



13 November 2024

✦ Mary McConnell C/-
Jon Trewin
Policy Planner
Selwyn District Council
PO Box 90
ROLLESTON 7643

Dear Mary

ROLLESTON ACCESS IMPROVEMENTS (PACKAGE 1) – REVIEW OF CONTAMINATED LAND REPORTS

1.0 Introduction

Pattle Delamore Partners Limited (PDP) has been engaged by the Selwyn District Council (i.e., SDC) to undertake a contaminated land peer review of contaminated land investigation reports that relate to New Zealand Transport Agency/Waka Kotahi (i.e., NZTA) *Notice of Requirement for Alteration of a Designation s181(1) Resource Management Act 1991* (i.e., NOR), issued October 2024.

The NOR document provides an overview of NZTA's proposal to undertake improvement works at the intersections of Dunns Crossing Road and Main South Road (SH1), and Runners Road and Walkers Road (i.e., 'Package 1'). Our understanding of the location and extent of the area of interest (i.e., 'the site' or 'investigation area'), is based on the NZTA NOR document provided by SDC in email dated 4 November 2024; specifically, the *Land Designation Plan Package 1* in the NOR document.

1.1 Background

The site is comprised of the SH1 roadway and reserve, Dunns Crossing Road, Runners Road, and Walkers Road, and occupies part of the railway corridor.

Specific to SDC's request, two reports have been identified for review:

- ✦ **Stantec New Zealand (2023)** – *Rolleston Access Improvements Preliminary Site Investigation* – prepared for NZTA.
- ✦ **Beca Limited (Beca) (2024)** – *Detailed Site Investigation (Contamination) (Package 1): Rolleston Access Improvements (Package 1)* – prepared for NZTA.

For additional context and completeness, we have also consulted the Assessment of Environmental Effects (AEE) report issued by Beca (30 October 2024) and the Consent Order issued on 31 October 2024. Based on the AEE, 'Package 1'¹ comprises *the construction and operation of a new roundabout and*

¹ Package 1 is part of a wider suite of NZTA coordinated works along approximately 6.7 km of SH1 access ways near Rolleston that will enable improvement of safety and access along SH1 with works comprised of upgrades.

associated improvements at the intersections of SH1 and Dunns Crossing Road/Walker Road and associated works.

Additional information from the Beca (2024) DSI report indicates that Package 1 also includes the installation of a cycling and walking underpass, new entry and exit lanes, and stormwater infrastructure (i.e., stormwater soakage basins). Based on the nature of the proposed works under Package 1, significant ground disturbance will occur.

1.2 Purpose

The purpose of this letter is to provide SDC with feedback from PDP's peer review of the two contamination assessment reports listed above (refer to Section 1.1) that relate to NZTA NOR Package 1. SDC wish to understand if there are any information gaps arising from the Stantec and Beca environmental reports that need to be highlighted in Council's Request for Information (RFI) for NOR Package 1.

While we have fully read both reports, only key observations or aspects have been commented on in this letter. Specifically, this review has assessed both reports in terms of:

- ✧ General adherence to relevant contaminated land management guidelines for investigation and reporting (i.e., CLMG No. 5² and CLMG No.1³, respectively).
- ✧ Key findings and recommendations.
- ✧ Potential information gaps (if any) that may need to be addressed (i.e., from a contaminated land perspective) ahead of commencing Package 1 works.

This review does not provide comprehensive feedback on every aspect of the reports, nor does it highlight inconsequential reporting errors. We recommend that both reports are read for additional context.

2.0 Peer Review

2.1 Stantec New Zealand (2023) – Rolleston Access Improvements Preliminary Site Investigation

The Stantec PSI was undertaken on behalf of NZTA to identify any potential historical or current sources of contamination on land likely to be impacted as a result of Package 1 improvements at the site. Five areas along SH1 were identified in Figure 2-1 (Project Alignment figure) of the report:

- ✧ Walkers Road Alignment,
- ✧ Rolleston Drive Alignment,
- ✧ Railway Upgrade Alignment,
- ✧ Main South Road Alignment, and
- ✧ Hoskyns Road Alignment.

For this review, only information directly relevant to the Walkers Road Alignment has been reviewed as it relates directly to Package 1. All other named alignments are excluded. The extent covered by the Stantec PSI is consistent with the extent of Package 1 in the NZTA NOR document (October 2024).

² Ministry for the Environment (MfE), 2021. *Contaminated Land Management Guidelines No. 5: Site investigation and analysis of soils* (revised 2021).

³ Ministry for the Environment (MfE), 2021. *Contaminated Land Management Guidelines No. 1: Reporting on contaminated sites in New Zealand* (revised 2021).

The PSI, which was desk-based, included a review of council records (i.e., ECan's Listed Land Use Register/LLUR), readily available historical aerial photographs of the site, Google Maps, and Google Streetview. Stantec's review of ECan's LLUR and historical aerial photographs was used to determine whether any HAIL⁴ activities are associated with the site.

In relation to Package 1, Stantec identified eight potential HAIL activities and LLUR site number 2541 (i.e., directly relates to land northwest of Runners Road and Walkers Road (i.e., Rolleston Prison)):

- ✧ HAIL A10 – *Persistent pesticide bulk storage or use, including sport turfs, market gardens, orchards, glass houses or spray sheds;*
- ✧ HAIL A17 – *Storage tanks or drums for fuel, chemicals, or liquid waste;*
- ✧ HAIL C1 – *Explosive or ordnance production, maintenance, dismantling, disposal, bulk storage or repackaging;*
- ✧ HAIL E1 – *Asbestos products manufacture or disposal, including sites with buildings containing asbestos products known to be in a deteriorated condition;*
- ✧ HAIL F6 – *Railway yards including goods handling yards, workshops, refuelling facilities or maintenance areas;*
- ✧ HAIL G3 – *Landfill sites;*
- ✧ HAIL G5 – *Waste disposal to land (excluding where biosolids have been used as soil conditioners); and*
- ✧ HAIL I – *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.*

Based on the Stantec PSI report (Table 4-1 *Summary of identified HAIL sites*), numerous environmental investigations have occurred in the vicinity of the Package 1 works extent (west of Walkers Road and Dunns Road only).

PDP's supplementary review of ECan LLUR information found that the majority of those investigations appear to have been undertaken on the Rolleston Prison property between 2013 and 2021. A few other investigations have occurred immediately southwest of the Dunns Road and SH1 intersection. The LLUR statement generated on 11 November 2024 is attached to this letter and should be read for additional context.

The Stantec PSI did not identify any HAIL activities within the site extents, which is consistent with PDP's review of ECan's LLUR statement. As such, PDP has not obtained any additional investigation reports for inclusion in our review.

The Stantec PSI report recommended further investigation for the HAIL activities close to the Package 1 works extent (i.e., HAIL C1 and HAIL G5) at the northwest corner of Runners Road and Walkers Road. According to Stantec, this risk rating is related to the lack of clarity about the historical extents of HAIL C1 and HAIL G5 in relation to land likely to be disturbed during implementation of Package 1 (northwest of Runners Road and Walkers Road).

⁴ The Hazardous Activities and Industries List (HAIL) is a compilation of activities and industries that are considered likely to cause land contamination resulting from hazardous substance use, storage or disposal. The HAIL is intended to identify most situations in New Zealand where hazardous substances could cause, and in many cases have caused, land contamination

2.1.1 Stantec (2023) PSI - Review Summary/Discussion

The Stantec PSI report generally adhered to CLMG No.1 in terms of site history information review coverage, evaluation of discovered information, and final recommendations. We agree with the recommendation that the land nearest to the site extent northwest of Walkers Road and Runners Road required additional investigation to rule out any doubt about the potential presence of contamination.

Surficial soils in unpaved areas around railway and roading corridors are known sinks for persistent contaminants (e.g., heavy metals, asbestos and polycyclic aromatic hydrocarbons (PAH), etc.). In some instances, roading pavements have historically been treated with coal tar, which can hold elevated concentrations of PAH (e.g., benzo(a)pyrene, naphthalene, and pyrene) and can be highly toxic to human and environmental receptors. Road and railway corridors are not currently considered HAIL activities, nevertheless, the Stantec PSI report should have highlighted these potential sources of contaminants, especially considering that disturbance of roading material and land within the railway corridor will be required as part of Package 1 upgrade works.

Aside from the matter highlighted immediately above, no other remarkable gaps in information were identified from our review of the Stantec PSI report.

2.1.2 Beca Limited (Beca) (2024) – Detailed Site Investigation (Contamination) (Package 1): Rolleston Access Improvements (Package 1)

The Beca DSI was carried out on behalf of NZTA following the Stantec (2023) PSI. The overarching purpose of the Beca DSI (as per the DSI report), specifically in relation to the extents of Package 1 works, was to:

- ✧ Understand contamination characteristics in soil and groundwater within the proposed upgrade areas with the Package 1 extent.
- ✧ Determine the potential risk to human health and/or the environment posed by potential contaminants in soil.
- ✧ Comment on the applicability of the NESCS⁵ for the proposed Package 1 works.
- ✧ Comment on offsite soil disposal requirements and/or soil re-use.

Based on our review of the Beca DSI report, we have made the following observations:

- ✧ The DSI coverage area (Figure 1, Beca DSI report) for Package 1 was generally consistent with the extent shown in the NZTA NOR document (October 2024).
- ✧ The physical setting of the area relevant to Package 1 was adequately described in terms of current and surrounding land uses, topography, geology, hydrogeology, and potential environmental receptor sensitivity.
- ✧ The summary of current environmental information was adequate, including summarising the findings of the Stantec PSI (i.e., HAIL activities identified) and the acknowledgement of potentially relevant sources of contamination that are excluded from MfE HAIL list, for example railway and road corridors, which are potential sources of asbestos, heavy metals, and petroleum hydrocarbon-based contaminants (including PAHs).
- ✧ The rationale, scope, and sampling methodology were satisfactorily laid out and demonstrated due consideration for the Stantec (2023) PSI. Furthermore, preliminary conceptual site model development in the DSI report was robust, appropriately identifying potentially complete and

⁵ Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.

incomplete exposure pathways to direct the focus of the investigation (e.g., groundwater receptor – *incomplete pathway* vs construction workers – *potentially complete pathway*).

- ✧ Intrusive field work included the advancement of 16 machine dug test pits from the ground surface to 4 m below ground level (bgl) (**refer to DSI report, Table 3**) targeting key areas (e.g., carriageway and railway verges, stormwater management facilities, etc.). The DSI further included laboratory testing of 41 soil samples variously analysed for heavy metals, total petroleum hydrocarbons (TPH), PAH, asbestos, semi-volatile organic compounds, and cyanide⁶ (**refer to DSI report, Table 4**) at depths ranging from 0.1 m to 1.5 m (**refer to DSI, Appendix F**).
- ✧ The soil contaminant standards/guidelines used for comparison covered the protection of human health, terrestrial ecological receptors, published local soil background and/ambient concentrations, and the landfill waste acceptance criteria for Kate Valley Landfill.
- ✧ The DSI found that contaminants in soil posed a low risk to human health and the environment, with results either reported at less than the limit of laboratory detection or below the relevant soil contaminant standards/guidelines. Some contaminants (e.g., lead and zinc) were variously reported at concentrations above published local soil background concentrations, which means that the NESCS is applicable to the proposed work under the '*controlled activity*' status.

2.1.3 Beca (September 2024) - Review Summary/Discussion

PDP found the Beca DSI and the DSI report to be generally satisfactory in terms of adhering to the general guidelines provided under MfE CLMG No. 5 and CLMG No.1, respectively.

Based on the DSI soil test results, contaminants of concern do not appear to be present at concentrations that pose an unacceptable risk to human health and/or ecological receptors. Additionally, soils represented by the samples analysed are suitable for re-use on-site if needed (i.e., except for the discoloured soils observed in TP04 at greater than 1.0 m depth) or alternatively, could be disposed off-site to cleanfill (i.e., **soils at depths greater than 0.3 - 0.5 m only, according to the DSI report**).

Our review noted that the DSI included collecting soil samples from 0.1 to 1.5 m depth at 0.5 m increments (e.g., 0.1 m, 0.5 m, 1.0 m, etc.). Exceptions to this sampling pattern were noted where materials described as 'basecourse' and 'road surface material' were sampled at other intervals (e.g., 0.15 m, 0.3 m and 0.4 m; refer to DSI Appendix F), which is acceptable.

Given the history of the unpaved extents of the investigation area and surrounding land, we would expect that if contamination had occurred, it would have eventuated via surficial deposition. Therefore, we suggest that a higher sampling and analysis frequency in shallow soils (e.g., surface to 0.1 m, 0.2 m – 0.3, 0.4 m – 0.5 m, etc.) could have been a more beneficial investigation strategy for soils to approximately 0.6 m depth. Nevertheless, the Beca DSI demonstrated attention to significant visual or olfactory changes in lithology (e.g., TP04 observations and targeted testing), which is important if implementing a testing strategy that includes sample collection over greater vertical gaps within a test pit.

3.0 Conclusion

PDP has undertaken a review of two environmental reports (prepared by Stantec (2023) and Beca (2024), respectively) on behalf of SDC. Both reports directly relate to the NZTA's proposed Package 1 upgrade works in the roadway and reserve, Dunns Crossing Road, Runners Road, and Walkers Road and occupies part of the railway corridor.

⁶ Analysed in two soil samples based on the observation of blue/black coloured soils at location TP04 (refer to DSI, Appendix C).

The focus areas of the Stantec (2023) PSI and Beca (2024) DSI were well defined and generally consistent with the Package 1 extent defined in the NZTA (October 2024) NOR document. Both investigations were carried out in general accordance with the MfE CLMGs and the stated purpose and objectives defined by each investigation were adequately achieved.

We are mindful that given the inherent limitations of contaminated land investigations, the accidental discovery of contamination during the Package 1 upgrade earthworks cannot be ruled out. We agree with the Beca DSI report that the proposed development works (limited to the northwestern part of the site, i.e., north-west of Runners Road and Walkers Road intersection) are covered by the NESCS as a controlled activity, which allows implementation of an Environmental Management Plan (EMP) with stormwater, erosion and sediment control measures included.

The EMP should be prepared by a Suitably Qualified and Experienced Practitioner for contaminated land and should include protocols for handling the unexpected discovery of contamination in the event it occurs (i.e., an accidental discovery protocol). Based on our findings, no additional environmental investigations are required ahead of the initiation of the Package 1 works, unless the currently defined area changes significantly.

In conclusion, the implementation of the NESCS and the final determination of the activity status (i.e., 'controlled activity') in relation to proposed land use within NOR Package 1 falls within the remit of the SDC. PDP did not identify any information gaps in the Stantec and Beca environmental reports that need to be identified in SDC's RFI for NOR Package 1.

4.0 Limitations

This peer review letter has been prepared by Pattle Delamore Partners Limited (PDP) on the basis of contaminated land investigation reports and relevant information provided by Selwyn District Council, specifically in relation to NZTA NOR Package 1 upgrade works at the intersections of SH1, Dunns Road, Walkers Road, and Runners Road, Selwyn District. PDP has not independently verified the provided information and has relied upon it being accurate and sufficient for use by PDP in preparing this letter. PDP accepts no responsibility for errors or omissions in, or the currency or sufficiency of, the provided information.

This letter has been prepared by PDP on the specific instructions of Selwyn District Council for the limited purposes stated in the letter. PDP accepts no liability if the letter is used for a different purpose or if it is used or relied on by any other person. Any such use or reliance will be solely at their own risk.

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Yours faithfully

PATTLE DELAMORE PARTNERS LIMITED

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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.

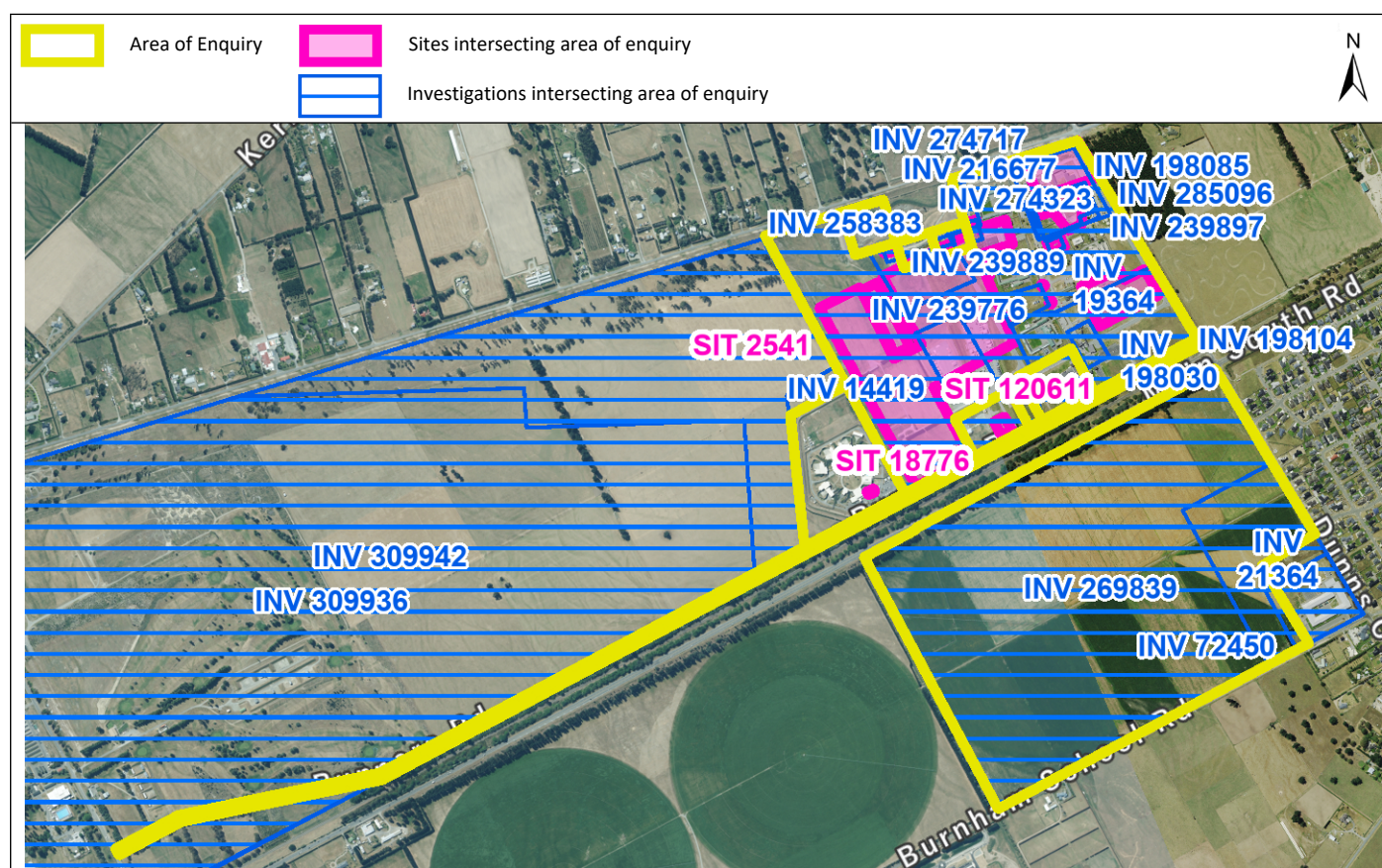
Yours sincerely

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 ENQ396820

Date generated: 10 November 2024
Land parcels: Section 2 SO 480906
Section 1 SO 14371
Section 2 SO 14371
Lot 1 DP 67195
Lot 6 DP 67195
Section 1 SO 308984
Lot 4 DP 67195
Lot 2 DP 67195



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
2541	Rolleston Prison	cnr Walkers, Runners & Two Chain Road, Rolleston	A17 - Storage tanks or drums for fuel, chemicals or liquid waste;C1 - Explosive or ordinance production, bulk storage, disposal;G5 - Waste disposal to land;A10 - Persistent pesticide bulk storage or use;I - Any other land;E1 - Asbestos products	Partially Investigated

			manufacture or disposal;G3 - Landfill sites;	
18776	Te Puna Wai o Tuhinapo Justice Residence, Runners Road, Burnham	108 Runners Road, Burnham	A17 - Storage tanks or drums for fuel, chemicals or liquid waste;	Not Investigated
120611	Section 1 SO 14371, Rolleston	Section 1 SO 14371, Rolleston	A10 - Persistent pesticide bulk storage or use;	Not Investigated

More detail about the sites

Site 2541: Rolleston Prison (Intersects enquiry area.)

Category: Partially Investigated
Definition: Verified HAIL has been partially investigated.

Location: cnr Walkers, Runners & Two Chain Road, Rolleston
Legal description(s): Lot 2 DP 67195, Lot 4 DP 67195, Lot 6 DP 67195

HAIL activity(s):

Period from	Period to	HAIL activity
post 1996	Current	Storage tanks or drums for fuel, chemicals or liquid waste
?	?	Explosive or ordnance production, maintenance, dismantling, disposal, bulk storage or re-packaging
Unknown	Unknown	Waste disposal to land (excluding where biosolids have been used as soil conditioners)
Pre-1984	Present	Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds
Unknown	Unknown	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
		Asbestos products manufacture or disposal including sites with buildings containing asbestos products known to be in a deteriorated condition
1950	1990	Landfill sites

Notes:

13 Aug 2001 Information from land use resource consent CRC962432. Site accommodates two above ground storage tanks (ASTs), each 3,400 litre capacity, to store diesel fuel for heating.

1 Aug 2019 A second Detailed Site Investigation (DSI) was undertaken due to concern that previously unidentified asbestos contamination had become entrained in the topsoil and redistributed at the Soil Dump Zone. According to the sampling in the DSI, areas of the soil are contaminated with asbestos in the Soil Dump Zone and Zones 1 and 2. Therefore this area has been given the HAIL activity E1 - Asbestos products manufacture or disposal.

The Site Validation Report (SVR) mentions the asbestos-contaminated soil was excavated and disposed off-site at Kate Valley Landfill. Validation testing in the SVR indicates that the asbestos contamination within the area has been appropriately remediated.



Investigations:

INV 14419 Department of Corrections - Rolleston Prison Housing - Yard Assessment
GHD Limited - Detailed Site Investigation
31 Jan 2013

Summary of investigation(s):

Site history: The site is currently Rolleston Prison. This use commenced in 1958, and prior to this the property was an army detention centre. The prison was investigating options for the construction of a new yard, which will be used to refurbish houses. Part of proposed yard area 1 is partially located across an area formerly used for disposal of sewage to land, and currently used for horticulture. The second proposed yard area is reportedly located in an area with no known HAIL activities.

Investigation objective: A soil sampling investigation was undertaken to assess whether this proposed location for the new yard contained any contamination. Soil samples were collected from surface soils at 20 locations. 18 of the sample locations were on a grid across the proposed yard area,

and two additional samples were collected from outside the known HAIL area to provide a comparison with local background concentrations. The 20 samples were analysed for a suite of 7 metals, and organochlorine pesticides.

Results: All of the soil samples contained concentrations of metals within recorded background concentrations for this area. All of the samples collected from within the horticulture area contained detectable levels of Aldrin, an organochlorine pesticide, however none of the sampling results exceeded the soil contaminant standards for residential land-use. One sample also contained detectable levels of DDT, however the levels were within recorded ambient concentrations for the Christchurch area.

Conclusions: The part of the site covered by this investigation can be described as "below guideline values - residential".

INV 19364 **Rolleston Prison, Detailed Site Investigation**
GHD Limited - Detailed Site Investigation
1 Jul 2013

Summary of investigation(s):

Site history: The site is currently Rolleston Prison. This use commenced in 1958, and prior to this the property was an army detention centre. The area covered by this investigation was reportedly used as a munitions store, and a new building is to be constructed in this area.

Investigation objective: A soil sampling investigation was undertaken prior to the area being developed for the construction of the new building. Soil samples were collected from 8 test pits located in a rough grid pattern within the footprint of the former ammunition store. 8 soil samples from four locations (one shallow sample and one from 0.3-0.5m depth in each location) were analysed for a suite of 7 metals, as well as one duplicate sample. Results: All of the soil samples contained concentrations of metals within recorded background concentrations, except for one sample for lead. However the expected contaminants from this type of activity in the Ministry for the Environment's HAIL list is very different from what the applicant has sampled for.

Conclusions: This part of the site should be described as "partially investigated", as there may be contamination that has not been identified due to the contaminants analysed for.

INV 198085 **Detailed Site Investigation Report, Rolleston Prison, Runners Road, Rolleston**
OPUS - Detailed Site Investigation
21 Apr 2017

INV 198104 **Rolleston Prison Expansion Project, Detailed Site Investigation (DSI) Report**
OPUS - Detailed Site Investigation
14 Mar 2018

Summary of investigation(s):

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

A DSI seeks to identify the type, extent and level of contamination (if any) in an area. Soil, soil-gas or water samples will have been collected and analysed.

This investigation has not been summarised.

INV 216677 **Detailed Site Investigation/Remedial Action Plan, Rolleston Prison**
Sephira Environmental Ltd - Detailed Site Investigation
31 Aug 2018

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 239889 **Detailed Site Investigation/Remedial Action Plan - Rolleston Prison - Runners Rd, Rolleston**
Sephira Environmental Ltd - Detailed Site Investigation
1 Sep 2018

Summary of investigation(s):

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

A DSI seeks to identify the type, extent and level of contamination (if any) in an area. Soil, soil-gas or water samples will have been collected and analysed.

This investigation has not been summarised.

INV 239897 **Site Validation Report - Rolleston Prison Site, Asbestos Zones**
Sephira Environmental Ltd - Site Validation Report
5 Oct 2018

Summary of investigation(s):

Environment Canterbury has received a Site Validation Report that includes all or part of the property you have selected.

A Site Validation Report is an assessment of the success of a remedial action relative to previously established remedial goals. Soil, soil-gas or water samples will have been collected and analysed. It will be stated whether remediation goals have been met and whether further remediation, management or investigation is required.

This investigation has not been summarised.

INV 239776 **Rolleston Prison Soil Validation Report**
WSP OPUS - Site Validation Report
23 May 2019

Summary of investigation(s):

Environment Canterbury has received a Site Validation Report that includes all or part of the property you have selected.

A Site Validation Report is an assessment of the success of a remedial action relative to previously established remedial goals. Soil, soil-gas or water samples will have been collected and analysed. It will be stated whether remediation goals have been met and whether further remediation, management or investigation is required.

This investigation has not been summarised.

INV 258383 **Rolleston Prison - Soil Contamination Investigation**
WSP - Detailed Site Investigation
30 Jun 2020

Summary of investigation(s):

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

A DSI seeks to identify the type, extent and level of contamination (if any) in an area. Soil, soil-gas or water samples will have been collected and analysed.

This investigation has not been summarised.

INV 274717 **Detailed Site Investigation Rolleston Prison, Runners Road, Rolleston**
Sephira Environmental Ltd - Detailed Site Investigation
1 Nov 2020

Summary of investigation(s):

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

A DSI seeks to identify the type, extent and level of contamination (if any) in an area. Soil, soil-gas or water samples will have been collected and analysed.

This investigation has not been summarised.

INV 274323 **Long-term Site Management Plan - Rolleston Prison**
WSP - Site Management Plan
16 Feb 2021

Summary of investigation(s):

Environment Canterbury has received an Ongoing Monitoring and Management Plan that includes all or part of the property you have selected.

A Site Management Plan is used where full clean-up for a specified land use (e.g. residential) is not possible or preferable. Contaminated soil may remain on the site, but exposure is minimised through either physical barriers or behavioural controls (e.g. paving a site or using raised garden beds).

This investigation has not been summarised.

INV 285096

Site Validation Report - Rolleston Prison, Runners Road, Rolleston

PDP - Site Validation Report

26 May 2021

Summary of investigation(s):

Environment Canterbury has received a Site Validation Report that includes all or part of the property you have selected.

A Site Validation Report is an assessment of the success of a remedial action relative to previously established remedial goals. Soil, soil-gas or water samples will have been collected and analysed. It will be stated whether remediation goals have been met and whether further remediation, management or investigation is required.

This investigation has not been summarised.

Site 18776: Te Puna Wai o Tuhinapo Justice Residence, Runners Road, Burnham (Intersects enquiry area.)

Category: Not Investigated

Definition: Verified HAIL has not been investigated.

Location: 108 Runners Road, Burnham

Legal description(s): Section 1 SO 308984

HAIL activity(s):

Period from	Period to	HAIL activity
2005	Present	Storage tanks or drums for fuel, chemicals or liquid waste

Notes:

11 Jul 2013

Above ground 2,500 litre Supervault MH storing diesel. Source: HSNO test certificate, file reference: HAZ 387, 23 August 2006.



Investigations:

There are no investigations associated with this site.

Site 120611: Section 1 SO 14371, Rolleston (Intersects enquiry area.)

Category: Not Investigated

Definition: Verified HAIL has not been investigated.

Location: Section 1 SO 14371, Rolleston

Legal description(s): Section 1 SO 14371

HAIL activity(s):

Period from	Period to	HAIL activity
1942	1990s	Persistent pesticide bulk storage or use including sports turfs, market gardens, orchards, glass houses or spray sheds

Notes:

7 Jan 2016

This record was created as part of the Selwyn District Council 2015 HAIL identification project.

7 Jan 2016

Area defined from 1942 to 1998 aerial photographs. A poultry farm (persistent pesticides) was noted in aerial photographs reviewed.

Investigations:

There are no investigations associated with this site.



Nearby investigations of interest

INV 21364 **Soil and Groundwater Quality: Proposed Rolleston School Site**
Separate Phase Ltd - Preliminary Site Investigation
3 Jul 2013

Summary of investigation(s):

PSI reports that the historic uses of this site include farm paddock and forestry plantation since the 1940s. All information sources that were reviewed suggest that HAIL activities have NOT occurred on this property. There is a potential that contaminant residues may be present from burning of forestry trees for clearance, however the likelihood of these being present at concentrations that would be harmful to human health or the environment are low.

INV 72450 **Detailed Site Investigation: West Rolleston School - Corner Burnham School Road and Dunns Crossing Road**
GHD Limited - Detailed Site Investigation
1 Nov 2014

Summary of investigation(s):

A grid based sampling pattern was used to sample soil at 16 locations at depths of 0.1 and 0.3 metres below ground level. The samples were analysed for a suite of metals, organochlorine pesticides and polycyclic aromatic hydrocarbons. All results were below the laboratory level of detection and below background concentrations for Canterbury soil.

INV 198030 **Rolleston Prison, Proposed Gatehouse Area, Runners Road, Rolleston**
OPUS - Detailed Site Investigation
16 Jun 2017

Summary of investigation(s):

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

A DSI seeks to identify the type, extent and level of contamination (if any) in an area. Soil, soil-gas or water samples will have been collected and analysed.

This investigation has not been summarised.

INV 269839 **Rolleston West Residential Ltd, Rolleston West Plan Change. Preliminary Site Investigation**
Coffey Environments - Preliminary Site Investigation
9 Nov 2020

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 309936 **NZDF HAIL Investigation Report**
ENGEO - Preliminary Site Investigation
1 Mar 2018

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 309942

PFAS Preliminary Site Investigation: Burnham Military Camp

Pattle Delamore Partners Ltd - Preliminary Site Investigation

1 May 2019

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.

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

How does Environment Canterbury classify sites on the LLUR?

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

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

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

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

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

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



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

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

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

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

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



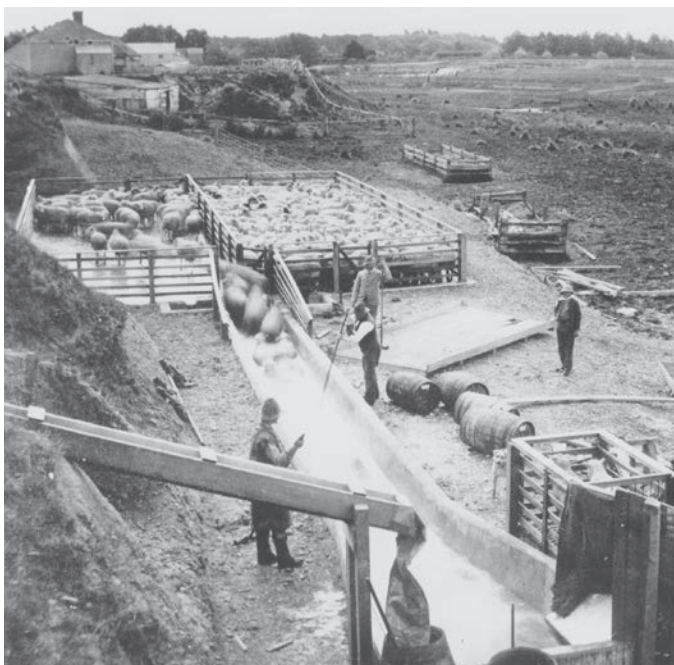
I think my site category is incorrect – how can I change it?

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

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

IMPORTANT!

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



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

Contact us

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

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

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

Contact Environment Canterbury:

Email: ecinfo@ecan.govt.nz

Phone:

Calling from Christchurch: (03) 353 9007

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



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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