assumed model.
- iii. Subsurface conditions relevant to construction works should be assessed by contractors who can make their own interpretation of the factual data provided. They should perform any additional tests as necessary for their own purposes.
- iv. This Limitation should be read in conjunction with the Engineering NZ / ACENZ Standard Terms of Engagement.
- v. This report is not to be reproduced either wholly or in part without our prior written permission.

We trust that this information meets your current requirements. Please do not hesitate to contact the undersigned on (03) 328 9012 if you require any further information.

Report prepared by



Natalie Flatman

Environmental Scientist

Report reviewed by



Dave Robotham, CEnvP SC

Principal Environmental Consultant

9 References

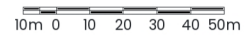
- Brown, L.J. & Weeber, J.H. (1992). *Geology of the Christchurch Urban Area 1:250,000*. CGD5122. Institute of Geological and Nuclear Sciences.
- ECan, 2021. *Environment Canterbury on-line GIS Database*. Viewed at: <http://canterburymaps.co.nz/Portal>
- MfE, 2012. *Users' Guide National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health*.
- MfE, 2011. *Contaminated Land Management Guidelines No.1: Reporting on Contaminated Sites in New Zealand*.
- MfE, 2011. *Ministry for the Environment Hazardous Activities and Industries List*.

FIGURES



Legend

— Site Boundary



© Nearmaps

ENGEO

Produced by **Evalu8.earth**

Title: Site Location Plan

Client: HUGHES DEVELOPMENT

Project: 130 Dunns
Crossing Road

Date: 26-05-2021

Proj No: 12903.001.000

Drawn:
NF

Checked:
DR

Scale:
1:2244

Figure No:

1.0

Size: A4

Version:
1.0

APPENDIX 1: CRC LLUR

Customer Services
P. 03 353 9007 or 0800 324 636

PO Box 345
Christchurch 8140

P. 03 365 3828
F. 03 365 3194
E. ecinfo@ecan.govt.nz

www.ecan.govt.nz

Dear Sir/Madam

Thank you for submitting your property enquiry in regards to our Listed Land Use Register (LLUR) which holds information about sites that have been used, or are currently used for activities which have the potential to have caused contamination.

The LLUR statement provided indicates the location of the land parcel(s) you enquired about and provides information regarding any LLUR sites within a radius specified in the statement of this land.

Please note that if a property is not currently entered on the LLUR, it does not mean that an activity with the potential to cause contamination has never occurred, or is not currently occurring there. The LLUR is not complete, and new sites are regularly being added as we receive information and conduct our own investigations into current and historic land uses.

The LLUR only contains information held by Environment Canterbury in relation to contaminated or potentially contaminated land; other information relevant to potential contamination may be held in other files (for example consent and enforcement files).

If your enquiry relates to a farm property, please note that many current and past activities undertaken on farms may not be listed on the LLUR. Activities such as the storage, formulation and disposal of pesticides, offal pits, foot rot troughs, animal dips and underground or above ground fuel tanks have the potential to cause contamination.

Please contact and Environment Canterbury Contaminated Sites Officer if you wish to discuss the contents of the LLUR statement, or if you require additional information. For any other information regarding this land please contact Environment Canterbury Customer Services.

Yours sincerely

Contaminated Sites Team

Property Statement from the Listed Land Use Register

Visit www.ecan.govt.nz/HAIL for more information about land uses.



Customer Services
P. 03 353 9007 or 0800 324 636

PO Box 345
Christchurch 8140

P. 03 365 3828
F. 03 365 3194
E. ecinfo@ecan.govt.nz

www.ecan.govt.nz

Date:	17 May 2021	
Land Parcels:	Lot 1 DP 70352	Valuation No(s): 2405537900



The information presented in this map is specific to the property you have selected. Information on nearby properties may not be shown on this map, even if the property is visible.

Summary of sites:

There are no sites associated with the area of enquiry.

Information held about the sites on the Listed Land Use Register

There are no sites associated with the area of enquiry.

Information held about other investigations on the Listed Land Use Register

For further information from Environment Canterbury, contact Customer Services and refer to enquiry number ENQ283615.

Disclaimer: *The enclosed information is derived from Environment Canterbury's Listed Land Use Register and is made available to you under the Local Government Official Information and Meetings Act 1987 and Environment Canterbury's Contaminated Land Information Management Strategy (ECan 2009).*

The information contained in this report reflects the current records held by Environment Canterbury regarding the activities undertaken on the site, its possible contamination and based on that information, the categorisation of the site. Environment Canterbury has not verified the accuracy or completeness of this information. It is released only as a copy of Environment Canterbury's records and is not intended to provide a full, complete or totally accurate assessment of the site. It is provided on the basis that Environment Canterbury makes no warranty or representation regarding the reliability, accuracy or completeness of the information provided or the level of contamination (if any) at the relevant site or that the site is suitable or otherwise for any particular purpose. Environment Canterbury accepts no responsibility for any loss, cost, damage or expense any person may incur as a result of the use, reference to or reliance on the information contained in this report.

Any person receiving and using this information is bound by the provisions of the Privacy Act 1993.

Listed Land Use Register

What you need to know



Everything is connected

What is the Listed Land Use Register (LLUR)?

The LLUR is a database that Environment Canterbury uses to manage information about land that is, or has been, associated with the use, storage or disposal of hazardous substances.

Why do we need the LLUR?

Some activities and industries are hazardous and can potentially contaminate land or water. We need the LLUR to help us manage information about land which could pose a risk to your health and the environment because of its current or former land use.

Section 30 of the Resource Management Act (RMA, 1991) requires Environment Canterbury to investigate, identify and monitor contaminated land. To do this we follow national guidelines and use the LLUR to help us manage the information.

The information we collect also helps your local district or city council to fulfil its functions under the RMA. One of these is implementing the National Environmental Standard (NES) for Assessing and Managing Contaminants in Soil, which came into effect on 1 January 2012.

For information on the NES, contact your city or district council.

How does Environment Canterbury identify sites to be included on the LLUR?

We identify sites to be included on the LLUR based on a list of land uses produced by the Ministry for the Environment (MfE). This is called the Hazardous Activities and Industries List (HAIL)¹. The HAIL has 53 different activities, and includes land uses such as fuel storage sites, orchards, timber treatment yards, landfills, sheep dips and any other activities where hazardous substances could cause land and water contamination.

We have two main ways of identifying HAIL sites:

- We are actively identifying sites in each district using historic records and aerial photographs. This project started in 2008 and is ongoing.
- We also receive information from other sources, such as environmental site investigation reports submitted to us as a requirement of the Regional Plan, and in resource consent applications.

¹ The Hazardous Activities and Industries List (HAIL) can be downloaded from MfE's website www.mfe.govt.nz, keyword search HAIL

How does Environment Canterbury classify sites on the LLUR?

Where we have identified a HAIL land use, we review all the available information, which may include investigation reports if we have them. We then assign the site a category on the LLUR. The category is intended to best describe what we know about the land use and potential contamination at the site and is signed off by a senior staff member.

Please refer to the Site Categories and Definitions factsheet for further information.

What does Environment Canterbury do with the information on the LLUR?

The LLUR is available online at www.llur.ecan.govt.nz. We mainly receive enquiries from potential property buyers and environmental consultants or engineers working on sites. An inquirer would typically receive a summary of any information we hold, including the category assigned to the site and a list of any investigation reports.

We may also use the information to prioritise sites for further investigation, remediation and management, to aid with planning, and to help assess resource consent applications. These are some of our other responsibilities under the RMA.

If you are conducting an environmental investigation or removing an underground storage tank at your property, you will need to comply with the rules in the Regional Plan and send us a copy of the report. This means we can keep our records accurate and up-to-date, and we can assign your property an appropriate category on the LLUR. To find out more, visit www.ecan.govt.nz/HAIL.



My land is on the LLUR – what should I do now?

IMPORTANT! Just because your property has a land use that is deemed hazardous or is on the LLUR, it doesn't necessarily mean it's contaminated. The only way to know if land is contaminated is by carrying out a detailed site investigation, which involves collecting and testing soil samples.

You do not need to do anything if your land is on the LLUR and you have no plans to alter it in any way. It is important that you let a tenant or buyer know your land is on the Listed Land Use Register if you intend to rent or sell your property. If you are not sure what you need to tell the other party, you should seek legal advice.

You may choose to have your property further investigated for your own peace of mind, or because you want to do one of the activities covered by the National Environmental Standard for Assessing and Managing Contaminants in Soil. Your district or city council will provide further information.

If you wish to engage a suitably qualified experienced practitioner to undertake a detailed site investigation, there are criteria for choosing a practitioner on www.ecan.govt.nz/HAIL.



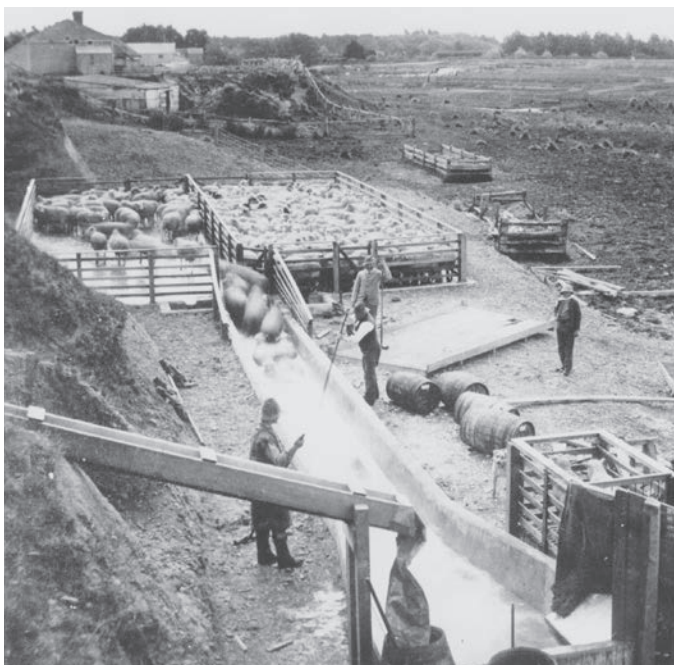
I think my site category is incorrect – how can I change it?

If you have an environmental investigation undertaken at your site, you must send us the report and we will review the LLUR category based on the information you provide. Similarly, if you have information that clearly shows your site has not been associated with HAIL activities (eg. a preliminary site investigation), or if other HAIL activities have occurred which we have not listed, we need to know about it so that our records are accurate.

If we have incorrectly identified that a HAIL activity has occurred at a site, it will be not be removed from the LLUR but categorised as Verified Non-HAIL. This helps us to ensure that the same site is not re-identified in the future.

IMPORTANT!

The LLUR is an online database which we are continually updating. A property may not currently be registered on the LLUR, but this does not necessarily mean that it hasn't had a HAIL use in the past.



Sheep dipping (ABOVE) and gas works (TOP) are among the former land uses that have been identified as potentially hazardous. (Photo above by Wheeler & Son in 1987, courtesy of Canterbury Museum.)

Contact us

Property owners have the right to look at all the information Environment Canterbury holds about their properties.

It is free to check the information on the LLUR, online at www.llur.ecan.govt.nz.

If you don't have access to the internet, you can enquire about a specific site by phoning us on (03) 353 9007 or toll free on 0800 EC INFO (32 4636) during business hours.

Contact Environment Canterbury:

Email: ecinfo@ecan.govt.nz

Phone:

Calling from Christchurch: (03) 353 9007

Calling from any other area: 0800 EC INFO (32 4636)

Listed Land Use Register

Site categories and definitions

When Environment Canterbury identifies a Hazardous Activities and Industries List (HAIL) land use, we review the available information and assign the site a category on the Listed Land Use Register. The category is intended to best describe what we know about the land use.

If a site is categorised as **Unverified** it means it has been reported or identified as one that appears on the HAIL, but the land use has not been confirmed with the property owner.

If the land use has been confirmed but analytical information from the collection of samples is not available, and the presence or absence of contamination has therefore not been determined, the site is registered as:

Not investigated:

- A site whose past or present use has been reported and verified as one that appears on the HAIL.
- The site has not been investigated, which might typically include sampling and analysis of site soil, water and/or ambient air, and assessment of the associated analytical data.
- 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.

If analytical information from the collection of samples is available, the site can be registered in one of six ways:

At or below background concentrations:

The site has been investigated or remediated. The investigation or post remediation validation results confirm there are no hazardous substances above local background concentrations other than those that occur naturally in the area. The investigation or validation sampling has been sufficiently detailed to characterise the site.

Below guideline values for:

The site has been investigated. Results show 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 samples taken after remediation confirm this.

Managed for:

The site has been investigated. Results show 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:

- the nature of the use of the site prevents human and/or ecological exposure to the risks; and/or
- 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.

Partially investigated:

The site has been partially investigated. Results:

- demonstrate 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
- 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.

Significant adverse environmental effects:

The site has been investigated. Results show that sediment, groundwater or surface water contains hazardous substances that:

- have significant adverse effects on the environment; or
- are reasonably likely to have significant adverse effects on the environment.

Contaminated:

The site has been investigated. Results show that the land has a hazardous substance in or on it that:

- has significant adverse effects on human health and/or the environment; and/or
- is reasonably likely to have significant adverse effects on human health and/or the environment.

If a site has been included incorrectly on the Listed Land Use Register as having a HAIL, it will not be removed but will be registered as:

Verified non-HAIL:

Information shows that this site has never been associated with any of the specific activities or industries on the HAIL.

Please contact Environment Canterbury for further information:

(03) 353 9007 or toll free
on 0800 EC INFO (32 4636)
email ecinfo@ecan.govt.nz



APPENDIX 2: Certificate of Titles



RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Search Copy




R.W. Muir
Registrar-General
of Land

Identifier **CB40D/786**
Land Registration District **Canterbury**
Date Issued 14 November 1995

Prior References
CB39A/686

Estate Fee Simple
Area 4.0000 hectares more or less
Legal Description Lot 1 Deposited Plan 70352
Registered Owners
Peter Rowlands Savage

Interests

Subject to Part IV A Conservation Act 1987
Fencing Covenant in Transfer A204853.22 - 14.11.1995 at 12.12 pm
Land Covenant in Transfer A204853.22 - 14.11.1995 at 12.12 pm
6060762.1 Mortgage to ASB Bank Limited - 30.6.2004 at 9:00 am
11211027.1 Court Order Varying Land Covenant in Transfer A204853.22 - 24.8.2018 at 7:00 am



**RECORD OF TITLE
UNDER LAND TRANSFER ACT 2017
FREEHOLD
Historical Search Copy**




R.W. Muir
Registrar-General
of Land

Constituted as a Record of Title pursuant to Sections 7 and 12 of the Land Transfer Act 2017 - 12 November 2018

Identifier **CB40D/786**
Land Registration District **Canterbury**
Date Issued 14 November 1995

Prior References
CB39A/686

Estate Fee Simple
Area 4.0000 hectares more or less
Legal Description Lot 1 Deposited Plan 70352
Original Registered Owners
Peter Rowlands Savage

Interests

Subject to Part IV A Conservation Act 1987
Fencing Covenant in Transfer A204853.22 - 14.11.1995 at 12.12 pm
Land Covenant in Transfer A204853.22 - 14.11.1995 at 12.12 pm
6060762.1 Mortgage to ASB Bank Limited - 30.6.2004 at 9:00 am
11211027.1 Court Order Varying Land Covenant in Transfer A204853.22 - 24.8.2018 at 7:00 am

References

Prior C/T 39A/686

Transfer No.

N/C. Order No. A204853/4-19

Land and Deeds 69



REGISTER

No. 40D/786

CERTIFICATE OF TITLE UNDER LAND TRANSFER ACT

This Certificate dated the 14th day of November one thousand nine hundred and ninety-five under the seal of the District Land Registrar of the Land Registration District of CANTERBURY

WITNESSETH that KAJENS TRADING & DEVELOPMENT LIMITED at Christchurch ---

is seized of an estate in fee-simple (subject to such reservations, restrictions, encumbrances, liens, and interests as are notified by memorial underwritten or endorsed hereon) in the land hereinafter described, delineated with bold black lines on the plan hereon, be the several admeasurements a little more or less, that is to say: All that parcel of land containing 4.0000 hectares or thereabouts being Lot 1 - Deposited Plan 70352 ---

DISTRICT LAND REGISTRAR



ASSISTANT LAND REGISTRAR

Subject to:

Part IVA Conservation Act 1987

Mortgage A141598/3 to Bank of New Zealand and
27.10.1994 at 11.16am

No. A204853/2 Borrowed pursuant to Section 222
Resource Management Act 1991 to The Selwyn
District Council 14.11.1995 at 12.12pm

A.L.R.

Transfer A204853/22 to Kajens Trading &
Development Limited at Christchurch -
14.11.1995 at 12.12pm (Fencing and Land
Covenants)

A.L.R.

Transfer A279346/3 to Peter Rowlands
Savage of Christchurch, Mechanic -
27.1.1997 at 12.15pm

for A.L.R.

Measurements are Metric

No. 40D/786

LAND DISTRICT CANTERBURY
SURREY BLK. & DIST. III LEESTON
NIMS 361 SH1 M 36 RECORD MAP No 00091 214

LOTS 1-16 BEING SUBDIVISION OF
LOTS 1-3 DP 66621

Scale 1:4000 Date JULY 1995

TERITORIAL AUTHORITY SELWYN DISTRICT
SURVEYED BY CONNELL WAGNER, LIMITED

Scale 1:4000 Date JULY 1995

KEEP A12101/218

Diagram 1

Diagram 2

Diagram 3

Diagram 4

Diagram 5

Diagram 6

Diagram 7

Diagram 8

Diagram 9

Diagram 10

Diagram 11

Diagram 12

Diagram 13

Diagram 14

Diagram 15

Diagram 16

Diagram 17

Diagram 18

Diagram 19

Diagram 20

Diagram 21

Diagram 22

Diagram 23

Diagram 24

Diagram 25

Diagram 26

Diagram 27

Diagram 28

Diagram 29

Diagram 30

Diagram 31

Diagram 32

Diagram 33

Diagram 34

Diagram 35

Diagram 36

Diagram 37

Diagram 38

Diagram 39

Diagram 40

Diagram 41

Diagram 42

Diagram 43

Diagram 44

Diagram 45

Diagram 46

Diagram 47

Diagram 48

Diagram 49

Diagram 50

Diagram 51

Diagram 52

Diagram 53

Diagram 54

Diagram 55

Diagram 56

Diagram 57

Diagram 58

Diagram 59

Diagram 60

Diagram 61

Diagram 62

Diagram 63

Diagram 64

Diagram 65

Diagram 66

Diagram 67

Diagram 68

Diagram 69

Diagram 70

Diagram 71

Diagram 72

Diagram 73

Diagram 74

Diagram 75

Diagram 76

Diagram 77

Diagram 78

Diagram 79

Diagram 80

Diagram 81

Diagram 82

Diagram 83

Diagram 84

Diagram 85

Diagram 86

Diagram 87

Diagram 88

Diagram 89

Diagram 90

Diagram 91

Diagram 92

Diagram 93

Diagram 94

Diagram 95

Diagram 96

Diagram 97

Diagram 98

Diagram 99

Diagram 100

Diagram 101

Diagram 102

Diagram 103

Diagram 104

Diagram 105

Diagram 106

Diagram 107

Diagram 108

Diagram 109

Diagram 110

Diagram 111

Diagram 112

Diagram 113

Diagram 114

Diagram 115

Diagram 116

Diagram 117

Diagram 118

Diagram 119

Diagram 120

Diagram 121

Diagram 122

Diagram 123

Diagram 124

Diagram 125

Diagram 126

Diagram 127

Diagram 128

Diagram 129

Diagram 130

Diagram 131

Diagram 132

Diagram 133

Diagram 134

Diagram 135

Diagram 136

Diagram 137

Diagram 138

Diagram 139

Diagram 140

Diagram 141

Diagram 142

Diagram 143

Diagram 144

Diagram 145

Diagram 146

Diagram 147

Diagram 148

Diagram 149

Diagram 150

Diagram 151

Diagram 152

Diagram 153

Diagram 154

Diagram 155

Diagram 156

Diagram 157

Diagram 158

Diagram 159

Diagram 160

Diagram 161

Diagram 162

Diagram 163

Diagram 164

Diagram 165

Diagram 166

Diagram 167

Diagram 168

Diagram 169

Diagram 170

Diagram 171

Diagram 172

Diagram 173

Diagram 174

Diagram 175

Diagram 176

Diagram 177

Diagram 178

Diagram 179

Diagram 180

Diagram 181

Diagram 182

Diagram 183

Diagram 184

Diagram 185

Diagram 186

Diagram 187

Diagram 188

Diagram 189

Diagram 190

Diagram 191

Diagram 192

Diagram 193

Diagram 194

Diagram 195

Diagram 196

Diagram 197

Diagram 198

Diagram 199

Diagram 200

Diagram 201

Diagram 202

Diagram 203

Diagram 204

Diagram 205

Diagram 206

Diagram 207

Diagram 208

Diagram 209

Diagram 210

Diagram 211

Diagram 212

Diagram 213

Diagram 214

Diagram 215

Diagram 216

Diagram 217

Diagram 218

Diagram 219

Diagram 220

Diagram 221

Diagram 222

Diagram 223

Diagram 224

Diagram 225

Diagram 226

Diagram 227

Diagram 228

Diagram 229

Diagram 230

Diagram 231

Diagram 232

Diagram 233

Diagram 234

Diagram 235

Diagram 236

Diagram 237

Diagram 238

Diagram 239

Diagram 240

Diagram 241

Diagram 242

Diagram 243

Diagram 244

Diagram 245

Diagram 246

Diagram 247

Diagram 248

Diagram 249

Diagram 250

Diagram 251

Diagram 252

Diagram 253

Diagram 254

Diagram 255

Diagram 256

Diagram 257

Diagram 258

Diagram 259

Diagram 260

Diagram 261

Diagram 262

Diagram 263

Diagram 264

Diagram 265

Diagram 266

Diagram 267

Diagram 268

Diagram 269

Diagram 270

Diagram 271

Diagram 272

Diagram 273

Diagram 274

Diagram 275

Diagram 276

Diagram 277

Diagram 278

Diagram 279

Diagram 280

Diagram 281

Diagram 282

Diagram 283

Diagram 284

Diagram 285

Diagram 286

Diagram 287

Diagram 288

Diagram 289

Diagram 290

Diagram 291

Diagram 292

Diagram 293

Diagram 294

Diagram 295

Diagram 296

Diagram 297

Diagram 298

Diagram 299

Diagram 300

Diagram 301

Diagram 302

Diagram 303

Diagram 304

Diagram 305

Diagram 306

Diagram 307

Diagram 308

Diagram 309

Diagram 310

Diagram 311

Diagram 312

Diagram 313

Diagram 314

Diagram 315

Diagram 316

Diagram 317

Diagram 318

Diagram 319

Diagram 320

Diagram 321

Diagram 322

Diagram 323

Diagram 324

Diagram 325

Diagram 326

Diagram 327

Diagram 328

Diagram 329

Diagram 330

Diagram 331

Diagram 332

Diagram 333

Diagram 334

Diagram 335

Diagram 336

Diagram 337

Diagram 338

Diagram 339

Diagram 340

Diagram 341

Diagram 342

Diagram 343

Diagram 344

Diagram 345

Diagram 346

Diagram 347

Diagram 348

Diagram 349

Diagram 350

Diagram 351

Diagram 352

Diagram 353

Diagram

APPENDIX 3: Site Photographs



Photo 1: Two garage buildings on-site



Photo 2: Small area of fruit trees in south-western corner



Photo 3: Southern paddock looking south



Photo 4: Northern paddock looking southeast



Photo 5: Northern paddock looking east



Photo 6: Remnant burn pile in south paddock



Date taken	May 2021	Client	Hughes Developments		
Taken by	NF	Project	130 Dunns Crossing Road		
Approved by	DR	Description	Site Photographs		
Photo No.	1 to 6	ENGEO Ref.	12903	Appendix No.	3