



Preliminary Site Investigation (Ground Contamination) – Momentum Land, Kaiapoi

Prepared for
Momentum Land Limited

Prepared by
Tonkin & Taylor Ltd

Date
December 2023

Job Number
1019317.1000 v4



**Together we create and
sustain a better world**

www.tonkintaylor.co.nz

Document control

Title: Preliminary Site Investigation (Ground Contamination) – Momentum Land, Kaiapoi					
Date	Version	Description	Prepared by:	Reviewed by:	Authorised by:
Sep 2022	V1	Issued to project, supporting document for project resource consenting (by others)	MDDM	SASC	GL
Feb 2023	V2	Issued to project, supporting document for project resource consenting (by others)	MDDM	SASC	GL
May 2023	V3	Updated block description (North Block)	MDDM	SASC	AFS
Dec 2023	V4	Update block descriptions and content including LLUR information	MDDM	SASC	AFS

Distribution:

Momentum Land Limited

1 electronic copy

Tonkin & Taylor Ltd (FILE)

1 electronic copy

Table of contents

1	Introduction	1
1.1	Development overview	1
1.2	Regulatory compliance	2
1.3	Using this report	2
2	Geology, Hydrogeology and Hydrology	3
2.1	Geology	3
2.2	Hydrogeology	3
2.3	Hydrology	3
3	South Block	3
3.1	Identification	4
3.2	History	4
3.3	LLUR	5
3.4	Site observations	5
3.5	South Block contaminants of concern and conceptual site model	6
3.6	Further investigation	9
4	North Block 1	10
4.1	Identification	10
4.2	History	10
4.3	LLUR	11
4.4	Site observations	11
4.5	North Block 1 contaminants of concern and conceptual site model	11
4.6	Further investigation	13
5	North Block 2	14
5.1	Identification	14
5.2	History	14
5.3	LLUR	14
5.4	Site observations	14
5.5	North Block 2 contaminants of concern and conceptual site model	15
5.6	Further investigation	17
6	North Block 3	18
6.1	Identification	18
6.2	History	18
6.3	LLUR	19
6.4	Site observations	19
6.5	North Block 3 contaminants of concern and conceptual site model	19
6.6	Further investigation	21
7	Ground Contamination Investigation and Accidental Discovery Procedures	22
7.1	Investigation	22
7.2	Accidental discovery procedures (ADP)	22
7.3	Hazardous building materials – pre-demolition survey	22
8	Applicability	24
Appendix A	South Block	
Appendix B	North Block 1	
Appendix C	North Block 2	
Appendix D	North Block 3	

1 Introduction

Tonkin & Taylor Ltd (T+T) has been engaged to prepare a ground contamination preliminary site investigation (PSI) for Momentum Land Ltd (MLL) to support the proposed redevelopment of a block of land referred to as the South Block and North Block, located to the north-east of Kaiapoi town centre, North Canterbury.

This report has been prepared in accordance with T+T variation orders 3 and 5, dated 13 July 2022 and 27 March 2023 respectively under job number 1019317.1000.

1.1 Development overview

The South Block and North Block (collectively, 'the site') is located approximately 750 m north-east of Kaiapoi town centre. The North Block, for the purpose of this report has been divided into three areas (sub-blocks), referred to by the project as North Blocks 1, 2, and 3. Figure 1.1 illustrates the site and the blocks relative to their surrounds.



Figure 1.1: The site and surrounds (source – ESRI (not to scale)).

MLL plan to redevelop the site for residential purposes (a 'medium density land use'). The site's development will require resource consent for (list not exhaustive) change in land use, bulk earthworks, and management of stormwater discharge. Site development will take place over several years.

Detailed design is not finalised but will include bulk earthworks to raise ground levels (akin to the neighbouring Beach Grove residential development (see Figure 1.1)). Roads, individual building lots, footpaths, and reserve areas will be built off the development platform made by the bulk earthworks.

This PSI has been prepared to document the potential ground contamination related issues and their implications to the development. These are reported separately for each sub-block in Sections 3 to 6. Principles for further investigation and/or response to an accidental discovery during development earthworks are detailed in Section 7.

1.2 Regulatory compliance

This PSI report has been prepared in general accordance with the requirements of CLMG #1¹ and the investigation principles (Section 7) are based on CLMG #5² and the Asbestos in Soil Guidelines.³

The persons writing, (technical) reviewing, and managing this PSI are all suitably qualified and experienced practitioners (SEQP) as required by the NESCS⁴ and defined in the NESCS user's guide.⁵

1.3 Using this report

The potential ground contamination related issues for each of the site's four sub-blocks are reported separately in Sections 3 to 6 inclusive. The PSI has included the following tasks:

- Site walkover observations.
- Review of previous T+T work on site.⁶
- Enquiries of Environment Canterbury's (ECan) Listed Land Use Register (LLUR).
- Review of available historical aerial photographs.⁷

Based on the findings from these tasks, a preliminary conceptual site model (CSM) is reported for each block and procedures for ground contamination investigation work (i.e., sampling, laboratory analysis and data assessment) are summarised in Section 7.

¹ Ministry for the Environment (MfE) – Contaminated Land Management Guideline #1 – Reporting on Contaminated Sites in New Zealand, (revised 2021).

² MfE – Contaminated Land Management Guideline #5 – Site Investigation and Analysis of Soils, (revised 2021).

³ BRANZ – New Zealand Guidelines for Assessing and Managing Asbestos in Soil, (2017).

⁴ Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Regulations), 2011.

⁵ MfE – Users' Guide: NES for Assessing and Managing Contaminants in Soil to Protect Human Health, (2012).

⁶ T+T reference 1019317 – Moore Land, Kaiapoi, Ground Contamination Overview for Due Diligence Purposes (10 February 2022).

⁷ www.canterburymaps.govt.nz.

2 Geology, Hydrogeology and Hydrology

The following information has been summarised from existing T+T geotechnical and hydrogeological reports for the site^{8 9}. These reports should be consulted for more detail.

2.1 Geology

Ground conditions on site generally comprise topsoil overlying natural alluvial deposits (i.e., silt, sands and gravels) of the Springston Formation.

2.2 Hydrogeology

Groundwater is encountered at shallow depths on site, ranging from current ground level up to 0.4 to 1 m below ground level (bgl). Groundwater flow direction is generally to the south-east and towards the coastline (approximately 3 km east of the site), with locally some flow towards the numerous drainage channels that are present across the site.

2.3 Hydrology

Several drainage channels bound, and/or cross the site, locally some of these exhibits tidal influence. McIntosh Drain forms the North Block's eastern boundary, the various drainage channels on site flow towards and into this drain.

The site, due to its flat, low lying contour (approximately 0.5 to 1 m above mean sea level), frequently experiences varying degrees of surface water flooding after periods of rainfall.

3 South Block

The South Block is located immediately north of and accessed off Beach Road (see Figure 3.1). Appendix A presents historical aerial photographs, a LLUR statement and photographs of the site and its salient features as discussed in the following sub-sections.

⁸ T+T reference 1019317.1000R v3 – Momentum Land Living, Geotechnical Report for Plan Change Application; and T+T reference 1019317.1000R v3 Momentum Land, Geotechnical Report for Proposed Subdivision – North Block – for Plan Change Application (both May 2023).

⁹ T+T reference 1019317.1000 – Hydrogeological Assessment, Moore Land Developments: Retirement Village (September 2022).



Figure 3.1: The South Block 1 (source ESRI (not to scale)).

3.1 Identification

South Block comprises an approximately 6 hectare area under title Lot 2 DP83191 and address of 310 Beach Road.

3.2 History

Historical aerial images for the South Block are provided in Appendix A and, in summary, the history of this block comprises:

- Area was pastoral land from at least 1940s to the early 1980s.
- Beach Road has been present on the southern boundary of this block since at least the 1940s.
- The existing dwelling on site (see below) was constructed during the early 1980s.

- Except for the addition of some small shed/barn type structures located to the west of the dwelling, and in the approximate centre of this block, no other development has taken place. The existing trees and shelter belts making up some of the block's boundaries and/or internal field boundaries have grown to their existing extent since the early 1940s.

3.3 LLUR

The South Block is recorded on ECan's LLUR¹⁰, its register of sites with historic and/or current land uses with a potential to cause land contamination recorded on the HAIL¹¹, for the following:

- Category E1 – Asbestos products, disposal (*abridged*).
- Category G4 – Scrap yards.
- Category G5 – Waste disposal to land.
- Category I – Any other land (*abridged*).

These activities are associated with the dwelling, the storage of various vehicles at the front of the property and a stockpile of soil as detailed in Section 3.4 and Figure 3.1. A LLUR statement is presented in Appendix A.

3.4 Site observations

Observations of current on-site activities were made in December 2021 and August 2022 and summary points are listed below as well as illustrated in Figure 3.1. Photographs illustrating some of these points are provided in Appendix A.

- Overall, this block is a flat area, and the majority is in use as pasture, there is a dwelling and some other buildings located on the block's southern boundary where it fronts Beach Road.
- A drain is present on the block's eastern boundary and evidence of a channel feature is visible in the approximate centre of the site and extending towards its north-eastern corner.
- The block is bound by residential properties to its south (on the other side of Beach Road) and west (off Williams Street). Immediately north of the South Block are the grounds of Kaiapoi North School and a council reserve and to its east there is an access track (used to get to the North Blocks) and a stormwater basin which forms part of the adjacent Beach Grove residential development.
- The dwelling and some of the other buildings on site (e.g., the garage) are clad in cement sheet building materials that could be an asbestos containing material (ACM). Locally these exhibited some damage.
- Around the garage and in the area fronting Beach Road, numerous vehicles, vehicle parts (including batteries) are present. Small areas (<1 m² in plan) of oil staining were noted in this part of the block.
- A stockpile of soil material (approximately 2 to 3 m high) is present in the south-east part of the site.
- West of the dwelling and the driveway off Beach Road there is a sheet metal clad shed with several fences around it (e.g., livestock pens) (see Figure 3.2). This structure is evident in the aerial photographs dating from 2010 to present.

¹⁰ The registration is based on a previous iteration of this PSI (v1, September 2022).

¹¹ MfE – Hazardous Activities and Industries List, (revised 2021).



Figure 3.2: Shed and livestock pens (source ESRI (not to scale)).

3.5 South Block contaminants of concern and conceptual site model

Based on site observations and the records reviewed as part of this PSI, the following contaminants of concern (CoCs) are considered relevant to the South Block:

- Coincident with the location of the current dwelling and other buildings, the potential for asbestos in soil. The buildings on site were constructed during the early 1980s when ACM building products were still in common use in New Zealand.

Asbestos in soil could be present around and underneath these existing buildings from the time of their construction (e.g., from the cutting of ACM cladding sheets) as well as potentially from the demolition of these buildings (when undertaken) if appropriate controls are not implemented (e.g., developed and implemented in accordance with the ACoP). It is presumed asbestos in soil will be generally limited to surficial soils around and/or below these buildings (e.g., ground level to 0.2 m bgl) unless some deeper disturbance of soils takes place.
- Metals and/or hydrocarbons and oils in surficial soils in the area around the garage and where numerous vehicles have been stored. It is presumed these CoCs will be limited to surficial soils (e.g., ground level to 0.2 m bgl).
- Possible pesticide residues in surficial soils from historic and current pastoral activities on site, and at the livestock pens (by metals and/or organo-chloride pesticides (OCPs)), including the stockpiled soils observed at the southeast corner of this block.

Based on the findings detailed above and referencing the CoCs considered relevant to the South Block, the source-pathway-receptor preliminary conceptual model has been developed overleaf, Table 3.1

Table 3.1: South Block Conceptual Site Model

Source	Pathway	Receptor	Likelihood and commentary (also refer to Section 3.6)
Asbestos in soil (limited to areas around existing dwelling and other buildings fronting Beach Road)	Inhalation of dust (containing asbestos fibres)	Construction workers	<i>Possible</i> – If asbestos in soil is present; the extent and quantity need to be assessed so appropriate controls and procedures can be developed to protect this group and to comply with the Asbestos Regulation. ¹²
		Future land users	<i>Possible</i> – Bulk earthworks for development likely more than 0.5 m thick of imported materials, thus breaking direct contact with the source to this group with any soil contamination (refer to Asbestos in Soil Guidelines – Table 5).
		Offsite neighbours	<i>Unlikely</i> –Development earthwork controls will be implemented to prevent the uncontrolled discharge of asbestos fibres from this block.
	Offsite disposal	Environment (at disposal location)	<i>Possible</i> – Soils containing asbestos must be disposed of to a facility approved to accept this CoC.
Metals and/or hydrocarbons and oil around existing dwelling and outbuilding fronting Beach Road	Inhalation of dust, vapours derived from soils, ingestion of soils	Construction workers	<i>Possible</i> – Appropriate earthwork controls need to be developed to protect this cohort.
		Future site users	<i>Possible</i> – Bulk earthworks for development likely more than 0.5 m thick of imported materials, thus breaking direct contact with these CoCs by this group. <i>If</i> hydrocarbons in soils are present, controls to manage exposure to vapours from these CoCs may be necessary (considered unlikely).
		Offsite neighbours	<i>Unlikely</i> –Project earthwork controls will be implemented to prevent the uncontrolled discharge of these CoCs from this block.
	Sediment discharge	Environment – surrounding drains, including McIntosh Drain	<i>Possible</i> –Appropriate earthwork controls (i.e. erosion and sediment controls) need to be developed to protect this receptor.
	Offsite disposal	Environment (at disposal location)	<i>Possible</i> –Investigation data needed to reduce likelihood for disposal to an inappropriate facility (e.g. materials not meeting cleanfill criteria).
Residual pesticides in surficial soils in	Inhalation of dust, ingestion of soils	Construction workers	<i>Possible</i> –Appropriate earthwork controls need to be developed to protect this cohort.

¹² Health and Safety at Work (Asbestos) Regulations, 2016.

Source	Pathway	Receptor	Likelihood and commentary (also refer to Section 3.6)
paddock areas across the block, at livestock pens		Future site users	<i>Possible</i> – Bulk earthworks for development likely more than 0.5 m thick of imported materials, thus breaking direct contact to these CoCs by this cohort.
		Offsite neighbours	<i>Unlikely</i> –Project earthwork controls will be implemented to prevent the uncontrolled discharge of these CoCs from this block.
	Sediment discharge	Environment – surrounding drains, including McIntosh Drain	<i>Possible</i> – Appropriate earthwork controls (i.e., erosion and sediment controls) need to be developed to protect this receptor.
	Offsite disposal	Environment (at disposal location)	<i>Possible</i> –Investigation data needed to reduce likelihood for disposal to an inappropriate facility (e.g., materials not meeting cleanfill criteria).

3.6 Further investigation

Prior to commencing redevelopment earthworks at the South Block, the following ground contamination investigation should be undertaken:

- (Immediately after demolition of existing dwelling and other buildings – before any earthworks to grub out their foundations, regrade footprints etc.):
 - Soil sampling for asbestos in soil analysis (semi-quantitative asbestos in soil content) to determine if this CoC is present and based on its extent the applicability of the Asbestos Regulations (i.e. unlicensed versus licensed work) and options for the offsite disposal of contaminated soils (if surplus to project needs).
- (Before development (bulk) earthworks):
 - Investigate surficial soils around the shed and livestock pens located to the west of the dwelling for pesticides associated with possible livestock treatment activities. [note: MfE guidance¹³ considers "old sheep dips" and the potential for ground contamination from this activity relates to livestock treatment prior to 1980. As the shed and livestock pens have only been present after this watershed, the likelihood of ground contamination by persistent pesticides (e.g., DDT, arsenic based mixes) is considered low.
 - Broad acreage sampling of surficial soils for metal and/or OCPs residues. Main purpose of this exercise is to identify options for the offsite disposal of soils if surplus to project needs and to inform the type of erosion and sediment controls to protect the environment (construction and operational).

Principles for ground contamination investigation for the site development are presented in Section 7.

¹³ MfE - Identifying, Investigating and Managing Risks Associated with Former Sheep-dip Sites: A guide for local authorities, (2006).

4 North Block 1

North Block 1 is located to the north of Beach Grove (see Figure 4.1). Appendix B presents historical aerial photographs, a LLUR statement and photographs of the site and its salient features as discussed in the following sub-sections.



Figure 4.1: Block North 1 (source ERSI (not to scale)).

4.1 Identification

Block North 1 comprises an approximately 4 hectare area under title Lot 2 DP4532.

4.2 History

Historical aerial images for Block North 1 are provided in Appendix B and in summary the history of this sub-block comprises:

- This area has been in pastoral land use from at least the 1940s to the present.
- Some buildings were present in this sub-block's north-western corner from the 1940s to c. 1990s. These are not present after the 1990s; this time coincides with bulk earthworks for residential development to the west of the Block (i.e., the Sovereign Palms subdivision).

- Images from the early 2000s to the present day indicate an area of potential filling (i.e. raised ground) in the north-western corner of this sub-block.

4.3 LLUR

North Block 1 is recorded on ECan's LLUR, for the following:

- Category G3 – Landfill sites.

This activity is associated with the potential filling at the block's north-western corner (see Section 4.4 below). A LLUR statement is presented in Appendix B.

4.4 Site observations

Observations of current on-site activities were made in December 2021 and August 2022 and summary points are listed below as well as illustrated in Figure 4.1. Photographs illustrating some of these points are provided in Appendix B.

- This sub-block is flat in contour and comprised a paddock.
- The sub-block is crossed by a drainage channel.
- In the sub-block's north-western corner, ground levels are hummocky in profile and higher than the majority of the block (approximately 1 to 2 m higher).
- The block is bound by residential properties at the Beach Grove subdivision to its south and Sovereign Palms subdivision off Allison Close to its west. Both residential areas are approximately 2 m higher than ground levels in the block.

4.5 North Block 1 contaminants of concern and conceptual site model

Based on site observations and the records reviewed as part of this PSI, the following contaminants of concern (CoCs) are considered relevant to North Block 1:

- Possible *pesticide* residues in surficial soils from historic and current pastoral activities on site (by *metals* and/or *organo-chloride pesticides (OCPs)*), including the area of raised ground at the north-west corner of this block.
- (North-west corner of this sub-block only and coincident with the raised ground) - if construction/demolition materials are present, potential for *asbestos in soil, metals, etc.*

Based on the results detailed above and referencing the CoCs considered relevant to North Block 1, the source-pathway-receptor preliminary conceptual model has been developed, see Table 4.1.

Table 4.1: North Block 1 Conceptual Site Model

Source	Pathway	Receptor	Likelihood and commentary (also refer to Section 4.6)
Residual pesticides in surficial soils in paddock areas across the sub-block, at raised area north-west corner of this sub-block	Inhalation of dust, ingestion of soils	Construction workers	<i>Possible</i> – Appropriate earthwork controls need to be developed to protect this group.
		Future site users	<i>Possible</i> – Bulk earthworks for development likely more than 0.5 m thick of imported materials, thus breaking direct contact to these CoCs by this group.
		Offsite neighbours	<i>Unlikely</i> – Project earthwork controls will be implemented to prevent the uncontrolled discharge of these CoCs from this sub-block.
	Sediment discharge	Environment – surrounding drains, including McIntosh Drain	<i>Possible</i> – Appropriate earthwork controls (i.e., erosion and sediment controls) need to be developed to protect this receptor.
	Offsite disposal	Environment (at disposal location)	<i>Possible</i> – Investigation data needed to reduce likelihood for disposal to an inappropriate facility (e.g., materials not meeting cleanfill criteria).
Construction/demolition materials at north-west corner of North Block 1	Inhalation of dust, ingestion of soils	Construction workers	<i>Possible</i> – Appropriate earthwork controls need to be developed to protect this cohort.
		Future site users	<i>Possible</i> – Bulk earthworks for development likely more than 0.5 m thick of imported materials, thus breaking likely contact to these CoCs by this group.
		Offsite neighbours	<i>Unlikely</i> – Project earthwork controls will be implemented to prevent the uncontrolled discharge of these CoCs from this sub-block.
	Sediment discharge	Environment – surrounding drains, including McIntosh Drain	<i>Possible</i> – Appropriate earthwork controls (i.e., erosion and sediment controls) need to be developed to protect this receptor.
	Offsite disposal	Environment (at disposal location)	<i>Possible</i> – Investigation data needed to reduce likelihood for disposal to an inappropriate facility (e.g., materials not meeting cleanfill criteria).

4.6 Further investigation

Prior to commencing redevelopment earthworks at North Block 1, the following ground contamination investigation should be undertaken:

- *(Before development (bulk) earthworks):*
 - Broad acreage sampling of surficial soils for metal and/or OCPs residues. Main purpose of this exercise is to identify options for the offsite disposal of soils if surplus to the project needs and to inform the type of erosion and sediment controls to protect the environment (construction and operational).
 - Targeted investigation and sampling at the area of raised ground at the north-west corner of North Block 1 to identify if construction/demolition materials are present and if so, to develop controls for their appropriate handling, erosion and sediment controls and offsite disposal options (if required).

Principles for ground contamination investigation for the site development are presented in Section 7.

5 North Block 2

North Block 2 is located to the north of Beach Grove (see Figure 5.1). Appendix C presents historical aerial photographs, a LLUR statement and photographs of the site and its salient features as discussed in the following sub-sections.



Figure 5.1: North Block 2 (source ESRI (not to scale)).

5.1 Identification

North Block 2 comprises an approximately 5.6 hectare area under title Lot 1 DP5010.

5.2 History

Historical aerial images for North Block 1 are provided in Appendix C and in summary the history of this block comprises pastoral land use from at least the 1940s to the present day.

5.3 LLUR

No HAIL activities at North Block 2 are recorded on ECan's LLUR.

5.4 Site observations

Observations of current on-site activities were made in December 2021 and August 2022 are described below as well as illustrated in Figure 5.1. Photographs illustrating some of these points are provided in Appendix C.

North Block 2 is in pastoral use and is crossed by channels with a tidal influence. The site is bound to the immediate south by residential properties at the Beach Grove subdivision development that are approximately 2 m higher than ground levels on the block.

5.5 North Block 2 contaminants of concern and conceptual site model

Based on site observations and the records reviewed as part of this PSI, the following contaminants of concern (CoCs) are considered relevant to North Block 2:

- Possible *pesticide* residues in surficial soils from historic and current pastoral activities on site (by *metals* and/or *organo-chloride pesticides (OCPs)*).

Based on the results detailed above and referencing the CoCs considered relevant to North Block 2, the source-pathway-receptor preliminary conceptual model has been developed, see Table 5.1.

Table 5.1: North Block 2 Conceptual Site Model

Source	Pathway	Receptor	Likelihood and commentary (also refer to Section 5.6)
Residual pesticides in surficial soils in pastoral areas across this sub-block	Inhalation of dust, ingestion of soils	Construction workers	<i>Possible</i> – Appropriate earthwork controls need to be developed to protect this group.
		Future site users	<i>Possible</i> – Bulk earthworks for development likely more than 0.5 m thick of imported materials, thus breaking direct contact to these CoCs by this group.
		Offsite neighbours	<i>Unlikely</i> – Project earthwork controls will be implemented to prevent the uncontrolled discharge of these CoCs from this sub-block.
	Sediment discharge	Environment – surrounding drains, including McIntosh Drain	<i>Possible</i> – Appropriate earthwork controls (i.e. erosion and sediment controls) need to be developed to protect this receptor.
	Offsite disposal	Environment (at disposal location)	<i>Possible</i> – Investigation data needed to reduce likelihood for disposal to an inappropriate facility (e.g. materials not meeting cleanfill criteria).

5.6 Further investigation

Prior to commencing redevelopment earthworks at North Block 2, the following ground contamination investigation should be undertaken:

- *(Before development (bulk) earthworks):*
 - Broad acreage sampling of surficial soils for metal and/or OCPs residues. Main purpose of this exercise is to identify options for the offsite disposal of soils if surplus to the project needs and to inform the type of erosion and sediment controls to protect the environment (construction and operational).

Principles for ground contamination investigation for the site development are presented in Section 7.

6 North Block 3

North Block 3 is located immediately to the north of North Blocks 1 and 2 and east of Fergus Street at the Sovereign Palms subdivision (see Figure 6.1). Appendix D presents historical aerial photographs, a LLUR statement and photographs of the site and its salient features as discussed in the following sub-sections.



Figure 6.1: North Block 3 (source ESRI (not to scale)).

6.1 Identification

North Block 3 comprises an approximately 18 hectare area under title Lot 5 DP313322.

6.2 History

Historical aerial images for North Block 3 are provided in Appendix D and, in summary, the history of this block comprises:

- This area has been in pastoral land use from at least the 1940s to the present day.
- A barn has been present in the block's south-western corner throughout this duration.
- An area on the block's western boundary was developed in the late 1990s/early 2000s into the Council's current water treatment plant (see below).

- From the early 1940s to the present day, at the north-western edge of the block an area of potential filling (i.e. raised ground) is evident.

6.3 LLUR

North Block 3 is recorded on ECan's LLUR, for the following:

- Category G3 – Landfill sites.

This activity is associated with the potential filling at the block's north-western corner. A LLUR statement is presented in Appendix D.

6.4 Site observations

Observations of current on-site activities were made in December 2021 and August 2022 are described below as well as illustrated in Figure 6.1. Photographs illustrating some of these points are provided in Appendix D.

- Except for an area at the north-western margin of North Block 3, the area is generally flat and used as paddocks.
- A Waimakariri District Council water treatment plant is present on the sub-block's western boundary.
- The block is surrounded by other pastoral land (including North Blocks 1 and 2 to its immediate south) and residential properties off Fergus Street and Monarch Boulevard to its west (part of the Sovereigns Palms subdivision. The residential area is about 2 m higher than ground levels on site.
- A barn is located at the south-western corner of this sub-block, this is a timber frame structure clad with sheet metal and/or weather boards and is in a poor state of repair. In part the building has a concrete ring foundation, and its floor is unsealed. Various agricultural materials and/or equipment is stored in the barn including pallets, timber, fencing etc.
- At the north-western boundary of this sub-block, hummocky ground is evident suggesting some filling has taken place.
- At the eastern edge of this area of filling (and opposite the north-eastern most corner of the water treatment plant), various pieces of agricultural materials and equipment are present including a silo, concrete tank, vehicles and drums. The drums are rusted with no labels visible, one drum contained (presumed) rainwater, the others were holed and empty. No evidence of staining was observed,

6.5 North Block 3 contaminants of concern and conceptual site model

Based on site observations and the records reviewed as part of this PSI, the following contaminants of concern (CoCs) are considered relevant to North Block 3:

- Possible *pesticide* residues in surficial soils from historic and current pastoral activities on site (by *metals* and/or *organo-chloride pesticides* (OCPs)), including the area of raised ground at the north-west corner of this block.
- (North-west corner of this block only and coincident with the hummocky ground) - if construction/demolition materials are present, potential for *asbestos in soil*, *metals* etc.

Based on the results detailed above and referencing the CoCs considered relevant to North Block 3, the source-pathway-receptor preliminary conceptual model has been developed, see Table 6.1.

Table 6.1: North Block 3 Conceptual Site Model

Source	Pathway	Receptor	Likelihood and commentary (also refer to Section 6.6)
Residual pesticides in surficial soils in paddock areas across the sub-block, at raised area north-west corner of this sub-block	Inhalation of dust, ingestion of soils.	Construction workers	<i>Possible</i> – Appropriate earthwork controls need to be developed to protect this group.
		Future site users	<i>Possible</i> – Bulk earthworks for development likely more than 0.5 m thick of imported materials, thus breaking direct contact to these CoCs by this group.
		Offsite neighbours	<i>Unlikely</i> –Project earthwork controls will be implemented to prevent the uncontrolled discharge of these CoCs from this sub-block.
	Sediment discharge	Environment – surrounding drains, including McIntosh Drain	<i>Possible</i> – Appropriate earthwork controls (i.e., erosion and sediment controls) need to be developed to protect this receptor.
	Offsite disposal	Environment (at disposal location)	<i>Possible</i> –Investigation data needed to reduce likelihood for disposal to an inappropriate facility (e.g., materials not meeting cleanfill criteria).
Construction/demolition materials at north-west corner of North Block 3	Inhalation of dust, ingestion of soils.	Construction workers	<i>Possible</i> – Appropriate earthwork controls need to be developed to protect this group.
		Future site users	<i>Possible</i> – Bulk earthworks for development likely more than 0.5 m thick of imported materials, thus breaking likely contact to these CoCs by this group.
		Offsite neighbours	<i>Unlikely</i> –Project earthwork controls will be implemented to prevent the uncontrolled discharge of these CoCs from this sub-block.
	Sediment discharge	Environment – surrounding drains, including McIntosh Drain	<i>Possible</i> – Appropriate earthwork controls (i.e., erosion and sediment controls) need to be developed to protect this receptor.
	Offsite disposal	Environment (at disposal location)	<i>Possible</i> –Investigation data needed to reduce likelihood for disposal to an inappropriate facility (e.g., materials not meeting cleanfill criteria).

6.6 Further investigation

Prior to commencing redevelopment earthworks at North Block 3, the following ground contamination investigation should be undertaken:

- *(Before development (bulk) earthworks):*
 - Broad acreage sampling of surficial soils for metal and/or OCPs residues. Main purpose of this exercise is to identify options for the offsite disposal of soils if surplus to the project needs and to inform the type of erosion and sediment controls to protect the environment (construction and operational).
 - Targeted investigation and sampling at the area of raised ground at the north-west corner of this block to identify if construction/demolition materials are present and if so, to develop controls for their appropriate handling, erosion and sediment controls and offsite disposal options (if required).

Principles for ground contamination investigation for the site development are presented in Section 7.

7 Ground Contamination Investigation and Accidental Discovery Procedures

7.1 Investigation

Ground contamination investigation work should be designed and implemented following CLMG #5² and Asbestos in Soil Guidelines³. The SQEP scoping investigation work must consider and articulate their reasoning for the observation and sampling densities used and selection of assessment criteria for the CoCs (refer to Sections 3.6, 4.6, 5.6 and 6.6).

With respect to laboratory testing data, the following assessment criteria are considered appropriate; other criteria may also be considered necessary by the SQEP at the time of undertaking investigation work:

- Land use criteria based on the NESCS⁴ and documents incorporated by reference and Asbestos in Soil Guidelines:
 - Standard residential (based on 10% home grown produce consumption).¹⁴
 - Construction worker – Proxy industrial/commercial land use.
- Offsite disposal:
 - Published background levels¹⁵ as a proxy for disposal of materials sent offsite as cleanfill.
 - Acceptance criteria for managed fills located in proximity to the site including, but not limited to:
 - o Plantation Road, Hororata.
 - o Leggett Road, Templeton.
 - o Wheatsheaf Quarry, Rolleston.
 - o Selwyn Quarries, Templeton.
 - (If results exceed the above criteria) – Class A landfill assessment criteria as an initial screening for disposal to Kate Valley Landfill.

Investigation reports should reference this PSI as part of their rationale detailing the scope of investigation work undertaken. Investigation report contents should be based on guidance in CLMG #1¹.

7.2 Accidental discovery procedures (ADP)

Under separate cover¹⁶, an ADP document has been prepared, which outlines to contractors undertaking earthworks on site the controls and procedures to implement if suspect ground contamination is encountered (e.g., staining, buried waste materials). This includes who to contact for more assistance and initial measures to manage the hazards of the suspect materials to human health and the environment, to reduce risk of cross-contaminating materials (list not exhaustive).

7.3 Hazardous building materials – pre-demolition survey

Before commencing demolition of structures on site (primarily the dwelling – South Block and the barn – North Block 3) a suitable invasive pre-demolition type survey needs to be completed to identify if hazardous building materials, including ACM¹⁷, asbestos dust, electrical switch gear containing polychlorinated bi-phenols, fluorescent light tubes containing mercury (list not exhaustive). The survey

¹⁴ The NESCS does not include assessment criteria for a 'medium density' residential land use (see Section 1.1), so investigation data shall be compared with the more conservative standard residential land use criteria in the first instance.

¹⁵ see <https://opendata.canterburymaps.govt.nz/datasets/ecan::soil-trace-elements-level-2/about>.

¹⁶ T+T ref. 1019317.1000 (v2) ADP – Momentum Land Living, Kaiapoi (Nov 2023).

¹⁷ see WorkSafe New Zealand – Good Practice Guidelines – Conducting Asbestos Surveys, (2016).

findings can be used by the demolition contractor to plan and undertake their work in accordance with the applicable workplace health and safety (e.g. the Asbestos Regulations) and environmental regulations. A part of this process will be planning and undertaking demolition work in such a manner that they do not result in ground contamination by hazardous building materials (e.g., allowing fragments of ACM sheet to fall onto the ground, become entrained in the ground).

8 Applicability

This report has been prepared for the exclusive use of our client Momentum Land Ltd, with respect to the particular brief given to us and it may not be relied upon in other contexts or for any other purpose, or by any person other than our client, without our prior written agreement.

We understand and agree that our client will submit this report as part of an application for resource consent for the rezoning and future re development of the site, and that Waimakariri District Council and/or Environment Canterbury as the consenting authority will use this report for the purpose of assessing that application.


Tonkin & Taylor Ltd
Environmental and Engineering Consultants

Report prepared by:

Authorised for Tonkin & Taylor Ltd by:


.....

Mark Morley
Environmental Consultant


.....

Anna Sleight
Project Director

Technical review by


.....

Sarah Schiess
Expertise Director

mddm

\\ttgroup.local\corporate\christchurch\tt projects\1019317\1019317.1000\issueddocuments\psi_momentum land kaiapoi_dec 2023_v4.docx

Appendix A South Block

- **Historical aerial photographs.**
- **LLUR statement.**
- **Site photographs.**

Historical aerial photographs (all, north at top of image)



Block 1 – c. 1940 to 1944.



Block 1 – c. 1965 – 1969.



Block 1 – c. 1985 – 1989.



Block 1 – c. 2010 – 2014.



Block 1 – November 2021.



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 from our Listed Land Use Register (LLUR). The LLUR holds information about sites that have been used or are currently used for activities which have the potential to cause contamination.

The LLUR statement shows the land parcel(s) you enquired about and provides information regarding any potential LLUR sites within a specified radius.

Please note that if a property is not currently registered 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 database 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; additional relevant information may be held in other files (for example consent and enforcement files).

Please contact Environment Canterbury if you wish to discuss the contents of this property statement.

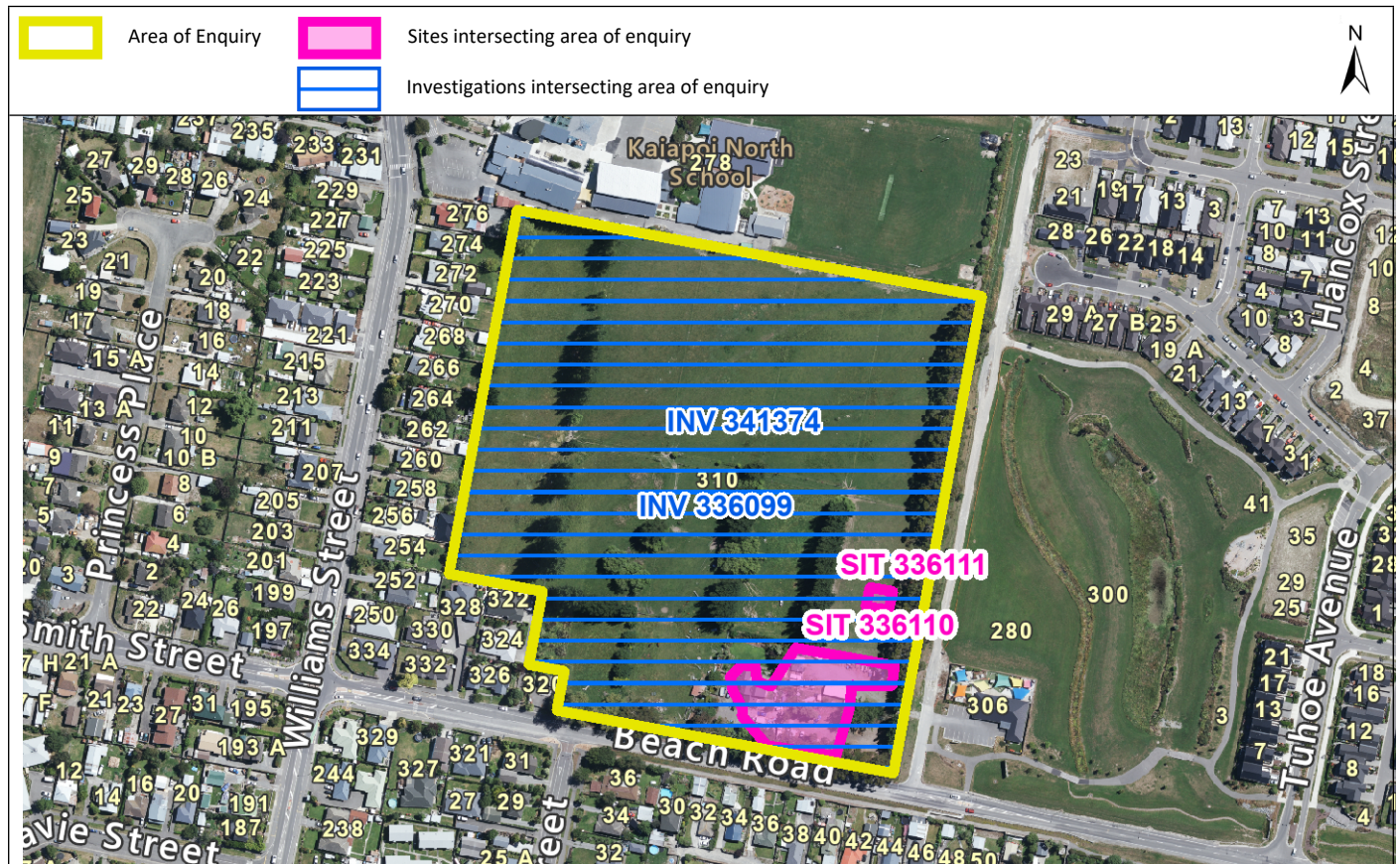
Yours sincerely

Contaminated Sites Team

Property Statement from the Listed Land Use Register

Visit ecan.govt.nz/HAIL for more information or contact Customer Services at ecan.govt.nz/contact/ and quote ENQ361743

Date generated: 28 November 2023
Land parcels: Lot 2 DP 83191



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.

Sites at a glance

 Sites within enquiry area

Site number	Name	Location	HAIL activity(s)	Category
336110	310 Beach Road, Kaiapoi	310 Beach Road, Kaiapoi	E1 - Asbestos products manufacture or disposal; G4 - Scrap yards; l - Any other land;	Yet to be reviewed
336111	310 Beach Road, Kaiapoi	310 Beach Road, Kaiapoi	G5 - Waste disposal to land;	Verified HAIL

More detail about the sites

Site 336110: 310 Beach Road, Kaiapoi (Intersects enquiry area.)

Category: Yet to be reviewed

Definition: Investigation reports have been received for this site, but we have not yet reviewed them.

Location: 310 Beach Road, Kaiapoi
Legal description(s): Lot 2 DP 83191

HAIL activity(s):	Period from	Period to	HAIL activity
	1980	Present	Asbestos products manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition
	~2010	Present	Scrap yards including automotive dismantling, wrecking or scrap metal yards
			Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment

Notes:



Investigations:

INV 336099 **Preliminary Site Investigation (Ground Contamination) – Moore Land, 310 Beach Road, Kaiapoi**
Tonkin and Taylor Ltd - Preliminary Site Investigation
1 Sep 2022

Summary of investigation(s):

Environment Canterbury has received a Preliminary Site Investigation report that includes all or part of the property you have selected.

A Preliminary Site Investigation seeks to identify potential sources of contamination resulting from current and historical land uses.

The preliminary site investigation may not have found any potential sources of contamination on the property you have enquired about. Where potential sources of contamination have been identified, a site identification number (e.g. SIT 1234) and land uses from the Hazardous Activities and Industries List (HAIL) will be shown on your statement.

This investigation has not been summarised.

INV 341374 **Preliminary Site Investigation (Ground Contamination) – Moore Land, Kaiapoi**
Tonkin and Taylor Ltd - Preliminary Site Investigation
1 Feb 2023

Summary of investigation(s):

Environment Canterbury has received a Preliminary Site Investigation report that includes all or part of the property you have selected.

A Preliminary Site Investigation seeks to identify potential sources of contamination resulting from current and historical land uses.

The preliminary site investigation may not have found any potential sources of contamination on the property you have enquired about. Where potential sources of contamination have been identified, a site identification number (e.g. SIT 1234) and land uses from the Hazardous Activities and Industries List (HAIL) will be shown on your statement.

This investigation has not been summarised.

Site 336111: 310 Beach Road, Kaiapoi (Intersects enquiry area.)

Category: Verified HAIL
Definition: The land-use / HAIL history has been confirmed.

Location: 310 Beach Road, Kaiapoi
Legal description(s): Lot 2 DP 83191

HAIL activity(s):	Period from	Period to	HAIL activity
	~2019		Waste disposal to land (excluding where biosolids have been used as soil conditioners)

Notes:



Investigations:

There are no investigations associated with this site.

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.

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



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.

¹The 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.

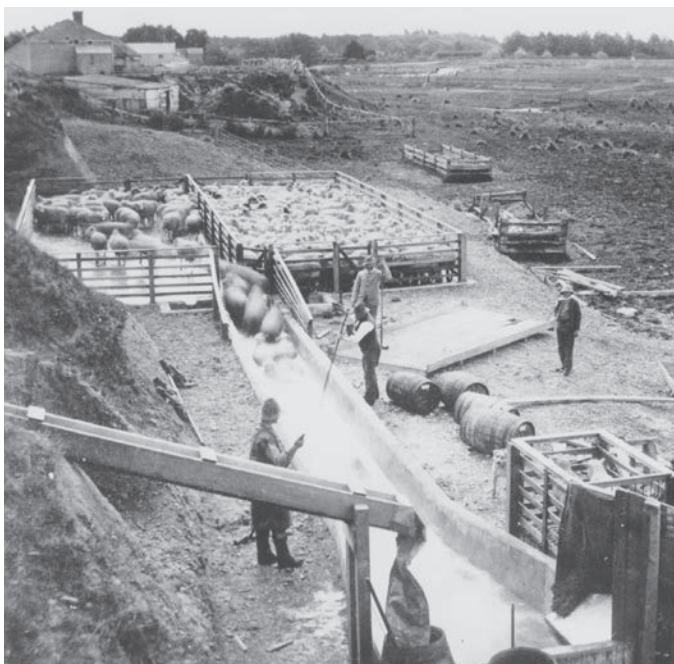
You may choose to have your property further investigated for your own peace of mind, or because you want to do one of the activities covered by the National Environmental Standard for Assessing and Managing Contaminants in Soil. Your district or city council will provide further information.

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.



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.)

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.

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)



Everything is connected

Promoting quality of life through balanced resource management.

www.ecan.govt.nz

E13/101

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

Site walkover observations (December 2021 and August 2022)



A1 – north east corner of Blok 1 (looking south-westerly). Note drain in foreground.



A2 – dwelling at 310 Beach Road - construction materials include suspect ACMs.



A3 – south-eastern corner of Block 1, car and car part storage (Beach Road to right of frame).



A4 – miscellaneous material storage at rear of garage outbuilding, Block 1 (Beach Road to left of frame).



A5 – oil storage at garage outbuilding, Block 1. Note suspect ACM faux wood effect cladding.



A6 – example of localised oil spill near dwelling, Block 1.



A7 – example of agricultural shed located in the approximate centre of Block 1.



A8 – Soil stockpile located in south-east corner of Block 1.

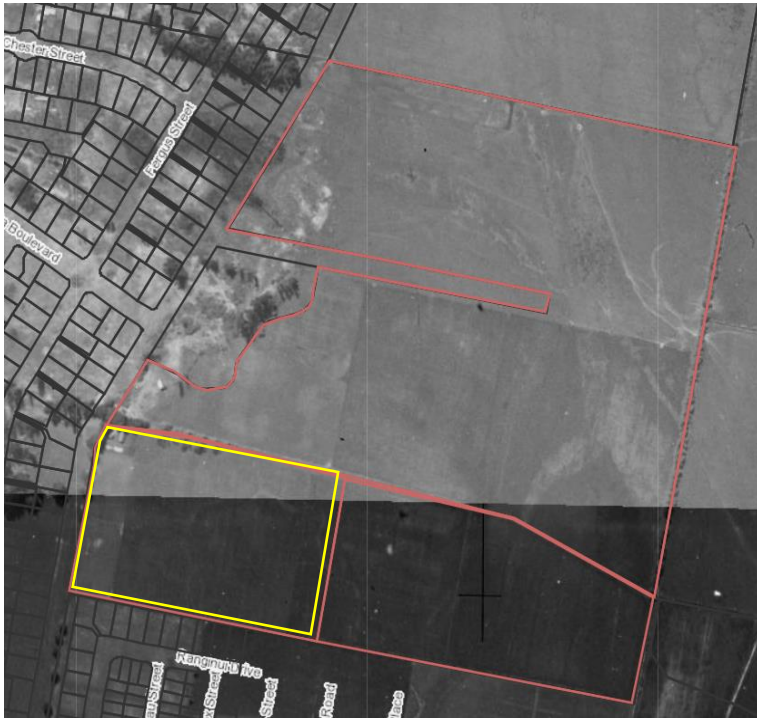


A9 – Shed and livestock pens west of the driveway.

Appendix B North Block 1

- **Historical aerial photographs.**
- **LLUR statement.**
- **Site photographs.**

Historical aerial photographs (all, north at top of image)



Block 2 – c. 1940 to 1944.



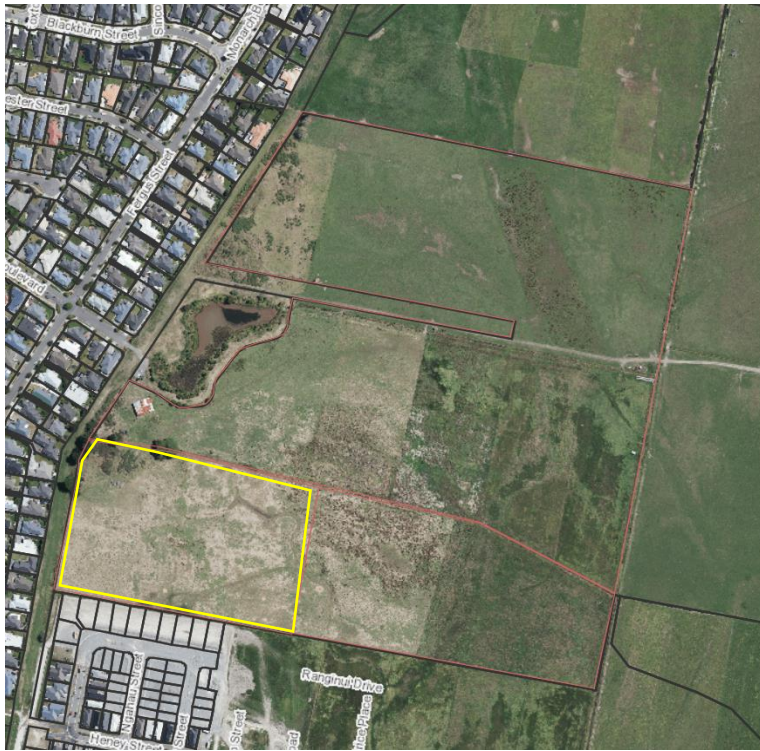
Block 2 – c. 1965 – 1969.



Block 2 – c. 1990 - 1994.



Block 2 – c. 2004.



Block 2 – November 2021.



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 from our Listed Land Use Register (LLUR). The LLUR holds information about sites that have been used or are currently used for activities which have the potential to cause contamination.

The LLUR statement shows the land parcel(s) you enquired about and provides information regarding any potential LLUR sites within a specified radius.

Please note that if a property is not currently registered 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 database 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; additional relevant information may be held in other files (for example consent and enforcement files).

Please contact Environment Canterbury if you wish to discuss the contents of this property statement.

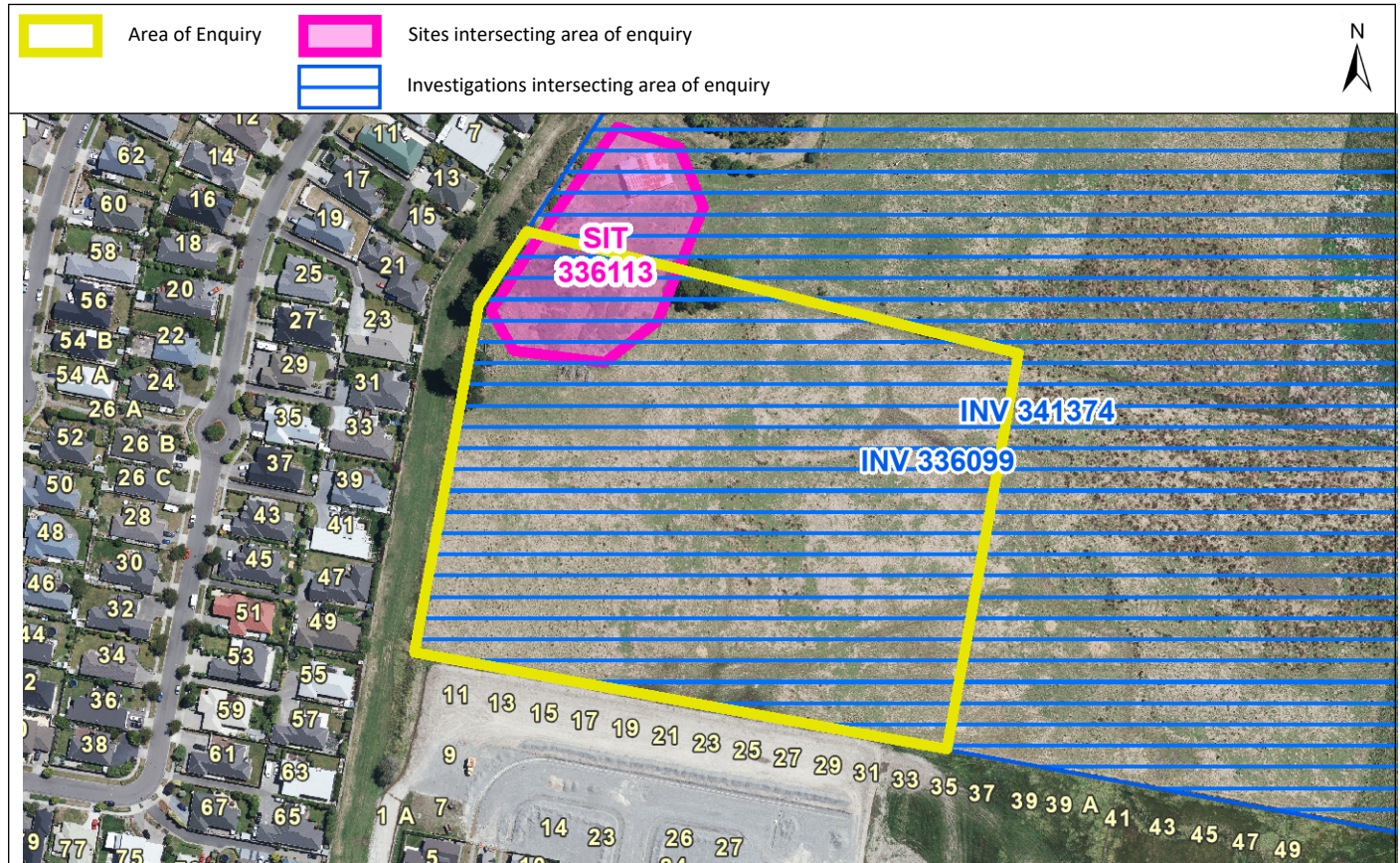
Yours sincerely

Contaminated Sites Team

Property Statement from the Listed Land Use Register

Visit ecan.govt.nz/HAIL for more information or contact Customer Services at ecan.govt.nz/contact/ and quote ENQ361766

Date generated: 28 November 2023
Land parcels: Lot 2 DP 4532



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.

Sites at a glance

 Sites within enquiry area

Site number	Name	Location	HAIL activity(s)	Category
336113	177 Ferry Road, Kaiapoi	177 Ferry Road, Kaiapoi	G3 - Landfill sites;	Yet to be reviewed

More detail about the sites

Site 336113: 177 Ferry Road, Kaiapoi (Intersects enquiry area.)

Category: Yet to be reviewed
Definition: Investigation reports have been received for this site, but we have not yet reviewed them.

Location: 177 Ferry Road, Kaiapoi
Legal description(s): Lot 2 DP 4532, Lot 5 DP 313322

HAIL activity(s):	Period from	Period to	HAIL activity

~2000	Present	Landfill sites
-------	---------	----------------

Notes:



Investigations:

INV 336099 **Preliminary Site Investigation (Ground Contamination) – Moore Land, 310 Beach Road, Kaiapoi**
 Tonkin and Taylor Ltd - Preliminary Site Investigation
 1 Sep 2022

Summary of investigation(s):

Environment Canterbury has received a Preliminary Site Investigation report that includes all or part of the property you have selected.

A Preliminary Site Investigation seeks to identify potential sources of contamination resulting from current and historical land uses.

The preliminary site investigation may not have found any potential sources of contamination on the property you have enquired about. Where potential sources of contamination have been identified, a site identification number (e.g. SIT 1234) and land uses from the Hazardous Activities and Industries List (HAIL) will be shown on your statement.

This investigation has not been summarised.

INV 341374 **Preliminary Site Investigation (Ground Contamination) – Moore Land, Kaiapoi**
 Tonkin and Taylor Ltd - Preliminary Site Investigation
 1 Feb 2023

Summary of investigation(s):

Environment Canterbury has received a Preliminary Site Investigation report that includes all or part of the property you have selected.

A Preliminary Site Investigation seeks to identify potential sources of contamination resulting from current and historical land uses.

The preliminary site investigation may not have found any potential sources of contamination on the property you have enquired about. Where potential sources of contamination have been identified, a site identification number (e.g. SIT 1234) and land uses from the Hazardous Activities and Industries List (HAIL) will be shown on your statement.

This investigation has not been summarised.

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.

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



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.

¹The 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.



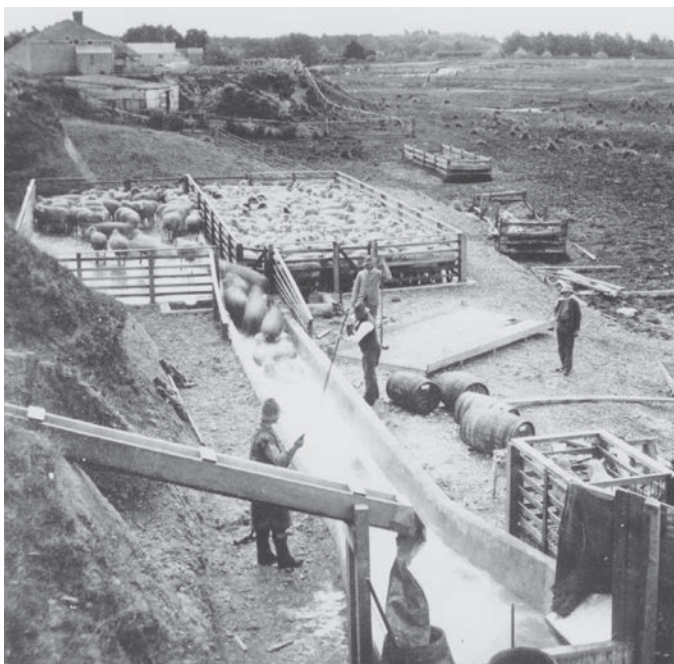
I think my site category is incorrect – how can I change it?

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)



Everything is connected

Promoting quality of life through balanced resource management.

www.ecan.govt.nz

E13/101

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

Site walkover observations (December 2021 and August 2022)



B1 – western half of Block 2, looking westerly



B2 – central and eastern parts of Block 2, looking northerly

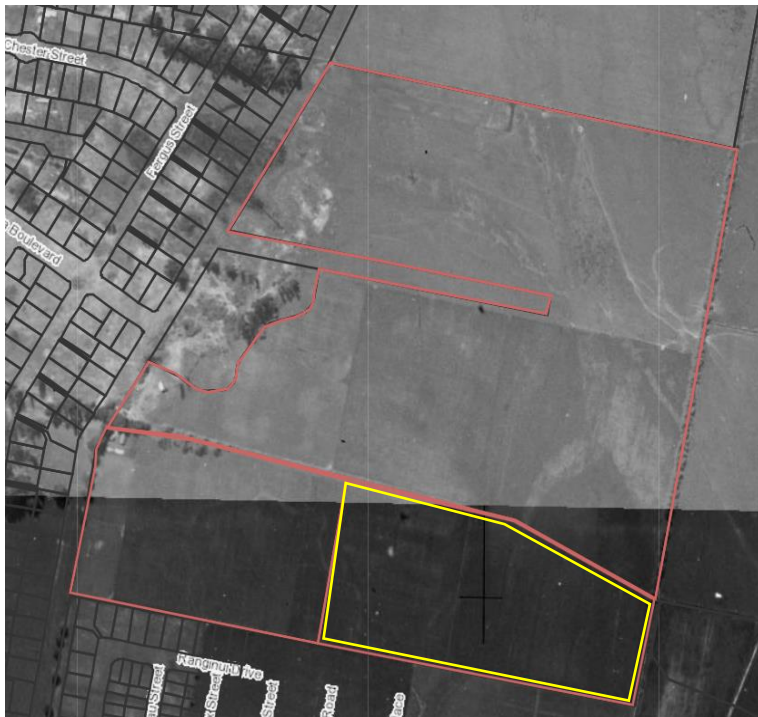


A3 – raised ground at north-western corner of Block 2, looking easterly.

Appendix C North Block 2

- **Historical aerial photographs.**
- **LLUR statement.**
- **Site photographs.**

Historical aerial photographs (all, north at top of image)



Block 2 – c. 1940 to 1944.



Block 2 – c. 1965 – 1969.



Block 2 – c. 1990 - 1994.



Block 2 – c. 2004.



Block 2 – November 2021.



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 from our Listed Land Use Register (LLUR). The LLUR holds information about sites that have been used or are currently used for activities which have the potential to cause contamination.

The LLUR statement shows the land parcel(s) you enquired about and provides information regarding any potential LLUR sites within a specified radius.

Please note that if a property is not currently registered 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 database 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; additional relevant information may be held in other files (for example consent and enforcement files).

Please contact Environment Canterbury if you wish to discuss the contents of this property statement.

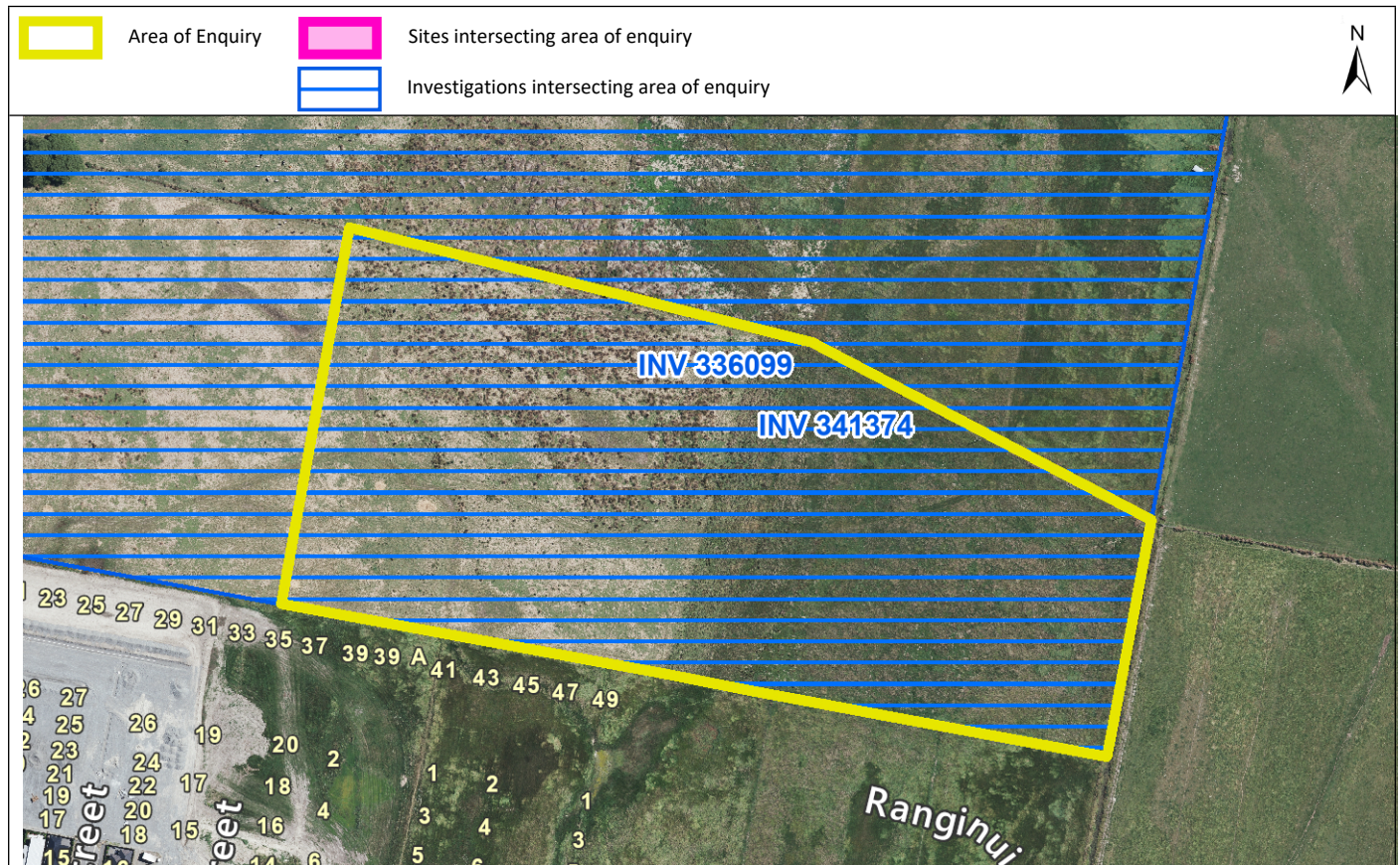
Yours sincerely

Contaminated Sites Team

Property Statement from the Listed Land Use Register

Visit ecan.govt.nz/HAIL for more information or contact Customer Services at ecan.govt.nz/contact/ and quote ENQ361785

Date generated: 28 November 2023
Land parcels: Lot 1 DP 5010



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.

Sites at a glance

 Sites within enquiry area

There are no sites associated with the area of enquiry.

More detail about the sites

There are no sites associated with the area of enquiry.

 Nearby investigations of interest

INV 336099 Preliminary Site Investigation (Ground Contamination) – Moore Land, 310 Beach Road, Kaiapoi
Tonkin and Taylor Ltd - Preliminary Site Investigation
1 Sep 2022

Summary of investigation(s):

Environment Canterbury has received a Preliminary Site Investigation report that includes all or part of the property you have selected.

A Preliminary Site Investigation seeks to identify potential sources of contamination resulting from current and historical land uses.

The preliminary site investigation may not have found any potential sources of contamination on the property you have enquired about. Where potential sources of contamination have been identified, a site identification number (e.g. SIT 1234) and land uses from the Hazardous Activities and Industries List (HAIL) will be shown on your statement.

This investigation has not been summarised.

INV 341374 **Preliminary Site Investigation (Ground Contamination) – Moore Land, Kaiapoi**
Tonkin and Taylor Ltd - Preliminary Site Investigation
1 Feb 2023

Summary of investigation(s):

Environment Canterbury has received a Preliminary Site Investigation report that includes all or part of the property you have selected.

A Preliminary Site Investigation seeks to identify potential sources of contamination resulting from current and historical land uses.

The preliminary site investigation may not have found any potential sources of contamination on the property you have enquired about. Where potential sources of contamination have been identified, a site identification number (e.g. SIT 1234) and land uses from the Hazardous Activities and Industries List (HAIL) will be shown on your statement.

This investigation has not been summarised.

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.

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



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.

¹The 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.



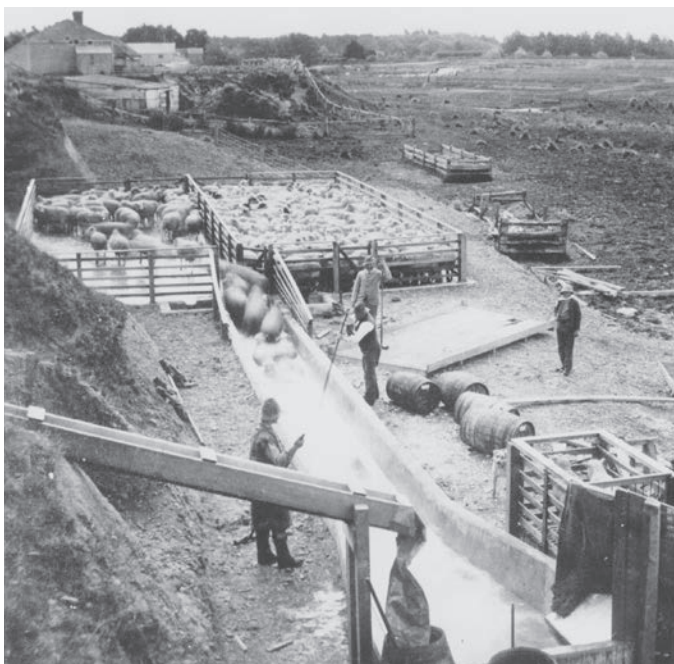
I think my site category is incorrect – how can I change it?

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

Site walkover observations (December 2021 and August 2022)



C1 – western half of Block 3, looking northerly

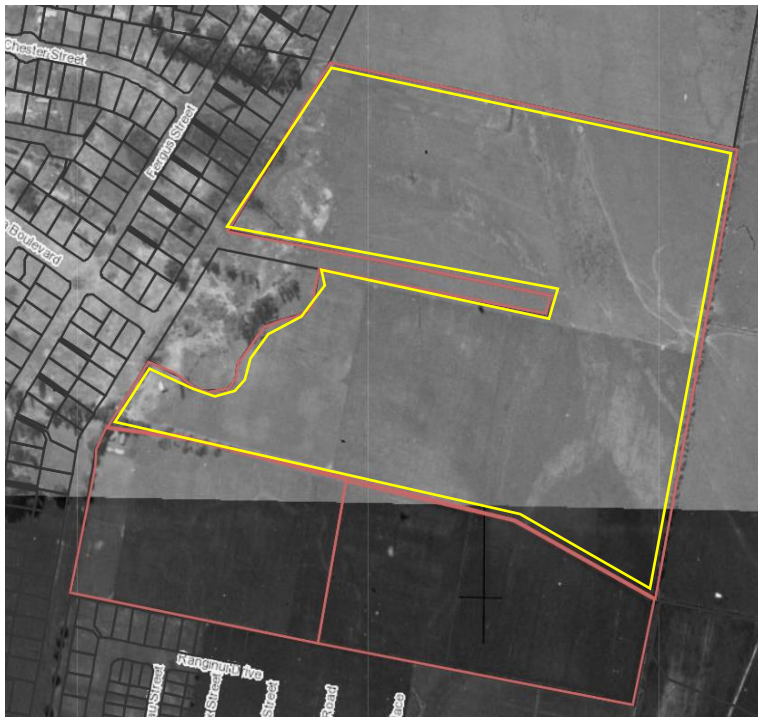


C2 – central and eastern parts of Block 3, looking north-easterly (taken from Beach Grove development)

Appendix D North Block 3

- **Historical aerial photographs.**
- **LLUR statement.**
- **Site photographs.**

Historical aerial photographs (all, north at top of image)



Block 4 – c. 1940 to 1944.



Block 4 – c. 1965 – 1969.



Block 4 – c. 1990 - 1994.



Block 4 – c. 2004.



Block 4 – November 2021.



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 from our Listed Land Use Register (LLUR). The LLUR holds information about sites that have been used or are currently used for activities which have the potential to cause contamination.

The LLUR statement shows the land parcel(s) you enquired about and provides information regarding any potential LLUR sites within a specified radius.

Please note that if a property is not currently registered 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 database 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; additional relevant information may be held in other files (for example consent and enforcement files).

Please contact Environment Canterbury if you wish to discuss the contents of this property statement.

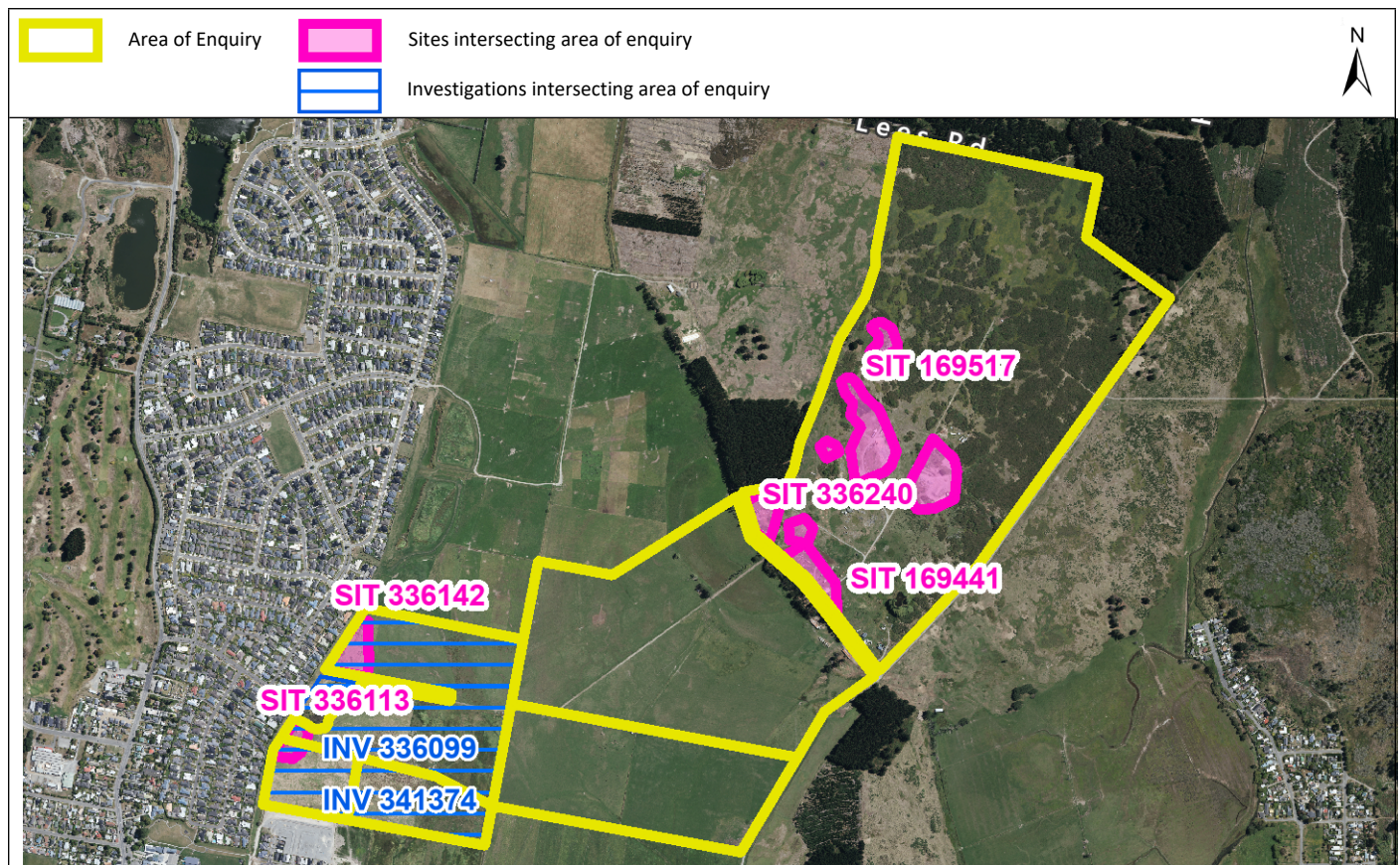
Yours sincerely

Contaminated Sites Team

Property Statement from the Listed Land Use Register

Visit ecan.govt.nz/HAIL for more information or contact Customer Services at ecan.govt.nz/contact/ and quote ENQ361800

Date generated: 28 November 2023
Land parcels: Lot 1 DP 5010
 Lot 2 DP 4532
 Lot 5 DP 313322
 Lot 2 DP 4102
 Lot 1 DP 4102



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.

Sites at a glance

 Sites within enquiry area

Site number	Name	Location	HAIL activity(s)	Category
169441	Lot 2 DP 4102, Kaiapoi	Lot 2 DP 4102, Kaiapoi	G4 - Scrap yards;	Not Investigated
169517	Lot 2 DP 4102, Kaiapoi	Lot 2 DP 4102, Kaiapoi	G5 - Waste disposal to land;	Not Investigated
336113	177 Ferry Road, Kaiapoi	177 Ferry Road, Kaiapoi	G3 - Landfill sites;I - Any other land;	Yet to be reviewed
336142	177 Ferry Road, Kaiapoi	177 Ferry Road, Kaiapoi	G3 - Landfill sites;	Verified HAIL
336240	170 Clifford Road, Kaiapoi	170 Clifford Road, Kaiapoi	G4 - Scrap yards;C2 - Gun clubs or rifle ranges;	Verified HAIL

More detail about the sites

Site 169441: Lot 2 DP 4102, Kaiapoi (Intersects enquiry area.)

Category: Not Investigated
Definition: Verified HAIL has not been investigated.

Location: Lot 2 DP 4102, Kaiapoi
Legal description(s): Lot 2 DP 4102

HAIL activity(s):	Period from	Period to	HAIL activity
	Unknown	Present	Scrap yards including automotive dismantling, wrecking or scrap metal yards

Notes:

17 Nov 2016 This record was created as part of the Waimakariri District Council 2016 HAIL identification project.
7 Jul 2017 Area defined from Unknown to Present aerial photographs. G4 - Scrap yards was noted in aerial photographs reviewed.



Investigations:

There are no investigations associated with this site.

Site 169517: Lot 2 DP 4102, Kaiapoi (Intersects enquiry area.)

Category: Not Investigated
Definition: Verified HAIL has not been investigated.

Location: Lot 2 DP 4102, Kaiapoi
Legal description(s): Lot 2 DP 4102

HAIL activity(s):	Period from	Period to	HAIL activity
	Unknown	Present	Waste disposal to land (excluding where biosolids have been used as soil conditioners)

Notes:

24 Nov 2016 This record was created as part of the Waimakariri District Council 2016 HAIL identification project.
7 Jul 2017 Area defined from Unknown to Present aerial photographs. G5 - Waste disposal to land was noted in aerial photographs reviewed.



Investigations:

There are no investigations associated with this site.

Site 336113: 177 Ferry Road, Kaiapoi (Intersects enquiry area.)

Category: Yet to be reviewed
Definition: Investigation reports have been received for this site, but we have not yet reviewed them.

Location: 177 Ferry Road, Kaiapoi
Legal description(s): Lot 2 DP 4532, Lot 5 DP 313322

HAIL activity(s):	Period from	Period to	HAIL activity
	~2000	Present	Landfill sites
	1940s	Present	Any other land that has been subject to the intentional or accidental release of a hazardous substance in sufficient quantity that it could be a risk to human health or the environment

Notes:

Investigations:

INV 336099 **Preliminary Site Investigation (Ground Contamination) – Moore Land, 310 Beach Road, Kaiapoi**
Tonkin and Taylor Ltd - Preliminary Site Investigation
1 Sep 2022

Summary of investigation(s):

Environment Canterbury has received a Preliminary Site Investigation report that includes all or part of the property you have selected.

A Preliminary Site Investigation seeks to identify potential sources of contamination resulting from current and historical land uses.

The preliminary site investigation may not have found any potential sources of contamination on the property you have enquired about. Where potential sources of contamination have been identified, a site identification number (e.g. SIT 1234) and land uses from the Hazardous Activities and Industries List (HAIL) will be shown on your statement.

This investigation has not been summarised.

INV 341374 **Preliminary Site Investigation (Ground Contamination) – Moore Land, Kaiapoi**
Tonkin and Taylor Ltd - Preliminary Site Investigation
1 Feb 2023

Summary of investigation(s):

Environment Canterbury has received a Preliminary Site Investigation report that includes all or part of the property you have selected.

A Preliminary Site Investigation seeks to identify potential sources of contamination resulting from current and historical land uses.

The preliminary site investigation may not have found any potential sources of contamination on the property you have enquired about. Where potential sources of contamination have been identified, a site identification number (e.g. SIT 1234) and land uses from the Hazardous Activities and Industries List (HAIL) will be shown on your statement.

This investigation has not been summarised.

Site 336142: 177 Ferry Road, Kaiapoi (Intersects enquiry area.)

Category: Verified HAIL
Definition: The land-use / HAIL history has been confirmed.

Location: 177 Ferry Road, Kaiapoi
Legal description(s): Lot 5 DP 313322

HAIL activity(s):	Period from	Period to	HAIL activity
	1990s	Present	Landfill sites

Notes:

Investigations:

There are no investigations associated with this site.

Site 336240: 170 Clifford Road, Kaiapoi (Intersects enquiry area.)

Category: Verified HAIL
Definition: The land-use / HAIL history has been confirmed.

Location: 170 Clifford Road, Kaiapoi
Legal description(s): Lot 2 DP 4102

HAIL activity(s):	Period from	Period to	HAIL activity
	Unknown	Present	Scrap yards including automotive dismantling, wrecking or scrap metal yards
	Pre 2000s	Present	Gun clubs or rifle ranges, including clay target clubs that use lead

Notes:**Investigations:**

There are no investigations associated with this site.

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.

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



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.

¹The 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.



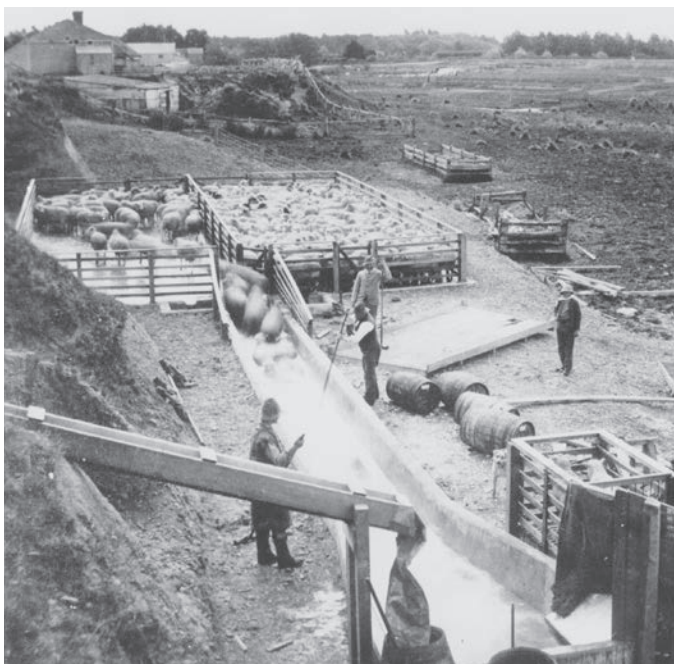
I think my site category is incorrect – how can I change it?

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)



Everything is connected

Promoting quality of life through balanced resource management.

www.ecan.govt.nz

E13/101

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

Site walkover observations (December 2021 and August 2022)



D1 – Block 4, looking easterly from north-west corner



D2 – Barn located in south-western corner of Block 4.



D3 – Evidence of filling, western boundary of Block 4, looking easterly.



D4 – Council's water treatment plant located on western edge of Block 4, looking south-easterly



D5 – Miscellaneous materials present on western part of Block 4, looking south-easterly

www.tonkintaylor.co.nz

