

Hazardous Substances Management Plan

TDC Contract No. 2720 Peel Forest Closed Landfill Remediation





Document Control

Title: Hazarsous Substances Management Plan - Peel Forest Closed Landfill Remediation

Principal: Timaru District Council

Contract Reference: 2720

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1	11/04/2025	For Review	Nicole Duncan	Bryce Ranger
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3	8/05/2025	Site Layout Plan updated following TDC Planning notes.	Nicole Duncan	Bryce Ranger

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General

Contract Name: TDC Contract No.2720 – Peel Forest Closed Landfill Remediation

Location: Dennistoun Road, Peel Forest

Head Contractor: Rooney Earthmoving Ltd

Contract Manager: Bryce Ranger

Email: Bryce.ranger@rooneygroup.co.nz

Contract Dates

 Start Date:
 5/05/2025

 Completion Date:
 2/03/2026

Scope of Works

The Contract Works are for the removal of the landfill waste and associated impacted soils to remediate the closed Peel Forest Landfill. The remedial works include segregation and sorting of waste materials/soils (where practicable) and transportation to an appropriate facility(s) for disposal, and reinstatement of the area to its former landform as a gully. The following generally describes the work required:

- **Site establishment** including development of a contractor's yard area and installation of the erosion, sediment, and stormwater control measures.
- Vegetation clearing, excavation, handling, segregation, temporary stockpiling, transportation, and disposal of the closed Peel Forest Landfill (approx. 18,000m³ insitu) including:
 - Management of landfill waste as asbestos-contaminated material under Class B asbestos removal works.
 - Managing hazardous materials (e.g., liquid wastes) if encountered during the remedial removal works.
 - Managing any landfill leachate if encountered during the works.
 - o Monitoring and management of landfill gas (LFG), odour, litter, dust and rodents.
 - o Identification and separation of material that can be cleaned and possibly diverted from the Class 1 landfill waste stream to an alternative disposal facility or retained on site for reuse.
 - Identification and separation of waste items that can be cleaned, compacted, and possibly diverted from the Class 1 landfill waste stream.
- Excavation, screening, transportation, and disposal of natural material underlying the landfill waste and potentially impacted by landfill leachate (estimated 5,000m³).
- **Excavation, transportation, and disposal** of waste intermixed within the debris at the toe of the terrace (shall only be undertaken upon instruction by the Engineer).
- Reinstatement of the gully including filling, shaping, compacting, and topsoiling.
- **Site disestablishment** including reinstatement of the contractor's yard area back to its original state and any required repairs to Dennistoun Road.
- Completing a topographic survey of the final landform and reinstated yard area.

Key Personnel

The key contacts for this contract include:

Timaru District Council Project Leader							
Programme Delivery Manager	Jacky Clarke	03 687 7258	Jacky.clarke@timdc.govt.nz				
Engineer's Details							
Engineer to Contract	Murray Kerr	021 921 208	Murray.Kerr@pdp.co.nz				
Engineer's Representative	David Hooke	027 220 5539	David.hooke@timdc.govt.nz				
Contractor Details							
Contract Manager	Bryce Ranger	027 622 3346	Bryce.ranger@rooneygroup.co.nz				
Area Manager	Niall O'Sullivan	027 249 7015	Niall.osullivan@rooneygroup.co.nz				
Site Manager	Mig Bradley	027 232 2137	Mig.bradley@rooneygroup.co.nz				
Compliance Manager	Nicole Duncan	027 210 3375	compliance@rooneygroup.co.nz				
Health & Safety Officer	Tracy Kennedy	027 444 5807	Tracy.kennedy@rooneygroup.co.nz				
Traffic Management Manager	Khylee Gray	027 289 8077	Khylee.gray@rooneygroup.co.nz				
First Aid Responder	Mig Bradley	027 232 2137	Mig.bradley@rooneygroup.co.nz				
Principals Consultants							
PDP Contaminated Land - Primary Contact	Lucy Duffus	0800 765 588	Lucy.Duffus@pdp.co.nz				
PDP Contaminated Land – Service Leader (SQEP)	Rowan Freeman	021 955 429	Rowan.Freeman@pdp.co.nz				
PDP Contaminated Land – Technical Director (SQEP)	Scott Wilson	021 215 5414	Scott.Wilson@pdp.co.nz				
PDP Geotechnics – Technical Director	Andy Smith	021 918 507	Andrew.Smith@pdp.co.nz				

Introduction

This Hazardous Substances Management Plan has been prepared for the Rooney Group's Peel Forest Closed Landfill Remediation Project (TDC Contract No.2720).

Purpose and Scope of the HSMP

This Hazardous Substances Management Plan (HSMP) aims to minimise the risk of Rooney Earthmoving LTD (REL) personnel, contractors, visitors and sensitive receivers of being exposed to substances that could negatively impact their health or safety. This plan details the procedures for managing hazardous substances, covering aspects such as reception, transport, storage, handling, reuse/recycling, and disposal.

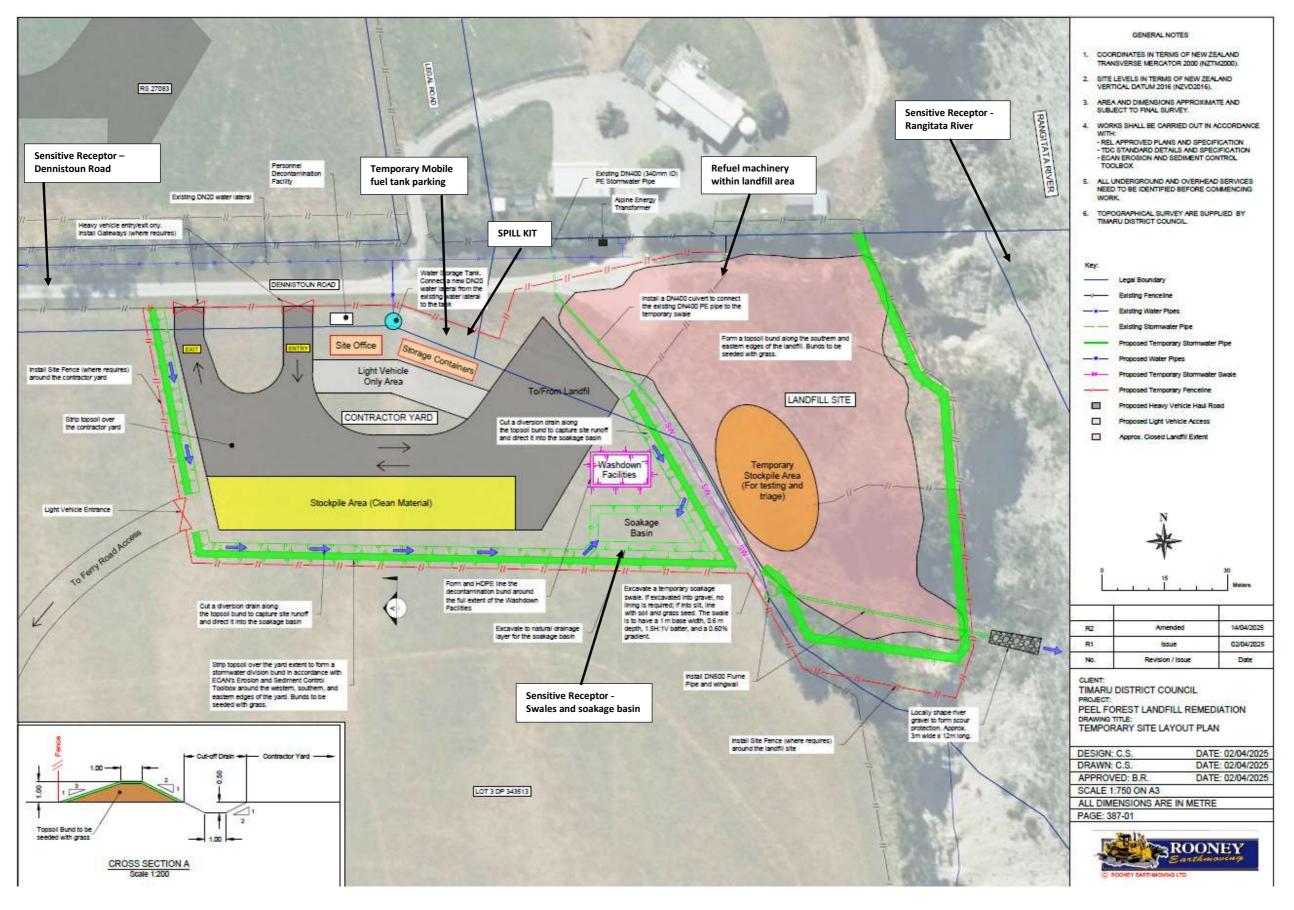
This plan applies to activities undertaken by REL employees and contractors on the Peel Forest Closed Landfill Remediation Project (TDC Contract No.2720) and shall comply with the conditions set out in Resource Consent CRC244187.

Specifically, the HSMP identifies:

- The hazardous substances and potential contaminants on the site.
- The layout of the site, receiving environment and sensitive receivers.
- The location of Spill kits and other environmental response equipment.
- Procedures for managing an environmental incident (spill or accidental discovery)
- Preventive measures to avoid spills of fuel or any other hazardous substance.
- Training staff will receive to increase knowledge and awareness of this HSMP.

Receiving Environment and Identification of Sensitive Receivers

Figure 1 – Site layout



Hazardous Substances

Hazardous substances will be encountered throughout various phases of the contract works:

Site Setup and Ongoing Construction Activities

- Refueling machinery.
 - A certified 1200L mobile diesel fuel trailer will be used to refuel machinery onsite.
 - The tanker will be located near the site containers when not in use and towed into the landfill area to replenish machinery when required.
- Refueling small plant.
 - Two 20L petrol fuel containers will be kept onsite withing the storage sheds to replenish small plant/tools and generators.
- Machinery greasing.
 - Grease cartridges will be used to lubricate moving machine parts. These cartridges will be stored in the site containers and be removed from site as they are used.
- Machine Hydraulic Fluid.
 - Machine hydraulic fluid may be required to maintain or service machinery. This fluid will be stored offsite and only brought onsite by service mechanics as required.

Landfill Contents

The landfill was used for the disposal of waste from the surrounding settlements from the early 1960's through to 2004. During this period the nature of the material being disposed of was not monitored. To gain some understanding of the material deposited Pattle Delamore Partners Limited (PDP) undertook a Detailed Site Inspection. The results of that investigation identified various hazardous substances.

- Asbestos.
 - The waste material should be treated as asbestos contaminated unless otherwise cleared through testing.
 - Asbestos contaminated material will be handled and disposed of in accordance with the Asbestos Removal Control Plan and Remedial Action Plan.
- Heavy metal contaminated soil.
 - o Waste material will be handled removed in accordance with the Remedial Action Plan.
- Pesticides.
 - Waste material will be handled removed in accordance with the Remedial Action Plan.
- Petroleum Hydrocarbons.
 - o Waste material will be handled removed in accordance with the Remedial Action Plan.
- Potential leachate.
 - Although unlikely to be encountered. There is a low risk of encountering leachate water withing the landfill excavation. If encountered this material must be handled and removed in accordance with the Remedial Action Plan.
- Potential landfill gas.
 - Although unlikely to be encountered. There is a low risk of encountering landfill gas and work should be undertaken in accordance with the Remedial Action Plan (20.3).

Due to the potential for unknown / unexpected contamination to be discovered during excavation the operating staff will work closely with the Suitably Qualified and Experienced Practitioner and Licensed Asbestos Remover to ensure that all materials are identified, handled and disposed of safely and correctly in accordance with the Remedial Action Plan and Asbestos Removal Plan.

In addition to the Key Staff identified in the Table on Page 5 the following Emergency Contacts Should be noted in case of an emergency, spill or discovery of unidentified material.

Emergency Service	Contact Number	Comment			
Ambulance/Fire/ Police	111	State the nature of the emergency and location			
Medical Treatment					
Four Peaks Health	03 693 8880	16 Cox Street, Geraldine 7930			
Ashburton Public Hospital	03 307 8450	28 Elizabeth Street, Ashburton 7700			
First Aiders					
Mig Bradley	027 232 2137	Site Manager			
REL Project Staff					
Bryce Ranger	027 622 3346	Contract Manager			
Mig Bradley	027 232 2137	Site Manager			
Rob Barton	021 086 42801	Licenced Asbestos Remover			
Nicole Duncan	027 210 3375	Compliance Manager			
Tracy Kennedy	027 444 5807	Health & Safety Officer			
TDC Project Staff					
David Hooke	027 220 5539	Engineer's Rep.			
Jacky Clarke	03 687 7258	Programme Delivery Manager			
Consultants					
Lucy Duffus	0800 765 588	PDP Contaminated Land - Primary Contact			
Rowan Freeman	021 955 429	PDP Contaminated Land – Service Leader (SQEP)			
Regulators					
Canterbury Regional Council	0800 765 588	Environmental issues			
Timaru District Council	03 687 7258	Via. Jacky Clarke			

Spill Mitigation, Response and Management

Training

REL is responsible for the preparation and delivery of a comprehensive Site-Specific Induction training session for all site personnel before the commencement of works. This induction ensures every that individual working on the site is adequately informed about the site-specific safety and operational procedures with particular emphasis on the following aspects:

- The actual and potential hazardous substances on site
- The minimum Personal Protective Equipment (PPE) requirements for the site
- Spill Response Procedures including the location and use of spill kits.
- Environmental incident reporting
- Preventative measures to avoid spills and leaks of fuel or other hazardous substances
- Accidental Discovery Procedures

All site personnel have been chosen for their roles based on their experience and competency. Awareness of hazardous substances and/or issues on or near our worksite will be addressed during regular site toolbox meetings, audits, and inspections.

The Site Manager will ensure this training takes place and records are maintained onsite.

Site Signage

REL is responsible for procuring and installing site safety signage. Specific signage will be installed for, but not limited to, the following purposes:

- Display the identified site hazards and mitigation
- Location of site office
- Contact details of the Site Manager
- Minimum PPE requirements for site entry
- Location of safety equipment (i.e. first aid kit, spill kit, fire extinguishers)
- Identify the site boundaries

Spill Response

• In the event of a spill the Site Manager (Mig Bradley – Ph 027 232 2137) will be notified immediately. The Site Manger will notify the SQEP for assistance and the following steps shall be taken:

1. Clear Obvious Hazards:

- o isolate or if possible, remove any sources of danger within the immediate spill site.
- Active spill response should not commence until the area has been deemed safe by the Site Manager.

2. Determine Spill Response Constituents:

- o Identify the spill contaminant.
- Uplift the Safety Data Sheets (SDS) from the site office to identify the emergency response considerations.
- Move spill kit to immediate area
- o Don the required PPE before approaching the spill source.

3. Stop Source (if it is safe to do so)

- o This may include righting an upturned container
- Plugging a leak with absorbent pads.

4. Contain the Spill and Inspect Surrounding Stormwater Infrastructure:

- o Contain the spill using items from spill kit or
- Create a bund around the spill area to prevent further contamination
- o Completed a visual inspection of immediate area around stormwater infrastructure to ensure no contamination has leached through.

5. Report the Spill:

- o Record spill on the Accident/Incident Form (AIF) and forward onto the TDC withing 24 hours.
- For spills that are over 5L and/or enter the stormwater network or surface water bodies, ECan shall be notified on 0800 765 588.

6. Corrective and Preventative Action:

 Following the investigation, the outcome will be communicated and documented using the REL site toolbox form.

7. Removal and Disposal of Contaminated material:

- The contaminated material should be removed, scraping until there are no longer any visual or olfactory cues.
- All materials associated with the clean-up shall be placed in a sealed container and disposed of offsite at the approved receiving facility.
 Consult with SQEP through remedial process to ensure process in undertaken correctly.

Refuelling

All refuelling onsite will be undertaken from a certified mobile tanker. The tanker has a capacity of 1200 litres.



The tanker will be brought to site and removed daily as necessary. During the day it will be parked behind the site containers away from potential clashes with other machinery or equipment.

Machines will generally be refuelled by towing the mobile tanker to a level area within the designated landfill. The machine being refilled will be parked and the engine turned off. The tanker will pull up beside the machine and fill the tank. One filling is complete the mobile tanker will be taken back to its temporary park

area.

Refuelling of machinery and vehicles must not occur within 20 metres of:

- Open Excavations.
- Exposed Groundwater.
- Stormwater Devices.

All machines are equipped with a spill kit in the case of any minor spills.

Pre-Start Checks on Machinery

All plant and equipment will have a daily prestart check completed to confirm it is safe for use and identify the presence or potential for any chemical leaks, including all sub-contractor equipment. A copy of all prestart sheets will be sent to the workshop where they maintain a register for all equipment plant and certifications. Where any defects or unsafe issues arise on the machines, the Pre-Start flow chart within the Site Specific Safety Plan (SSSP) must be followed in order to have repaired and signed off for safe operation again.

Procedure for Removal of Contaminated Materials

Notification:

- WorkSafe Notification for Asbestos. Notification will be made a minimum of 24 hours prior to commencement of work.
- TDC notified as per Resource Consent: 102.2024.64.1.
- ECan notified as per Resource Consents: CRC244188 and CRC244187
- **Identify Contaminants**: Shallow Test Pitting and analysis of soil samples from within the landfill has been undertaken to identify potential contaminants of concern.
 - Asbestos has been identified primarily associate with soil-waste mixtures tested within the landfill.
 - The detailed Site investigation (DSI) identified the following within the waste samples:
 - **Heavy Metals:** Although the sample results dis not exceed standards for recreational use, the contaminant levels do require disposal at an approved facility.
 - Organochlorine Pesticides: Although the sample results dis not exceed standards for recreational use, the contaminant levels do require disposal at an approved facility.
 - Total Petroleum Hydrocarbon (TPH): Although the sample results dis not exceed standards for recreational use, the contaminant levels do require disposal at an approved facility.
 - Polycyclic Aromatic Hydrocarbons (PAH): Detected in trace amounts below laboratory reporting limits.
 - Landfill Gas (LFG): Detected in very low limits. Requires monitoring during remedial works.
 - Leachate: Not detected. Potential discovery does exist and should be monitored in accordance with the Remedial Action Plan.

Given the limitations of the investigation work undertaken and potential for unexpected contamination. Should visual or olfactory evidence of a potentially unknown contamination be detected, the location should be isolated and the SQEP engaged to assess the discovery. Work must only proceed after clearance is given by the SQEP and TDC. The SQEP may determine that it requires testing before removal to an appropriate facility.

- Assess and plan for the risk: Refer to:
 - o Asbestos Removal Control Plan and,
 - o Remedial Action Plan (RAP).
 - REL Site Specific Safety Plan (SSSP).

Current copies will be maintained in the REL site office by the Site Manager and made easily accessible for all workers. Toolbox meetings will serve as the primary method for disseminating information from the relevant site plans. All updates will be communicated as soon and practicable to the relevant parties and uploaded to the TDC website.

- **Inform Workers:** REL is responsible for communication the work plan, safety measures and all changes to its workers. This will be documented using the REL Tailgate Form and Site Toolbox Form.
- Stakeholders: The TDC are responsible for all communications with stakeholders and wider community.

• Personal Protective Equipment: REL is responsible for providing the required PPE to workers in line with the requirements set out in section 20.2 of the RAP. It should be noted that asbestos contamination is prevalent throughout the landfill. Specific PPE for workers during removal of this material is detailed in the Asbestos Removal Control Plan (ARCP). All used PPE items will be bagged and tagged to prevent double handling, minimise cross-contamination, and ensure they are identified and disposed of in approved locations.

• Removal Process:

- o REL will ensure that material is identified correctly, and disposal facility confirmed through consultation with the SQEP and Licenced Asbestos Remover.
- o Drivers must be made aware of the nature of the material being carted away and the correct disposal facility. This will be communicated by the Site Manager.
- Truck and trailer units must be covered and or wrapped when transporting asbestos
 contaminated soil. The Site Manager and Driver are responsible for ensuring compliant loads.
- **Disposal Approved Facilities**: Disposal of contaminated materials/hazardous waste will be confirmed and directed to the appropriate facility by the SQEP.
 - Redruth Class 1 Landfill South Timaru.
 Contact: Ku Brown 027 404 7459
 - o Taiko Managed Fill.

Contact: Toby McClenaghan - 027 469 7143

Hororata Managed Fill.
 If required.

The SQEP will determine the appropriate facility.

• **Documentation:** Disposal records will be documented using a soil waste transfer manifest. Records will be uploaded to the Job File in MS Teams for future reference. A copy of the manifest is provided in Appendix G of the RAP.

Prepared by:

Nicole Duncan

Approved by:

Bryce Ranger