Liquid and Hazardous Wastes Code of Practice

2nd edition

Prepared for WasteMINZ 2012
Published in April 2012 by:

WasteMINZ
PO Box 305426
Triton Plaza
North Shore 0757
New Zealand

This document is available on WasteMINZ’ website: www.wasteminz.org.nz

This document is based on the Liquid and Hazardous Waste Code of Practice, published in 2003, by the now Water New Zealand (please see acknowledgements).

**Limitation**: This document has been prepared on behalf of and for the exclusive use of Patterson Environmental Limited’s client and is subject to and issued in connection with the provisions of the contract between Patterson Environmental Ltd and its client. Patterson Environmental Limited and WasteMINZ accepts no liability or responsibility whatsoever for or in respect of any use or reliance upon this document by any third party.
ACKNOWLEDGEMENTS

Sponsors of the Liquid and Hazardous Wastes Code of Practice (Code)

The Waste Management Institute New Zealand incorporated (WasteMINZ) and its Liquid and Hazardous Waste Operators Certification Council initiated the review of the Code, with support from the Ministry for the Environment (MfE) and those listed below. It would like to acknowledge the authors of the 2003 Code which was used as a base for this review.

Project Team


Darren Patterson Patterson Environmental Ltd

Technical Working Group

Bruce Bain Bains Liquids Disposal
Bruce Holland Parkinson & Holland Ltd
Charlie Tomlin Charlies Takeaways Limited
Dan Beard Beard’s Environmental Limited (Hastings)
Gary Soper New Plymouth District Council
Gareth Phillips Christchurch City Council
Graham Farrelly Transpacific Industries Group (NZ) Ltd
Julian Brown Christchurch City Council
Mike Sahayam Palmerston North City Council
Nic Quilty WasteMINZ
Richard Rollins  Watercare Services Ltd
Ron Salter  Salters Cartage Ltd
Wayne Plummer  EnviroWaste Technical Services Ltd

Targeted Stakeholders

Bill Birch  Responsible Care New Zealand Inc
Brian Davey  NZ Fire Service
Chris Keeling  Environment Canterbury
David Stagg  Waikato Regional Council
Gerard O’Neill  Ministry for the Environment
Jeffery Hawkes  Waikato Regional Council
Kirsten Forsyth  Ministry for the Environment
Natalia Foronda  Ministry of Health
Rachael O'Donnell  Waikato Regional Council
Richard Bean  NZ Transport Authority
Foreword

The Liquid and Hazardous Waste Code of Practice was originally published in 2003. The Code was developed to improve the operating standard within the liquid and hazardous waste industry, and create a minimum standard to which all operators are required to comply. In 2007, the Liquid and Hazardous Waste Operators Certification Council was established as a direct result of a need for greater accountability within the industry and it oversees the accompanying audit and certification programme.

There are now more than 50 certified contractors throughout New Zealand, tracking more than 300 million litres of waste per annum. 28 councils require all liquid wastes to be tracked, and another eight require indirect tracking in their regions.

Over time, the Code had become outdated due to changes in legislation. However through the establishment of a positive and proactive partnership between the Liquid and Hazardous Waste Operators Certification Council and WasteMINZ there are now processes in place to ensure the Code is a living document, reflective of the challenges and changes affecting the industry.

Over the past 12 months the Code has been substantially updated to ensure its suitability for the present environment as well as enhancing its usability as a practical tool for operators.

The Code helps individual businesses by:

- reducing the risk of non-compliance with regulations;
- providing a level playing field within the Industry;
- providing critical business information which improves efficiencies;
- protecting the health of staff; and
- protecting plant and equipment.
The Code helps local authorities:

- monitor compliance of liquid waste operators;
- monitor generator compliance with respect to disposal;
- monitor resource consents for private disposal facilities;
- focus on those within the industry that do not have independent verification that they follow and apply good practices;
- protect its assets from potential damage;
- identify priority wastes for future management; and
- track where wastes are disposed of to:
  - prevent unauthorised waste disposal which could result in time consuming investigations and potential litigation;
  - charge for disposal at council treatment facilities; and
  - identify trends within market sectors of the liquid waste industry.

The Code helps liquid waste generators:

- meet their environmental obligations as far as where wastes are disposed of;
- monitor compliance of liquid waste operators;
- monitor generator compliance with respect to disposal;
- track where wastes are disposed of to; and
- identify trends within market sectors of the liquid waste industry.

The revised Code will help all stakeholders by:

- providing up to date information on legislation, as far as practicable;
- enabling auditors to assess all operators against current legislative requirements as well as improving the overall performance of the industry; and
- increasing awareness and compliance in regard to the protection of human health and the environment.

During the review of the Code, a Technical Working Group was established to peer review amendments to the Code and numerous stakeholders were consulted as part of the review process. To both groups; we sincerely thank you for your time, experience
and passion for improving our industry. We also acknowledge and thank those industry members who generously contributed their time to develop the original code, which has provided essential guidance and enabled the industry to enjoy the benefits it has provided.

In closing, the liquid waste industry has developed significantly in the nine years since the Code was first introduced in 2003 and this revision is indicative of WasteMINZ’ and the Liquid and Hazardous Waste Operators Certification Council’s ongoing commitment to continual improvement in the pursuit of excellence.

Bruce Holland

Chair, Liquid and Hazardous Waste Certification Council
## CONTENTS

**ACKNOWLEDGEMENTS** ........................................................................................................... ii

1. **INTRODUCTION** .................................................................................................................. 1
   1.1 STATUS OF THE CODE ........................................................................................................ 1
   1.2 SCOPE .................................................................................................................................. 1
   1.3 BENEFITS AND OBJECTIVES OF THE CODE ................................................................. 2
   1.4 CODE COMPLIANCE ........................................................................................................... 4
   1.5 EXCLUSIONS ..................................................................................................................... 5
   1.6 REFERENCES ....................................................................................................................... 7

2. **THE REGULATORY AND POLICY FRAMEWORK** .......................................................... 8
   2.1 THE RESOURCE MANAGEMENT ACT 1991 .................................................................. 8
   2.2 THE LOCAL GOVERNMENT ACT 2002 .......................................................................... 9
   2.3 THE HAZARDOUS SUBSTANCES AND NEW ORGANISMS ACT 1996 ......................... 10
   2.4 THE HEALTH AND SAFETY IN EMPLOYMENT ACT 1992 & AMENDMENT 2002 .......... 13
   2.5 THE LAND TRANSPORT ACT 1998 ................................................................................. 17
   2.6 THE HEALTH ACT 1956 .................................................................................................... 17
   2.7 THE WASTE MINIMISATION ACT 2008 ........................................................................... 17
   2.8 THE NEW ZEALAND WASTE STRATEGY 2010 ............................................................... 18
   2.9 THE RESOURCE MANAGEMENT ACT ROLE OF LOCAL AUTHORITIES .................... 18
   2.10 OTHER LEGISLATION ...................................................................................................... 20

3. **OWNERSHIP, RESPONSIBILITY & LIABILITY** ................................................................. 23
   3.1 Introduction ......................................................................................................................... 23
   3.2 OWNERSHIP ..................................................................................................................... 23
   3.3 RESPONSIBILITY ................................................................................................................. 24
5.10 MANDATORY CODE REQUIREMENTS ................................................................. 59

6 TRANSPORTATION ......................................................................................... 61

6.1 INTRODUCTION ......................................................................................... 61
6.2 TRANSPORT MANAGEMENT ISSUES ......................................................... 63
6.3 DRIVER AND VEHICLE PREPARATION .................................................... 66
6.4 THE MIXING OF WASTE MATERIALS ....................................................... 67
6.5 TANKER CLEANING .................................................................................... 70
6.6 LOAD DOCUMENTATION ............................................................................ 71
6.7 PLACARDING ................................................................................................. 74
6.8 SEGREGATION OF PACKAGED WASTE .................................................... 76
6.9 CARTAGE OF INFECTIOUS SUBSTANCES ............................................... 77
6.10 OTHER OBLIGATIONS IN TRANSIT ......................................................... 78
6.11 EMERGENCY RESPONSE ON THE ROAD .............................................. 78
6.12 REFERENCES .............................................................................................. 79
6.13 MANDATORY CODE REQUIREMENTS .................................................... 79

7 WASTE TREATMENT ....................................................................................... 90

7.1 INTRODUCTION ........................................................................................... 90
7.2 WASTE TREATMENT OPTIONS ............................................................... 90
7.3 TREATMENT RECORDS .............................................................................. 91
7.4 WHEN IS TREATMENT COMPLETE? ......................................................... 93
7.5 UNTREATABLE WASTES ............................................................................ 93
7.6 DIRECT DISCHARGE OF WASTE TO NATURAL GROUND OR WATER .... 94
7.7 TREATMENT SITE MANAGEMENT ............................................................ 94
7.8 MANDATORY CODE REQUIREMENTS ..................................................... 95

8 DISPOSAL ......................................................................................................... 98

8.1 INTRODUCTION ........................................................................................... 98
8.2 SOLID WASTES ........................................................................................................ 98
8.3 LIQUID WASTE ...................................................................................................... 99
8.4 OFFSHORE DISPOSAL .......................................................................................... 100
8.5 REFERENCES ........................................................................................................ 100
8.6 MANDATORY CODE REQUIREMENTS ................................................................... 100

9 HEALTH AND SAFETY ................................................................................................. 102
  9.1 INTRODUCTION .................................................................................................... 102
  9.2 HEALTH AND SAFETY RESPONSIBILITIES ...................................................... 103
  9.3 LEVELS OF RESPONSIBILITY ............................................................................. 104
  9.4 HAZARD IDENTIFICATION AND MANAGEMENT ................................................ 108
  9.5 PROVIDING INFORMATION ................................................................................ 110
  9.6 TRAINING AND SUPERVISION ......................................................................... 110
  9.7 EMPLOYEE PARTICIPATION ................................................................................ 111
  9.8 HEALTH MONITORING ....................................................................................... 111
  9.9 IMMUNISATIONS .................................................................................................. 112
  9.10 FIRST AID ........................................................................................................... 112
  9.11 REPORTING & RECORDING ACCIDENTS .......................................................... 113
  9.12 MANUAL HANDLING ......................................................................................... 114
  9.13 DEPARTMENT OF LABOUR .............................................................................. 115
  9.14 MANDATORY CODE REQUIREMENTS ................................................................ 115

10 EMERGENCY PREPAREDNESS .................................................................................... 121
  10.1 INTRODUCTION .................................................................................................. 121
  10.2 EMERGENCY PLAN ............................................................................................. 121
  10.3 TRANSPORT ....................................................................................................... 126
  10.4 TRAINING ............................................................................................................ 130
  10.5 ORGANISATIONS THAT MAY NEED TO BE CONTACTED IN AN EMERGENCY ... 130
  10.6 OTHER GUIDELINE INFORMATION ................................................................... 131
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>PORTABLE TOILETS</td>
<td>167</td>
</tr>
<tr>
<td>15.1</td>
<td>INTRODUCTION</td>
<td>167</td>
</tr>
<tr>
<td>15.2</td>
<td>TRANSPORTATION</td>
<td>167</td>
</tr>
<tr>
<td>15.3</td>
<td>TOILET SERVICING</td>
<td>171</td>
</tr>
<tr>
<td>15.4</td>
<td>WASTE DISPOSAL</td>
<td>171</td>
</tr>
<tr>
<td>15.5</td>
<td>STORAGE OF PORTABLE TOILETS</td>
<td>171</td>
</tr>
<tr>
<td>15.6</td>
<td>DOCUMENTATION</td>
<td>172</td>
</tr>
<tr>
<td>15.7</td>
<td>HEALTH AND SAFETY</td>
<td>172</td>
</tr>
<tr>
<td>15.8</td>
<td>NUMBER OF TOILETS REQUIRED</td>
<td>173</td>
</tr>
<tr>
<td>15.9</td>
<td>REFERENCES</td>
<td>174</td>
</tr>
<tr>
<td>15.10</td>
<td>MANDATORY CODE REQUIREMENTS</td>
<td>174</td>
</tr>
<tr>
<td>16</td>
<td>ANIMAL EFFLUENT</td>
<td>178</td>
</tr>
<tr>
<td>16.1</td>
<td>INTRODUCTION</td>
<td>178</td>
</tr>
<tr>
<td>16.2</td>
<td>HANDLING REQUIREMENTS</td>
<td>178</td>
</tr>
<tr>
<td>16.3</td>
<td>INFORMATION FOR LIQUID WASTE CONTRACTORS</td>
<td>179</td>
</tr>
<tr>
<td>16.4</td>
<td>REFERENCES</td>
<td>180</td>
</tr>
<tr>
<td>16.5</td>
<td>MANDATORY CODE REQUIREMENTS</td>
<td>180</td>
</tr>
<tr>
<td>17</td>
<td>APPENDIX A – GLOSSARY</td>
<td>182</td>
</tr>
<tr>
<td>18</td>
<td>APPENDIX B - MANDATORY CHECKLIST</td>
<td>188</td>
</tr>
<tr>
<td>19</td>
<td>APPENDIX C – REFERENCES</td>
<td>231</td>
</tr>
</tbody>
</table>
1. INTRODUCTION

The Liquid and Hazardous Waste Code of Practice (the Code) was originally published in 2003 and this document is its first revision.

The Code was developed to improve operating standards within the liquid and hazardous waste industry, enabling the establishment of the Liquid and Hazardous Waste Operators Certification Council who oversee a national audit and certification scheme. The aim of the Certification Council and the Code is to promote good practice across all levels of the industry.

1.1 STATUS OF THE CODE

The Code does not have its own statutory force. However, it is used by local authorities to support their trade waste bylaws and in the preparation of plans, policy statements and granting of resource consents under the Resource Management Act 1991 (RMA).\(^1\)

The Certification Council can certify operators as ‘code compliant’. The Certification Council can also revoke this certification if a company fails to meet the requirements of the Code.

It is intended that the Code shall be revised and updated to reflect changes in regulations and improvements in operating practices.

1.2 SCOPE

The Code specifically relates to liquid waste and hazardous waste requiring transportation from the generator to a treatment and/or disposal point. Non-hazardous solid waste is excluded.

\(^1\) Code compliance is included as a requirement of the model trade waste bylaw, where adopted by councils.
The Code provides liquid and hazardous waste operators and the regulators and assessors of waste contracting services with practical advice on how to comply with legal requirements. These requirements include, but are not limited to, the RMA, the Land Transport Act 1998 (LTA), the Health and Safety in Employment Act 1992 (HSE Act), the Hazardous Substances and New Organisms Act 1996 (HSNO), and the New Zealand Waste Strategy 2010.

The Code has been developed to protect human health and the environment. It does this by promoting the following goals:

- Promoting operational practices that protect public health.
- Ensuring operational practices are undertaken in a manner which protects public health.
- Protection of the environment, with specific criteria for identifying waste streams, the potential for risk from hazardous constituents, handling procedures (including plant, transport and treatment) and final disposal of waste materials.
- Compliance with existing regulatory requirements including those in regional and district plans.

The Code is intended to provide a good-practice reference for parties involved in the waste industry.

1.3 BENEFITS AND OBJECTIVES OF THE CODE

The intention of the Code is to aid the waste industry by setting out the legal and regulatory requirements that shall be complied with when working with liquid and hazardous wastes.
The Code will help the industry by:

- promoting industry knowledge of the regulations and a desire to comply with them;
- using an audit and compliance process to reduce non-compliance events that may put the industry into disrepute;
- allowing regulators to restrict the operations of those who evade compliance requirements (e.g. for market advantage);
- providing a platform for negotiating appropriate operating conditions with regulators; and
- helping to protect human health and the environment.

The Code will help on an individual business level by:

- reducing the complexity of paperwork that is required in the running of the business;
- reducing the risk of non-compliance with a regulation;
- providing a level playing field within the industry, helping to prevent rogue businesses from seeking a competitive advantage by evading compliance requirements;
- providing useful information and advice to improve the efficiency of the business;
- protecting the health of staff;
- protecting plant; and
- reducing the risk of environmental incidents.
1.4 CODE COMPLIANCE

1.4.1 COMPLIANCE PROGRAMME

The *Liquid and Hazardous Waste Operators Code Compliancy Programme* (code compliancy programme) was established to provide New Zealand businesses with confidence that certified liquid and hazardous waste service providers (certified operators) are reliable, of high quality and do not pose hazards to the environment, safety or personal welfare.

There are two aspects to the code compliancy programme: rules around how the certification programme operates, and an auditing process which assesses service providers and their operations against the code requirements.

For the industry, the code compliancy programme is a way of:

- improving operational standards;
- fostering the highest standards of efficiency, services and ethical behaviour; and
- promoting a positive image.

The compliancy programme is run by the Liquid and Hazardous Waste Operators Certification Council.

1.4.2 LIQUID AND HAZARDOUS WASTE OPERATORS CERTIFICATION COUNCIL

The Liquid and Hazardous Waste Operators Certification Council (Certification Council) is elected from members of the WasteMINZ Liquid and Hazardous Waste Sector Group. Any code compliant liquid and hazardous waste operator can be elected to the Council.

There are a maximum of six members on the Certification Council, comprising a minimum of two from rural areas and two from urban areas of New Zealand. Each member is elected for a term of two years.

The Certification Council meets at least once a year and decides on certification, complaints and any changes in fees.
1.4.3 **Code Interpretation**

There are two levels of direction in the Code:

- The mandatory requirements of the Code include the word: ‘shall’. These requirements are summarised at the end of Chapters 3 to 16 of the Code.

- Non-mandatory requirements of the Code include the word: ‘should’ and ‘the Code recommends’. Compliance is recommended for these parts, although it is not a legal or code requirement. Compliance with the recommendations will, however, minimise risk to the environment and the industry in accordance with good practice.

1.5 **Exclusions**

The Code either excludes, or addresses only in part, the following activities (any aspects of the activity that are addressed by the Code are highlighted in red):

1.5.1 **Medical Waste Collection**

The Code excludes medical wastes including animal (research and veterinary practices) and human excreta and items contaminated with these materials (e.g. incontinence pads and nappies). These are covered by New Zealand Standard 4304:2002 Management of Healthcare Waste.

The ‘Industry Code of Practice for the Management of Clinical and Related Wastes’ prepared for the Australian and New Zealand Clinical Waste Management Industry Group is also in use, operators can refer to this publication for guidance in this area.

1.5.2 **Stock Truck Effluent**

Stock truck effluent contained in a stock truck is excluded from the Code.
However, the Code applies when effluent is removed by a liquid and hazardous waste contractor from a stock truck, or when the liquid and hazardous waste contractor is removing the effluent from the stock truck effluent disposal sites.

Download a copy of the Industry Code of Practice for the Minimisation of Stock Effluent Spillage from Trucks on Roads from:

www.rcaforum.org.nz/industry-code-of-practice/

1.5.3 Farmer Spreading of Effluent

The Code does not cover farmers spreading stock effluent from their own farms onto their own properties. However, farmers should comply with district and regional plan requirements and implement appropriate measures to avoid any adverse environmental effects in accordance with the RMA.

The Code applies in full where payment is received for the spreading of stock effluent on a property, as the operation is deemed commercial.

1.5.4 Recreational Vehicles

The Code does not cover public transport companies, campervan rental companies and most campervan sites that have facilities for holding tank discharge to sewer.

However, the Code applies to commercial operations collecting discharge from the holding tanks of recreational or public transport vehicles.

1.5.5 Portable Toilets

The Code does not cover vehicles and drivers transporting portable toilet units for domestic or recreational use, unless they exceed:

- 250 litres; or
- 2 portable toilets.
However, **the Code applies** to all companies involved in the commercial provision of portable toilet services irrespective of the volume of waste or number of toilets transported.

### 1.5.6 WASTE WATER TREATMENT PLANT OPERATORS

The Code does not apply to the operation of municipal wastewater treatment plants as resource consent conditions governing the operation of these plants provide specific waste management controls.

### 1.5.7 GUIDANCE FOR EXCLUDED ACTIVITIES

As a matter of good practice, it is recommended that activities excluded from the Code in sections 1.5.1 to 1.5.6 apply the environmental protection measures specified in the Code as far as practicable unless more specific controls apply.

### 1.6 REFERENCES

Industry Code of Practice for the Minimisation of Stock Effluent Spillage from Trucks on Roads, Road Transport Forum, April 1999

NZS 4304:2002 Management of Healthcare Waste

NZS 5433:2007 Transport of Dangerous Goods on Land

Land Transport Rule: Dangerous Goods 2005

Land Transport Rule: Dangerous Goods Amendment 2010

Liquid and Hazardous Waste Operators’ Code Compliance Programme 2007

Liquid and Hazardous Waste Code of Practice 2003
2 THE REGULATORY AND POLICY FRAMEWORK

This chapter provides an overview of the legal and policy framework that applies to the management of liquid and hazardous waste. It is not intended as a comprehensive guide to New Zealand law, but will provide an indication of the issues and guidance on where to find further information.

The waste industry has undergone significant legislative and policy changes since the publication of the 2003 Liquid and Hazardous Waste Code of Practice. These changes include the introduction of the Waste Minimisation Act 2008, the revised New Zealand Waste Strategy 2010, the Hazardous Substances and New Organisms Act 1996 (which has come into full force), and amendments to the Land Transport Rule for Dangerous Goods.

2.1 THE RESOURCE MANAGEMENT ACT 1991

The Resource Management Act 1991 (RMA) plays a key role in environmental management. District, city and regional councils (local authorities) are responsible for implementing the bulk of the RMA controls.

The RMA promotes the sustainable management of natural and physical resources. Local authorities implement the RMA through rules in district and regional plans and by issuing resource consents.

Central government can issue National Environmental Standards (NES) to, for example, prescribe technical standards, set particular monitoring requirements, or specify resource consent requirements for particular activities.

For the waste industry, the RMA controls any discharge of contaminants to land, air or water (whether intended or unintended). It also controls how wastes are stored and managed on site, through land use consents or rules.

Under the RMA, everyone has the duty to avoid, remedy or mitigate adverse effects on the environment arising from an activity carried out by or on behalf of that person. Therefore, you shall ensure that your operation complies with any relevant permitted
activity rules in district and regional plans and that you hold any resource consents required. These resource consents may include consents to discharge contaminants into the environment, for example contaminated stormwater, gas emissions (including odours) or dust caused by your activities.

All applications for consents follow the same procedures. The applicant:

- checks the rules in district and regional plans to see what consents, if any, are needed;
- includes in their application an assessment of environmental effects, and what steps they will take to avoid, remedy or mitigate those effects; and
- may also have to outline what consultation has taken place with any affected parties.

Some resource consent applications require public notification. This gives the community a chance to consider the application and to make a submission if they wish.

Failure to meet the requirements of any resource consent or rule within a regional or district plan can result in enforcement action. This ranges from infringement notices through to prosecution. Fines of up to $600,000 can be imposed on companies and up to $300,000 for any individual, together with up to two years imprisonment.

2.2 THE LOCAL GOVERNMENT ACT 2002

The Local Government Act 2002 (LGA) defines the purpose, structure, function and duties of local government in New Zealand. It provides the operational (rather than regulatory) framework for local government. The control of the transport of wastes and the discharge of liquid wastes to sewer comes under local authority bylaws established under this Act with specific bylaw-making powers for trade waste (Section 148). The penalties for offences against a trade waste bylaw include a maximum fine of $200,000.
**Download a copy of the Act from:**


### 2.2.1 Trade Waste Bylaws

Most councils that own and operate a municipal wastewater treatment facility also have a trade waste bylaw that controls the discharges to their sewerage system. Many have based their bylaw on New Zealand Standard 9201:Part 23 Model General Bylaw Trade Waste (model bylaw).

Within the model bylaw (s5.4.3 Tankered Wastes), territorial authorities can restrict access to their sewerage system to those who do not comply with this Code.

Specifically the bylaw states: “Tankered wastes shall not be discharged into the Waste Water Authority’s sewerage system by any Person or Consent Holder not compliant with the Liquid & Hazardous Wastes Code of Practice.”

**Download a copy of the model bylaw (purchase required) from:**

[www.standards.co.nz](http://www.standards.co.nz)

Some councils (e.g. Christchurch City Council) have used the model bylaw to require Liquid and Hazardous Waste Operators using their wastewater treatment plant to comply with the Code.

**Download a copy of the Christchurch City Council Bylaw from:**


### 2.3 The Hazardous Substances and New Organisms Act 1996

The Hazardous Substances and New Organisms Act 1996 (HSNO) controls hazardous substances but not the majority of hazardous wastes. Hazardous wastes that are controlled by HSNO are those that are pure substances and not a mixture of different wastes. To avoid confusion, these pure substances are called waste hazardous substances. (Unwanted agrichemicals that have not been mixed with other materials, for example, are waste hazardous substances and are therefore controlled by HSNO.)
However spent electroplating liquor is not, as it is no longer considered to be a pure substance.)

HSNO is enforced by a number of agencies (depending on the location of the activity) including:

- **Department of Labour (DoL):** any place of work.
- **Energy Safety:** around any gas distribution system, installation, or appliance.
- **New Zealand Transport Agency:** with road, rail and vehicles (optional).
- **New Zealand Police Commercial Vehicle Investigation Unit:** road, rail and vehicles.
- **Civil Aviation Authority:** any aircraft.
- **Maritime Safety Authority:** any ship.
- **New Zealand Customs Service:** at the border.
- **Ministry of Health:** where necessary to protect public health.
- **Territorial authorities:** in or on any premises situated within their district other than those premises mentioned above; and/or those premises specified above where the function, power or duty has been transferred to the territorial authority by another enforcement agency.
- **Regional councils:** may enforce the Act in or on premises if enforcing the RMA.

Waste contractors dealing with waste hazardous substances shall comply with HSNO and associated regulations. They need to be Approved Handlers and have storage facilities that comply with all requirements.
The following regulations are most relevant to liquid and hazardous waste contractors:

- Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 (SR 2001/112)
- Hazardous Substances (Classification) Regulations 2001 (SR 2001/113)
- Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001 (SR 2001/116)
- Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations 2001 (SR 2001/117)
- Hazardous Substances (Packaging) Regulations 2001 (SR 2001/118)
- Hazardous Substances (Disposal) Regulations 2001 (SR 2001/119)
- Hazardous Substances (Tracking) Regulations 2001 (SR 2001/120)
- Hazardous Substances (Emergency Management) Regulations 2001 (SR 2001/123)
- Hazardous Substances (Identification) Regulations 2001 (SR 2001/124)
- Hazardous Substances (Fireworks, Safety Ammunition, and Other Explosives Transfer) Regulations 2003 (SR 2003/176)
- Hazardous Substances (Compressed Gases) Regulations 2004 (SR 2004/43)
- Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004 (SR 2004/46)

Download a copy of the regulations from:

www.legislation.govt.nz/
To obtain an Approved Handler certificate, the applicant needs to show a Test Certifier that they have an appropriate understanding of HSNO and the knowledge, experience and competence to safely handle the hazardous substances that their certificate will cover.

You can search for your nearest Test Certifier here:
www.epa.govt.nz/search-databases/Pages/testcertifiers-search.aspx

Penalties under this Act include fines of up to $500,000 and up to three months imprisonment. Courts may also require offenders to meet clean up and recovery costs.

You can get more information on the HSNO Act here:
www.epa.govt.nz/
www.mfe.govt.nz/publications/hazardous/info-sheets-dec97/index.html
www.legislation.govt.nz/

2.4 THE HEALTH AND SAFETY IN EMPLOYMENT ACT 1992 & AMENDMENT 2002

The Health and Safety in Employment Act (HSE Act) focuses on the prevention of harm to those at work and other persons in, or in the vicinity of, a place of work. Employers are required to identify and control hazards; provide information, training, and supervision; and to maintain accident records.

The HSE Act lists various means to achieve its objective, including:

- Promoting excellence in health and safety management, in particular through being systematic.
- Defining hazards and harm in a comprehensive way so that all hazards and harm are identified and managed, including harm caused by work-related stress and hazardous behaviour caused by certain temporary conditions.
- Imposing duties to ensure that people are not harmed as a result of work activities.
• **Setting requirements** that relate to taking all practicable steps to ensure health and safety, and that are flexible to cover different circumstances.

• Encouraging the health and safety of **volunteers**.

• Requiring **employee participation** in the improvement of health and safety and encouraging good faith co-operation in places of work.

• Providing a range of **enforcement methods** in response to failure to comply with the Act.

The HSE Act imposes **duties** on a wide range of people, including:

• Employers

• Persons who control places of work

• Persons who sell or supply plant for use in places of work

• Self-employed people

• Principals to contracts

• Employees

• Volunteers

• People receiving on the job training or gaining work experience.

The HSE Act promotes health and safety management in the workplace and focuses on the prevention of harm to employees at work. It covers a comprehensive range of workplace types in both the state and private sectors. Primary responsibility for health and safety is placed on the employer to provide an appropriate work environment. Employer responsibilities include hazard identification and control, providing information, training and supervision, involving employees and accident reporting.
The HSE Act sets out a hierarchy of actions to follow in the management of hazards:

- identification of hazards;
- elimination;
- isolation; and
- minimisation.

Employers, employees and self-employed workers are also expected to ensure that their actions at work do not result in harm. Responsibilities include:

- following instructions;
- using protective equipment; and
- taking all practicable steps to ensure personal safety and the safety of others.

The Department of Labour administers the HSE Act, investigates incidents and undertakes enforcement action. For the most serious offences, a person may be fined up to $500,000 and/or face up to two years in prison. These cases are when a person:

- takes an action knowing that it is reasonably likely to cause death or serious harm, and the action is contrary to a provision of the HSE Act; or
- does not take action, knowing that inaction is reasonably likely to cause death or serious harm, and the person concerned is required by the HSE Act to take action.

The HSE Act also has regulations that help to implement the HSE Act.

**2.4.1 HEALTH AND SAFETY IN EMPLOYMENT (ASBESTOS) REGULATIONS 1998**

The Asbestos Regulations 1998 outline the controls placed on the management of asbestos wastes and the disposal of asbestos-containing materials.
Download a copy of the Regulations from:

www.legislation.govt.nz/

2.4.2 **Health and Safety in Employment Regulations 1995**

The Health and Safety in Employment regulations (HSE regulations) set out some minimum standards which employers shall meet to ensure they have taken all practicable steps to protect employees and others from harm in the workplace. The regulations cover all work activities except work that is voluntary or carried out on ships at sea, or aircraft in flight. Like the Act, regulations are enforceable and breaches may result in prosecution and fines.

The HSE regulations contain more detailed requirements on how to comply with the HSE Act. They cover:

- facilities required for the safety and health of employees such as lighting, air and emergency exits;
- precautions to be taken and management of particular hazards such as noise and working at heights;
- notification of hazardous work activities such as construction and forestry;
- certificates of competence for activities involving high risk such as the use of scaffolding;
- young people in hazardous places of work; and
- duties of people designing, manufacturing or supplying plant or protective equipment.

Download a copy of the regulations from:

www.legislation.govt.nz/
2.5 **THE LAND TRANSPORT ACT 1998**


2.6 **THE HEALTH ACT 1956**

The Health Act 1956 empowers district and city councils to appoint Environmental Health Officers to control nuisances, offensive trades, and the handling and storage of noxious substances, which may include hazardous wastes.

‘Offensive trades’ are described in Schedule 3 of the Health Act 1956 and include:

- nightsoil collection and disposal;
- refuse collection and disposal; and
- septic tank desludging and disposal of sludge.

Some councils require liquid and hazardous waste operators to register and obtain an Offensive Trades Licence.

2.7 **THE WASTE MINIMISATION ACT 2008**

The Waste Minimisation Act 2008 (WMA) aims to encourage waste minimisation and decrease waste disposal in order to protect the environment from harm and provide environmental, social, economic, and cultural benefits.

It does this by setting a levy on all waste disposed to disposal facilities that accept household waste, establishing a procedure to accredit product stewardship programmes, and requiring councils to develop Waste Minimisation and Management Plans (WMMP) for their districts.

The WMA also requires the distribution of the collected levy. Half of the levy goes to city and district councils to fund the implementation of their WMMP; the remainder,
once administration costs have been met, goes into a contestable fund where projects that meet specific criteria can apply for funding.

The WMA also enables territorial authorities to develop and enforce bylaws that prohibit or regulate the deposit of waste, and regulate its collection and transport. It also enables them to licence waste operators and require operators to provide performance bonds and report on the quantity, composition and destination of waste they collect and transport.

2.8 THE NEW ZEALAND WASTE STRATEGY 2010

The New Zealand Waste Strategy 2010 (the Strategy) provides high level direction for the management and minimisation of waste, allowing a flexible approach to be developed for different situations. City and district councils must have regard to the Strategy when developing their WMMP.

The Strategy includes two primary goals: reducing the harmful effects of waste, and improving the efficiency of resource use. It also includes infectious wastes in its definition of hazardous waste.

Download a copy of the Strategy from:


2.9 THE RESOURCE MANAGEMENT ACT ROLE OF LOCAL AUTHORITIES

Local authorities (district/city, unitary and regional councils) represent communities affected by RMA decisions, and are responsible for implementing the bulk of the RMA.

Listings and locality maps of the local authorities can be found here:

www.lgnz.co.nz/ig-sector/maps/
2.9.1 **DISTRICT AND CITY COUNCILS**

District and city councils are responsible for controlling:

- the effects of land use (including hazardous substances and natural hazards);
- subdivision;
- noise; and
- the effects of activities on the surface of lakes and rivers.

To enable them to carry out these functions, district and city councils prepare district plans, issue resource consents, take enforcement action and undertake a wide range of monitoring activities.

2.9.2 **REGIONAL COUNCILS**

Regional councils are responsible for controlling:

- the taking, use, damming, and diversion of surface water, ground water and geothermal water;
- the maintenance and enhancement of water quality and quantity;
- the discharge of contaminants to land, air or water;
- the effects of activities in the coastal marine area (together with the Minister of Conservation);
- land use for soil conservation and other purposes; and
- the introduction of plants into water bodies.

They are responsible for preparing regional policy statements and regional plans, issuing resource consents, taking enforcement action and undertaking a wide range of monitoring activities.
2.9.3 UNITARY AUTHORITIES

These councils have functions of both regional councils and territorial authorities under the RMA.

2.9.4 THE MINISTER FOR THE ENVIRONMENT

The Minister for the Environment (Minister) maintains an active overview and monitoring role in regard to the implementation of the RMA, HSNO and the WMA. The Minister also has some direct areas of responsibility, for example:

- recommendations on issuing national policy statements;
- national environmental standards;
- water conservation orders; and
- the ‘call-in’ of major resource consent applications.

The Ministry for the Environment is responsible for assisting the Minister in carrying out his or her functions under the RMA (as is the newly established Environmental Protection Authority which deals with environmental matters of national significance, and has taken over the functions of the Environmental Risk Management Authority).

2.10 OTHER LEGISLATION

Other legislation that can affect liquid and hazardous waste operators includes:

- Building Act 2004
- Fire Service Act 1975
- Radiation Protection Act 1965
- Biosecurity Act 1993
- Machinery Act 1950
- Ozone Layer Protection Act 1990
2.10.1 REGULATIONS

Other relevant regulations include:

- Building Code
- Factories and Commercial Premises (First Aid) Regulations 1985
- Fire Safety and Evacuation of Building Regulations 2006 and Amendment 2008

2.10.2 CODES OF PRACTICE AND STANDARDS

Other codes of practice and standards relevant to the industry include:

- The Approved Code of Practice for Training Operators and Instructors of Powered Industrial Lift Trucks
- Management of Substances Hazardous to Health (MOSH) in the Place of Work - Approved Code of Practice
- Managing Hazards to Prevent Major Industrial Accidents
- Approved Code of Practice for the Management of Noise in the Workplace
- Workplace Exposure Standards (WES), Department of Labour
- NZS 3760:2010 In-service Safety Inspection & Testing of Electrical Equipment
- Guidelines for the Provision of Facilities and General Safety in Commercial and Industrial Premises
- AS 2865-1995 Safe Working in a Confined Space
- Code of Practice for Temporary Traffic Management
- Requirements for Transitional Facilities for Sea Containers
Download copies from:

www.osh.dol.govt.nz/order/catalogue/index.shtml#ap


3 OWNERSHIP, RESPONSIBILITY & LIABILITY

3.1 INTRODUCTION

It is essential to clarify ownership and responsibility before undertaking a waste management activity, as the cost of managing waste and the repercussions associated with incidents can be far-reaching. This clarity will prevent a situation where an incident occurs, laws are broken, huge costs are run up - then you find that you are responsible.

This chapter includes:

- waste ownership, responsibility and liability;
- uncontrolled discharges/emissions to the environment;
- emergency response to incidents relating to a waste;
- the Health and Safety in Employment (HSE) Act; and
- site contamination.

3.2 OWNERSHIP

The standard industry approach to the ownership of a waste is that all wastes remain in the ownership of the generator indefinitely. Even when the waste is deposited in a landfill, the waste continues to remain the property of the generator - until the generator specifically passes legal ownership (not just responsibility) to a second party.

Most generators may not be aware of the difference between transferring the responsibility for managing a waste, and transferring the ownership of a waste. Contractors should continually seek to educate generators and make them aware of their continued ownership. This will minimise confusion in the event of a dispute.

The ownership status of the waste shall be clearly stated in the transfer documents if ownership is to be transferred from the generator to a third party.
3.3 RESPONSIBILITY

A person does not need to own a waste to be responsible for it.

Relevant legislation gives a degree of responsibility to everyone directly or indirectly involved in an activity regardless of whether they own the waste.

People shall be responsible for the waste in their care until such time as the responsibility has been passed to a subsequent person.

You shall comply with all legal and code requirements whilst you are responsible for a waste and then ensure that the next party is able to continue with these responsibilities. People are responsible for the actions of agents (e.g. contractors) working on their behalf. (Under sections 340 and 341 of the RMA, for example, the principals [generators] are liable for the acts of agents [contractors]).

You shall ensure that all liquid and hazardous waste contractors undertaking work on your behalf are code compliant.

3.4 LIABILITY

3.4.1 CIVIL LIABILITY

Civil liability is when a person breaches common law. Every person has the responsibility under common law to ensure their actions do not cause injury (financial or otherwise). A breach of common law may result in a civil court requiring payment of compensation to the aggrieved party. (Note: the New Zealand Accident Compensation Act covers the costs associated with actual bodily injury caused by accident.)

The Code does not include civil liability. However, compliance with the Code will minimise the risk of civil action against persons in the industry.

3.4.2 CRIMINAL LIABILITY

Liability in the context of this section relates to criminal liability. Where a person contravenes an Act, such as Section 15 of the RMA (unauthorised discharges), that
person commits an offence and enforcement action may be taken by the enforcement authority.

Liability is related to responsibility and ownership, with the emphasis on responsibility. If a breach of legislation occurs, then the person(s) responsible and/or the owners may be found liable by the relevant regulating authority. Each Act identifies the potential fines and penalties for offences against it.

Each law identifies the parties that may be found liable. Often multiple parties will be found liable for a breach of legislation. It is not a valid argument that someone else is more liable. If a party has not fulfilled its legal responsibilities, then it may be found liable.

3.4.3 Individual Liability

Liability is not restricted to companies. Most laws, including the RMA, HSE Act and the Hazardous Substances and New Organisms Act 1996 (HSNO), allow the regulators to take action against the directors of the company as well as against the company itself. Action can also be taken against individuals, such as employees.

You therefore need to be proactive in minimising risk and trying to avoid a breach of legislation, whether you are directly or indirectly responsible for the waste. It is not enough for you to merely avoid intentionally breaching legislation.

3.4.4 Unauthorised Discharge to the Environment

Any unintentional or unauthorised discharge (spill or emission) of waste into the environment is likely to breach the RMA and/or other legislation. It may also be a breach of HSNO and the Land Transport Rule.
Therefore, no person(s) shall discharge waste:

- to air;
- into water; or
- onto land in an uncontained area which may result in ground or surface water contamination;

unless it is allowed by a resource consent or a rule in a plan.

This means that all wastes (unless otherwise authorised) shall be discharged and stored in a contained facility. This facility may be anything from a tank to a sealed pond or within a sealed building. Any storage of wastes in uncontained areas is likely to result in a breach of the RMA and is not allowed.

3.5 EMERGENCY PLAN

The person responsible for the waste at the time of an emergency is responsible for implementing an Emergency Plan. However, under the RMA (as with uncontrolled discharges) there is a generic responsibility for all persons involved in an activity to respond to an emergency.

Every person involved in a waste activity (directly or indirectly) has responsibilities under Section 17 of the RMA to protect the environment in the following ways.

- **Avoid:** stop the escape of a waste into the environment. This may involve maintaining equipment and vehicles so that a spill does not occur, or it may include closing an emergency valve, placing a container upright or blocking off a hole.

- **Remedy:** rectify the problem. This may include cleaning up the spill or putting in place booms and bunds to collect the discharge.

- **Mitigate:** minimise the adverse effects of the incident on the environment. This level of action indicates the event has occurred but action can still be taken to minimise the effects of the incident. This may include oxygenating
the water or diluting the contaminant. Generally, this will be the most ineffective of the actions as it is necessary only when avoidance and remedy have failed.

Refer to Chapter 10 for more information on emergency plans.

In addition, persons responsible for a waste have a duty to ensure that any person subsequently taking responsibility for the waste has an appropriate emergency plan, before handing over that responsibility.

3.6 HEALTH AND SAFETY IN EMPLOYMENT ACT 1992 & AMENDMENT 2002

Under the HSE Act, all employers, employees, the self-employed, contractors and principals have a duty to take all practicable steps to protect themselves and others whilst working. Health and safety should never be considered someone else’s problem. It is a shared responsibility amongst those involved.

Again, ignorance is not a valid defence: a person is obliged to familiarise themselves and others with a potentially dangerous situation.

Refer to Chapter 9 for details on how to comply with the Health and Safety in Employment regulations.

3.7 SITE CONTAMINATION

Pre-1991 sites: If a site was contaminated before 1991, the current landowner/occupier is liable for the costs of remediating the site.

Post-1991 sites: Under the RMA, those responsible for the contamination of a site (polluter/owner/occupier) are liable for the unauthorised discharge of contaminants to the environment. However, if the polluter cannot be found, or no longer exists, then the site owner is responsible for managing or remediating the site.

When selling a site, vendors have a duty of care to disclose information about known site contamination issues to potential purchasers, if asked.
Prior to purchasing a site, a potential purchaser should have a site investigation undertaken to assess any contamination issues relating to the site.

Site owners should require a departing lessee to remedy any site contamination that has occurred during the lease, prior to departure; otherwise the site remediation may default to the owner (depending on the terms of the lease).

### 3.8 THE GENERATOR

The generator shall own their waste indefinitely, unless stated otherwise.

The generator shall be responsible for the waste while it is on their site, including health and safety issues, spills and site contamination issues.

An Emergency Plan shall be in place on the generator’s site.

The generator shall be responsible (and may be found liable) for any unauthorised discharges of waste and contaminants on their site, including in the event of a spill during waste collection.

The generator shall classify and identify their waste and sign a declaration, prior to transferring responsibility to a second person.

The declaration should be made in a manner consistent with the Waste Declaration Form (refer to Chapters 4 and 5).

If the transporter agrees to undertake the classification and identification of the waste on the generator’s behalf, the generator shall still accept responsibility for the identification by signing the Waste Declaration Form (refer to Chapter 5).

The generator shall be responsible for contracting a suitable transporter to move the waste and should keep records as to who took what, when and where. This should include viewing the transporter’s documentary evidence of ability to transport in accordance with legal requirements (refer to Chapter 6 for a list of compliance requirements for transporters).
The generator may be found liable (in conjunction with the transporter) for accidental spillage during transport if their due diligence of the transporter was inadequate.

The generator and transporter shall complete a formal transfer of the waste (refer to Chapter 5).

On completion of this transfer, while the ownership of the waste may still lie with the generator, the responsibility now rests with the transporter.

3.9 **THE TRANSPORTER**

A transporter shall only accept a waste if they are confident that the waste classification and identification is accurate and signed by the generator (refer to Chapters 4 and 5).

On accepting the waste, the transporter shall accept responsibility for it and is liable for the waste while it is in their vehicle and on their site. This liability includes health and safety issues, spills and site contamination resulting from the storage, handling and disposal of the waste on the site.

The transporter (along with the generator, if they have not shown due diligence) may be found liable for accidental spillages during transport in the event that the accidental spill was foreseeable and therefore preventable. This includes having an inadequate Emergency Plan.


The transporter shall deliver the waste to a receiver who is willing and able to receive and manage the waste in accordance with all legislative requirements.

It is the transporter’s decision to mix wastes during transport and any matters resulting from the mixing process shall be the transporter’s responsibility.
Under the Code, the transporter shall use WasteTRACK (refer to Chapters 5 and 14) and maintain tracking records of all wastes. This is in addition to the legal requirements under HSNO and the Land Transport Rule: Dangerous Goods 2005 and its 2010 Amendment.

Once delivered to and accepted by the receiver, the responsibility for the waste shall pass to the receiver, though ownership of the waste may still lie with the generator.

3.10 THE RECEIVER (TREATER/DISPOSER)

Receivers shall only accept waste for which they are able and willing to take responsibility.

The receiver shall be fully responsible for the waste, including responsibility for health and safety issues, spills and site contamination issues.

Receivers (including landfills and sewage treatment plants) shall comply with their RMA discharge consents or trade waste bylaws at all times.

Receivers should take due care to accept waste that will not result in a breach of resource consent or bylaw conditions. Recording the acceptance of the waste and associated particulars will help the receiver comply with their RMA requirements.

On completion of this process, responsibility shall be retained by the receiver, though the ownership of the waste may still lie with the generator.

3.11 MANDATORY CODE REQUIREMENTS

The table below summarises the mandatory requirements of this section of the Code. This means mandatory in law or regulation or under the Code.
<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>Ownership shall be retained by the generator indefinitely unless a contract states otherwise.</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>Any waste transfer shall state the ownership status of the waste.</td>
<td>3.2</td>
</tr>
<tr>
<td>Responsibility</td>
<td>Persons responsible for a waste shall comply with all legal requirements.</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Persons responsible for a waste shall comply with all code requirements.</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Persons shall be responsible for agents (e.g. contractors) working on their behalf.</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Persons shall ensure the subsequent person accepting the waste is able to comply with the Code and legal requirements associated with the waste.</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>You shall ensure that all liquid and hazardous waste contractors undertaking work on your behalf are code compliant.</td>
<td>3.3</td>
</tr>
<tr>
<td>Liability</td>
<td>In the event of a breach of legislation, the person(s) responsible and/or the owners may be found liable by the relevant regulatory authority.</td>
<td>3.4</td>
</tr>
<tr>
<td>Liability for uncontrolled</td>
<td>No person(s) shall discharge waste:</td>
<td>3.4.4</td>
</tr>
<tr>
<td></td>
<td>• to air;</td>
<td></td>
</tr>
<tr>
<td>discharges</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>• into water; or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• onto land in an uncontained area which may result in ground or surface water contamination;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>unless it is allowed by a resource consent or a rule in a plan.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency response shall be the responsibility of the person(s) responsible for the waste at that time.</td>
<td>3.5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsibility under the HSE Act</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Persons shall take all practicable steps to protect themselves and others while working.</td>
<td>3.6</td>
</tr>
<tr>
<td>Persons shall familiarise themselves and others with potentially dangerous situations.</td>
<td>3.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Site contamination</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Land owners / occupiers and polluters may be responsible for remediation of a contaminated site.</td>
<td>3.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The generator shall...</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>own their waste indefinitely unless stated otherwise.</td>
<td>3.8</td>
</tr>
<tr>
<td>be responsible for the waste while it is on their site.</td>
<td>3.8</td>
</tr>
<tr>
<td>be responsible for health and safety and any site emergency on their site.</td>
<td>3.8</td>
</tr>
<tr>
<td>classify and identify their waste and sign a waste declaration.</td>
<td>3.8</td>
</tr>
<tr>
<td>be responsible for contracting a suitable transporter.</td>
<td>3.8</td>
</tr>
<tr>
<td>be liable for the actions of their agents, if they have</td>
<td>3.8</td>
</tr>
</tbody>
</table>
The transporter shall...  

<table>
<thead>
<tr>
<th>Task</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>only accept waste for which they have received adequate information and for which they are willing and able to take responsibility.</td>
<td>3.9</td>
</tr>
<tr>
<td>be responsible for the waste on accepting it, until such time as the responsibility is handed over to a third party who the transporter has assessed is competent to accept the waste.</td>
<td>3.9</td>
</tr>
<tr>
<td>comply with all the legislative and code requirements in relation to a waste, including with the Land Transport Rule: Dangerous Goods 2005, the Land Transport Rule: Dangerous Goods Amendment 2010, and NZS 5433: 2007 Transport of Dangerous Goods on Land.</td>
<td>3.9</td>
</tr>
<tr>
<td>be responsible for health and safety and any site emergency on their site.</td>
<td>3.9</td>
</tr>
<tr>
<td>be responsible for mixing the waste in an appropriate manner.</td>
<td>3.9</td>
</tr>
<tr>
<td>maintain WasteTRACK tracking records of wastes for which they have been responsible.</td>
<td>3.9</td>
</tr>
</tbody>
</table>

The receiver shall...  

<table>
<thead>
<tr>
<th>Task</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>only accept waste for which they are willing and able to take responsibility.</td>
<td>3.10</td>
</tr>
<tr>
<td>be responsible for health and safety and any</td>
<td>3.10</td>
</tr>
</tbody>
</table>
emergency on their site.

be responsible for the waste on accepting it, until such time as the responsibility is handed over to a third party.

comply with all the legislative and code requirements in relation to a waste.

| 3.10 | 3.10 |
4 HOW TO IDENTIFY YOUR WASTE

4.1 INTRODUCTION

Waste identification enables you to assess the degree of hazard associated with a waste, and allows for the correct actions to be taken to protect the environment and public health. Identification will help you address occupational health and safety issues and determine the appropriate storage, transport, treatment, and disposal options.

Waste identification falls into three categories:

- **Classification** involves identifying a waste by placing it in a class of known characteristics.

- **Identification** involves identifying the physical, chemical and biological properties of a waste using knowledge of the waste stream or by testing and/or chemical analyses.

- **Characterisation** uses the knowledge obtained from the identification and classification of the waste to determine the potential for risk arising from the hazards of explosiveness, flammability, oxidising capacity, toxicity, corrosiveness, ecotoxicity, infectious nature and/or radioactivity.

This chapter identifies standard tools for waste classification. They include the Ministry for the Environment’s working definition of hazardous waste, the New Zealand Waste List and WasteTRACK.

If a waste is common and the processes by which it was produced are well understood, recognised classification procedures can provide adequate identification to determine the correct actions to be taken.

If the waste is not well known, or if its classification indicates that it may contain hazardous substances, characterisation by testing and/or chemical analyses will be required to help identify the best practice for dealing with the waste.
4.2 CLASSIFICATION TOOLS FOR WASTES

There are a number of tools used to identify whether a waste is hazardous or potentially hazardous. These options should be used as appropriate and are given below. However, the choice of tool will depend on the nature of the waste, and the circumstances governing storage, transport, treatment and disposal. Seek guidance from an environmental professional if you are uncertain about how to apply the tools set out in this section.

4.2.1 NEW ZEALAND DEFINITION OF HAZARDOUS WASTE

The Ministry for the Environment’s working definition identifies hazardous waste as any waste that:

- contains hazardous substances at sufficient concentrations to exceed the minimum degrees of hazard specified by the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 under the Hazardous Substances and New Organisms Act 1996 (HSNO); or
- meets the definition for radioactive material included in the Radiation Protection Act 1965 and Regulations 1982.

4.2.2 THE NEW ZEALAND WASTE LIST (L-LIST)

The L-List is intended to be used as a guide for the classification of wastes generated by New Zealand industry. It contains 20 waste categories, some of which are process-based and some that are generic. Each waste is assigned a unique six-digit code (L-Code). Wastes marked with an asterisk (*) after their L-Code should be treated as hazardous.
The New Zealand Waste List can be found at:


4.2.3 NEW ZEALAND STANDARD 5433:2007 TRANSPORT OF DANGEROUS GOODS ON LAND

When a dangerous good is transported, it is classified in accordance with the rules prescribed in the Land Transport Rule: Dangerous Goods 2005, the Land Transport Rule: Dangerous Goods Amendment 2010 and New Zealand Standard 5433:2007 Transport of Dangerous Goods on Land. Dangerous goods for transport are a subset of ‘hazardous substances’ as defined in HSNO, but also include radioactive material and infectious substances.

The term ‘dangerous goods’ is used internationally to describe the goods covered by the United Nations Recommendations on the Transport of Dangerous Goods (UNRTDG). They are divided into nine classes based on the risks associated with the goods when prepared for transport:

- **Class 1** Explosives
- **Class 2** Compressed gases
- **Class 3** Flammable liquids
- **Class 4** Flammable solids; substances liable to spontaneous combustion; substances which in contact with water emit flammable gas
- **Class 5** Oxidising substances and organic peroxides
- **Class 6** Toxic and infectious substances
- **Class 7** Radioactive material
- **Class 8** Corrosive substances
- **Class 9** Miscellaneous dangerous substances
The UNRTDG also includes procedures and requirements for:

- marking (to include the proper shipping name and United Nations (UN) number);
- labelling (class and subsidiary labels);
- packaging;
- segregation; and
- documentation.

A waste is identified as non-hazardous for the purpose of the Code if:

1. it is not marked with an asterisk (*) in the L-List; and
2. it is not classified as a dangerous good in NZS 5433:2007 Transport of Dangerous Goods on Land.

However, if the waste is carried in a tank that has not been adequately cleaned after transporting a hazardous waste, it would be considered to be contaminated and hazardous. It should also be noted that some wastes that would be considered non-hazardous by the criteria given above could be hazardous in certain situations. Accidental or intentional release of these wastes could result in significant environmental damage and potential prosecution under the Resource Management Act 1991.

### 4.2.4 WASTETRACK

WasteTRACK is an internet-based tracking system that allows operators to assign a waste category for the material that they handle. The 15 category groups are:

- **Category 1** Biological wastes
- **Category 2** Solid/sludge waste
- **Category 3** Clinical & pharmaceutical wastes
- **Category 4** Pesticides
Category 5  Paints & resins
Category 6  Oils & emulsions
Category 7  Solvents
Category 8  Other organic chemicals
Category 9  Acids
Category 10  Alkalis
Category 11  Chromium
Category 12  Cyanide
Category 13  Inorganic chemicals
Category 14  Low strength wash waters
Category 15  Miscellaneous

All wastes shall be classified using both WasteTRACK and the Dangerous Goods classification (s4.2.3 above) prior to transportation.

The WasteTRACK system is described in Chapter 14.

4.3 IDENTIFICATION TOOLS FOR WASTES

Prior to acceptance by a second party, the waste shall be identified and classified. This can be achieved by:

- Using process knowledge to apply the six-digit code from the L-List and its dangerous goods class from NZS 5433: 2007 Transport of Dangerous Goods on Land.
- Identifying and assigning a unique WasteTRACK category to the waste.
• If the waste is not classified as hazardous in the L-List or as a dangerous good in NZS 5433: 2007 Transport of Dangerous Goods on Land, it is not subject to controls under that Standard.

• If it is classified as hazardous, the risk is assessed by reference to the waste definition (s4.2.1 above) which includes definitions for infectious substances, radioactive substances and degree of hazard.

This identification and classification can then be used to:

• ensure occupational health and safety requirements can be met;

• avoid potential problems arising from unintended emissions (odour, vapours, liquid spillages etc) and/or chemical reactivity;

• establish what is required to comply with the transport of dangerous goods; and

• determine the best options available for treatment of the waste to meet the waste acceptance criteria for disposal.

4.4 CHARACTERISATION TOOLS FOR WASTES

Key information in identifying a waste can be derived from process knowledge. This can be obtained by:

• Gaining an understanding of the industrial processes that generated the waste.

• Obtaining information about the waste itself such as:
  – the physical state of the waste (solid, liquid, sludge);
  – the volume; and
  – the likely composition.
• Obtaining information on the best methods for treatment and disposal.

• Checking with trade associations to see if the appropriate information already exists for a particular waste.

Expert advice may be required to assist in developing process knowledge. See, for example, the New Zealand Infrastructure, Water & Environment Directory. A list of environmental consultants can be found in the Yellow Pages and other directory publications.

With process knowledge, the waste stream can readily be classified with the six-digit code from the L-List and identified as potentially hazardous or non-hazardous. If process knowledge identifies the waste as potentially hazardous, the degree of hazard may need to be determined to allow correct decisions to be made for transport, treatment and disposal of waste.

4.4.1 MINIMUM DEGREES OF HAZARD

The Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 (also known as the Threshold Regulations) specify hazardous property thresholds to establish whether a substance is hazardous for the purposes of HSNO. In HSNO terms, a substance is considered hazardous if it triggers any one of the threshold levels for any of the following hazardous properties:

• explosiveness;

• flammability;

• oxidising capacity;

• corrosiveness;

• toxicity; and

• ecotoxicity.
A threshold is the amount or concentration of a substance that is likely to cause an adverse effect on people or the environment. It is a trigger level for effects which may require controls on the substance to meet the purpose of the HSNO Act.

4.4.2 INFEKTIOUS SUBSTANCES

The hazardous properties of infectious wastes are assessed against the definition of infectious wastes given in the Land Transport Rule: Dangerous Goods 2005 and the 2010 Amendment, and the Standard NZS 5433:2007 Transport of Dangerous Goods on Land, Part 1, Appendix F, as follows:

‘Waste matter such as sewage, septic tank sludges, animal effluent and human waste matter in portable toilets are classified for transport as Division 2, infectious substances. Such waste matter may contain pathogens that can cause human disease, but are unlikely to be a serious hazard.’

4.4.3 RADIOACTIVE MATERIAL

The hazardous properties of radioactive material are defined in the Radiation Protection Act 1965 and Regulations 1982. Radioactive material means any article containing a radioactive substance giving it a specific radioactivity exceeding 100 kilobecquerels per kilogram and a total radioactivity exceeding 3 kilobecquerels.

4.5 WASTE TESTING AND CHEMICAL ANALYSES

The identification of a waste as potentially hazardous using the L-List does not imply that laboratory analysis or testing is mandatory. If the waste stream is continual and unlikely to change in character, it may be managed on process knowledge alone.

Although not always required, laboratory analysis or testing is recommended where process knowledge is limited as it will determine the level of treatment, if any, required before disposal.

Laboratory analysis and/or testing, if required, shall be carried out by a suitably qualified laboratory to ensure the waste meets the disposal site waste acceptance criteria or sewer trade waste bylaws.
4.6 FIELD TESTING AND OBSERVATIONS

A written description of the waste (type, quantity, source and testing) shall be kept for seven years.

In some situations, field testing results obtained using hand-held equipment are sufficient (for example, parameters such as pH, conductivity, temperature, dissolved oxygen and explosive gases can be measured in the field without the need for laboratory testing). Other field tests (e.g. those using colour tests indicative of particular chemicals) are not as reliable and should not be used as an alternative to laboratory tests.

If the application of both process knowledge and the ‘minimum degree of hazard’ regulation indicates that the waste is non-hazardous, field testing (for example, simple tests for pH and ionic strength; flammable and toxic gases; and recording the temperature of the waste and any phase separation of liquids or odour) can provide some confirmation if required.

Some simple and quick tests and observations that would provide valuable records for a waste contractor transporting a waste from a generator to a treatment or disposal plant are listed in the table below.

FIELD TESTS AND OBSERVATIONS TO CONFIRM HAZARDOUS CHARACTERISTICS FOR WASTE CONSIGNMENTS

<table>
<thead>
<tr>
<th>Test</th>
<th>Indication of -</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH</td>
<td>Corrosiveness</td>
</tr>
<tr>
<td>Electrical conductivity</td>
<td>Amount of ions in water (metals and salts in water)</td>
</tr>
<tr>
<td></td>
<td>Ionic strength of a solution (metals and salts in water)</td>
</tr>
<tr>
<td>Dissolved oxygen</td>
<td>Biological activity (can produce flammable and toxic gases)</td>
</tr>
<tr>
<td></td>
<td>Redox (reducing/oxidising) conditions</td>
</tr>
<tr>
<td>--------------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>Temperature</td>
<td>Chemical reactivity (can produce flammable and toxic gases)</td>
</tr>
<tr>
<td></td>
<td>Biological activity (can produce flammable and toxic gases)</td>
</tr>
<tr>
<td>Gas detectors</td>
<td>Flammable gases</td>
</tr>
<tr>
<td></td>
<td>Toxic gases</td>
</tr>
<tr>
<td>Phase separation</td>
<td>Toxicity (oils)</td>
</tr>
<tr>
<td></td>
<td>Flammability (solvents, fuel oils)</td>
</tr>
<tr>
<td>Odour</td>
<td>Biological activity</td>
</tr>
<tr>
<td></td>
<td>Solvents, fuel oils</td>
</tr>
<tr>
<td></td>
<td>Chemicals</td>
</tr>
</tbody>
</table>

### 4.7 WASTE IDENTIFICATION CHECKLIST

1. Complete a field description of the waste.

2. Classify the waste according to the L-List, NZS 5433:2007 Transport of Dangerous Goods on Land and WasteTRACK.

3. If the waste is classified as hazardous, treat the waste until it meets the appropriate waste acceptance criteria.

4. Laboratory testing, if required, shall be carried out to ensure that the waste no longer exceeds the waste acceptance criteria for disposal at an approved facility.
4.8 MANDATORY CODE REQUIREMENTS

The table below identifies the mandatory requirements of this section of the Code. This means mandatory in law or regulation or under the Code. For further information refer to the section within this chapter.

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Classification</td>
<td>Prior to transportation of a waste, all wastes shall be classified under WasteTRACK and NZS 5433:2007 Transport of Dangerous Goods on Land.</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>Prior to acceptance by a second party, the waste shall be identified and classified.</td>
<td>4.3</td>
</tr>
<tr>
<td>Waste testing and chemical analyses</td>
<td>Laboratory analysis and/or testing, if required, shall be carried out to ensure the waste meets the disposal site waste acceptance criteria or sewer trade waste bylaws.</td>
<td>4.5</td>
</tr>
<tr>
<td>Field observations</td>
<td>A written description of the waste (type, quantity, source and testing) shall be kept for seven years.</td>
<td>4.6</td>
</tr>
</tbody>
</table>
5 DOCUMENTATION AND RECORD KEEPING

5.1 INTRODUCTION

In view of the liabilities associated with handling liquid and hazardous waste, operators shall show that all aspects of waste handling and transfer have been undertaken with due care and that adequate documentation has been completed and filed.

This documentation shall:

- Be practical.
- Attain the minimum requirement of meeting legal obligations – locally, regionally and nationally. Compliance is important for the credible and legal operation of the business.
- Include additional requirements as set out in the Code.

Under the Code, documentation shall include:

- Classification and identification of the waste.
- Contract acceptance.
- Waste transfer using WasteTRACK (from generator via transporter to treater, then from treater via transporter to the final disposal site).
- Invoicing.
- General business documentation relating broadly to the process of waste handling, rather than specifically to the transfer of a waste.

This chapter groups documentation as it applies to each stage of the waste transfer process.
5.1.1 UNIQUE JOB NUMBER

The Code recommends that businesses develop a uniform identification system. This job number is maintained with the waste, from the enquiry stage through to the passing of responsibility to a separate organisation (e.g. a landfill operator).

5.1.2 STORAGE OF DOCUMENTS

Documents shall be retained for seven years in line with commercial filing requirements.

5.2 TRACKING REQUIREMENTS

Code compliant liquid and hazardous waste contractors shall use WasteTRACK for the tracking of all wastes carried by the company.

WasteTRACK tracks the movement of wastes from generation to treatment and/or disposal. A unique WasteTRACK tracking form generated for each load of waste relates only to that load. The tracking form number can be used as the unique job number if the load is made up only of wastes from one generator. If a waste load includes waste from a number of waste generators, then an additional identifying system is required.

5.3 WASTE CLASSIFICATION, IDENTIFICATION AND CONTRACT ACCEPTANCE DOCUMENTATION

In accordance with the Land Transport Rule: Dangerous Goods 2005, the Land Transport Rule: Dangerous Goods Amendment 2010 and New Zealand Standard 5433:2007 Transport of Dangerous Goods on Land, it is the responsibility of the consignor ('generator' in waste terms) to provide documentation on the waste characteristics. In reality, it is often the liquid and hazardous waste operator or the treater who provide advice in this area, or complete the documentation for the generator.

If the transporter or treater complete the documentation on behalf of the generator, the generator shall retain responsibility for the accuracy of the waste documentation.
The characteristics of a waste shall be documented when:

- The generator/consignor wishes to transfer responsibility for a waste for transport, treatment and disposal.
- The treater wishes to transfer responsibility for a waste for disposal as a result of waste treatment activities.

5.3.1 JOB ENQUIRY RECORD

A written job enquiry shall be completed for each new job. The job enquiry should include:

- waste generator contact information;
- waste description;
- estimated waste volume;
- preliminary price estimate;
- a time-line for the job; and
- a unique job identification number.

5.3.2 FORMAL EXCHANGE OF WASTE INFORMATION

Upon an enquiry becoming a job, a minimum level of information shall be required to:

- allocate a transport classification code under NZS 5433:2007 Transport of Dangerous Goods on Land;
- allocate a WasteTRACK category;
- assess the level of treatment required for the waste material; and
- arrange for treatment and/or disposal requirements.

In most cases, a waste declaration needs to be completed by the client (generator) with supporting data supplied where possible. The transporter/treater shall only accept waste on receipt of a signed waste declaration.
The Code recommends that this formal declaration by the client (including a signature) be used wherever possible as it provides some protection to the transporter/treater. The exceptions are discussed in section 5.3.3.

The main features of the waste declaration are:

- the generator has a duty to provide waste information to the transporter/treater;
- an agreement that this information is necessary for the correct identification of the waste material;
- a statement that the waste is accurately described by a person with the authority and qualifications to sign off on this information;
- the ownership of the waste remains with the generator unless a contract transfers ownership; and
- an understanding that if the description is not accurate, the waste can be returned to the client’s site and costs recovered.

5.3.3 LOW RISK WASTES AND THE NEED FOR DECLARATION

Whilst the Code recommends the use and signing of a waste declaration, this may not be practical in certain situations.

The Land Transport Rule: Dangerous Goods 2005, Section 5.2(2).c.ii states that the agent of the consignor can sign the dangerous goods declaration.

If the transporter/treater considers the risk to be low, they can therefore sign both the waste declaration and the dangerous goods declaration on behalf of the generator. This decision is based on the degree of risk the transporter is willing to take.

A signed waste declaration should nevertheless be obtained for all waste transfers where possible.
Examples of low risk wastes are:

- sewage material including septage;
- grease trap waste;
- council pumping chambers;
- roadside cess pits; and
- other simple organics where the level of risk is judged by the transporter/treater to be low.

5.3.4 CONTRACT FOR SERVICE FOR TRANSPORT AND TREATMENT

On larger jobs, a formal waste acceptance process is required. This contract can be drawn up by the waste operator in a style that suits their business. The more risky or costly the waste, the more formal the contract should be. The contract shall include:

- Special requirements for collection and treatment of the waste.
- A price for the work and variations.
- WasteTRACK tracking form number, which is required at the treatment or disposal facility.
- The position on the ownership of the waste.
- A commitment to working in accordance with the Code and other relevant regulations and guidelines.

In addition to these mandatory requirements, the contract should also include:

- Safety Data Sheets.
- Testing and laboratory analysis where required or completed.
• Treatment description (which enables the transporter to ensure that the treater is able to handle the waste material, and provides some transparency for the generator).

• A summation of a collection site hazard analysis completed with the client (probably verbally and in writing).

• Transport and collection arrangements.

5.3.5 JOB INSTRUCTION

The transporter/treater shall provide written job instructions to the driver to ensure:

• the characteristics of the waste are understood;

• the collection process is understood; and

• the point of discharge is known.

5.4 WASTE TRANSPORT

There are usually two stages of waste transfer, which may take place at quite different times:

• transfer from the generator to the waste treatment plant; and

• transfer from the waste treatment plant to the final disposal site (e.g. landfill, compost facility).

In some cases there will be one direct transfer: from generator to final disposal site.

5.4.1 STANDARD OR JOB-SPECIFIC COLLECTION PROCEDURE

The job instruction shall include a standard or customised work plan to ensure all operational, health, safety and environmental issues associated with a job have been addressed.
5.4.2 GENERATOR’S WASTE CONTRACTOR CHECKLIST

The generator should ensure that the transporter is a code compliant liquid and hazardous operator, or complies with the following checklist:

1. Is the transporter’s vehicle in a visibly sound condition?
2. Is the driver equipped with personal safety gear and emergency response/spill equipment?
3. For a flammable or corrosive waste, is the tanker certified? (The driver shall show you the certification plate).
4. Does the driver have the following forms:
   • A job instruction?
   • A form(s) comprising a waste declaration, dangerous goods declaration, and service docket?
   • Emergency response information (such as an Emergency Procedure Guide)?
5. Does the load volume recorded on the transport documentation agree with your estimates?
6. Does the driver check the packaging? Pick one container and trace it through the paperwork.
7. Does the driver placard the truck with the correct placards for the waste?
8. Is the load secure?

A current list of code compliant liquid and hazardous waste operators can be found here:

www.wasteminz.org.nz/sectorgroups/hazardous/LHWOC2.htm
5.4.3 RECORD OF SITE WORK

The transporter shall ensure that a job is documented in a service docket. This is the start of the waste tracking process which records the chain of custody (from the generator to the final disposal site).

The service docket shall include:

- the date and time of the job;
- an address, contact name and phone number;
- the waste type and volume; and
- the WasteTRACK tracking form number.

The transporter/treater shall ensure the service docket is signed by the generator of all wastes where possible.

For some waste collections, the generator may not be present, therefore the service docket cannot be signed. Examples of when a generator may not be able to sign the service docket include collections of waste from:

- septic tanks;
- grease traps;
- council owned pumping chambers;
- road-side cess pits; and
- other simple organic waste collections where the level of risk is judged by the transporter/treater to be low.

The transporter/treater should nevertheless attempt to have this service docket signed for all waste transfers.
5.4.4 TRANSPORT DOCUMENTATION

All dangerous goods shall be transported in compliance with the documentation requirements of the Dangerous Goods Rule and NZS 5433:2007 Transport of Dangerous Goods on Land.

The transport documents shall include:

- a dangerous goods declaration;
- a waste declaration;
- a service docket; and
- emergency procedure guides.

Protection of Confidential Information

By using WasteTRACK and passing on the tracking form number to the treatment company or final disposal site, commercial information is protected. The tracking number that is passed onto the treatment company or final disposal site (along with the receiving details) allows all parties to meet their disclosure obligations without compromising commercial information.

5.5 WASTE TREATMENT DOCUMENTATION

The transporter shall know the discharge point (tank/pit) in advance of the waste collection.

The treater shall know the treatment process that will be used for a specific waste material before the material arrives at the treater’s site.

5.5.1 ACKNOWLEDGMENT OF RECEIPT

Most wastes will be co-treated at the treater’s facility.

The treater shall sign for the waste received from the transporter as part of the tracking requirements of the Code. If the disposal site is unmanned (e.g. a local authority oxidation pond), the requirements of the facility shall be followed.
The treatment company or disposal plant operator shall complete the disposal steps in WasteTRACK to demonstrate that the wastes were received at the facility.

5.5.2 TREATMENT RECORD

A record of treatment shall be maintained by the treatment company.

The treatment record shall include:

- dates of waste receipt at site;
- waste type and volume received;
- WasteTRACK tracking form number;
- treatment process used;
- additives used;
- treatment by-product outcome (volumes to the public sewer, landfill and re-use);
- post-treatment analysis results;
- transport off the site; and
- reference to final disposal site documentation.

The original identification number shall travel with the waste until such time as the waste is mixed with other wastes, when a new identification number shall be assigned. A record linking the original waste identification numbers with this new identification number shall be maintained.
5.5.3 FINAL DISPOSAL SITE

The treater shall complete any documentation required by the final disposal site or user of the treated waste.

The majority of treated wastes will follow at least one of four final disposal routes:

1. To the public sewerage system as a trade waste.

   Disposal to the sewer is usually governed by a trade waste discharge consent (or trade waste permit) with various conditions. There may be the ability for a one-off unusual discharge that is outside the conditions of the consent, after specific permission has been gained from the consenting authority. The standard requirements for public sewer access vary for each council, and should be checked before discharges take place.

2. To an approved public or private landfill.

   Most landfills use a Landfill Access Application/Landfill Disposal Manifest. These are issued for both recurring loads and one-off jobs, and include a range of conditions relating to physical characteristics (e.g. wetness, dustiness) and laboratory analyses.

3. To ground or a water body in accordance with a permitted activity rule or a resource consent under the Resource Management Act 1991.

   Regional councils and unitary authorities issue resource consents or provide permitted activity rule conditions for the disposal of any contaminant to ground or into water. This process requires proof that the contaminant will not have a significant impact, and that all requirements are met. Regional and district plans determine the process for this approach to final disposal. The requirements vary for different councils.

4. To use or recover waste (e.g. beneficial use of biosolids, use of spent sulphuric acid).
Clients who wish to use or recover the waste will set any applicable requirements. These requirements shall also comply with local and regional plan rules.

5.6 FINAL DISPOSAL SITE DOCUMENTATION

The final disposal site shall provide written acknowledgement that they have received a waste. The fate of any treated or directly discharged waste needs to be recorded to show the chain of custody is complete. This acknowledgement may be in the form of an invoice, and should record the volume/weight of the specific material received.

The discharge of a treated waste via the sewerage network to a sewage treatment plant is exempt from this requirement as the procedure is usually not load-specific, although it may require direct volume measurement and frequent analysis of the waste stream.

5.6.1 ACCEPTANCE BY THE FINAL DISPOSAL SITE

The final disposal site shall provide written acceptance of the waste including the identification of any disposal conditions.

Information required includes:

- date and time of receipt of the waste;
- WasteTRACK tracking form number;
- weight (preferably by weighbridge) or volume;
- waste type (referred back to the accepted final disposal site application documents); and
- transporter identification (organisation and operator).

Where final disposal site access is after hours and by arrangement, this information should still be supplied to the transporter/treater.
5.7 INVOICING

Invoices shall include:

- a description of the waste;
- the waste amount;
- the activity undertaken (transport, treatment, etc);
- WasteTRACK tracking form number; and
- the unique job number.

Invoicing ensures the waste tracking information is returned to the generator, indicating completion of the chain of custody.

5.8 INTERNAL BUSINESS DOCUMENTATION

A liquid and hazardous waste operator also completes a range of other documentation (not directly resulting from a waste transfer). Examples include requirements for:

- Health and safety, including meetings, monitoring and reporting.
- Councils (e.g. for offensive trades licensing, trade waste consent, Approved Handlers).
- New Zealand Transport Agency records and reporting (e.g. for Certificates of Fitness, Road User Charges etc).
- Hazardous substances and new organisms.
- Environmental management programmes (meetings, monitoring, reporting and feedback loops).
- Building Warrant of Fitness (including hazardous substances on site).
- Resource consents (land use, storm water discharge, air discharge) monitoring and reporting.
### 5.9 REFERENCES

NZS 5433:2007 Transport of Dangerous Goods on Land

Land Transport Rule: Dangerous Goods 2005

Land Transport Rule: Dangerous Goods Amendment 2010

### 5.10 MANDATORY CODE REQUIREMENTS

The table below summarises the mandatory requirements of this section of the Code. This means mandatory in law or regulation or under the Code.

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storage of document</td>
<td>Waste transfer documents shall be retained for seven years.</td>
<td>5.1.2</td>
</tr>
<tr>
<td>Tracking requirements</td>
<td>Contractors shall use WasteTRACK to track all movements of liquid and hazardous wastes carried by the contractor on public roads.</td>
<td>5.2</td>
</tr>
<tr>
<td>Job enquiry record</td>
<td>The enquiry by the potential client shall be recorded.</td>
<td>5.3.1, 5.3.2</td>
</tr>
<tr>
<td>Waste declaration</td>
<td>The generator, or their agent, shall complete the waste declaration for all waste transfers.</td>
<td>5.3.2, 5.3.3</td>
</tr>
<tr>
<td>Contract</td>
<td>For significant and risky wastes the generator and operator shall complete a written contract.</td>
<td>5.3.4</td>
</tr>
<tr>
<td>Job instruction</td>
<td>The operator shall complete a job instruction for all jobs that incorporate a standard or job-specific collection procedure.</td>
<td>5.3.5, 5.4.1</td>
</tr>
<tr>
<td><strong>Service docket</strong></td>
<td>The operator shall complete a service docket for all waste transfers.</td>
<td>5.4.3</td>
</tr>
<tr>
<td>--------------------</td>
<td>-----------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td><strong>Dangerous goods declaration</strong></td>
<td>The generator, or their agent, shall complete the dangerous goods declaration for all dangerous goods transfers.</td>
<td>5.4.4</td>
</tr>
<tr>
<td><strong>Waste treatment</strong></td>
<td>The transporter/treater shall know the treatment destination for the liquid and hazardous waste before it is collected.</td>
<td>5.5</td>
</tr>
<tr>
<td><strong>Receipt by transporter</strong></td>
<td>The treater shall sign for the waste transfer from the transporter when they accept the waste.</td>
<td>5.5.1</td>
</tr>
<tr>
<td><strong>Treatment record</strong></td>
<td>The treater shall maintain records of all transfers.</td>
<td>5.5.2</td>
</tr>
<tr>
<td><strong>Final disposal site</strong></td>
<td>The treater shall complete any documentation required by the final disposal site or user of the treated waste.</td>
<td>5.5.3</td>
</tr>
<tr>
<td><strong>Receipt by final disposal site</strong></td>
<td>The final disposal site shall provide written acceptance of the waste including the identification of any disposal conditions to the transporter.</td>
<td>5.6.1</td>
</tr>
<tr>
<td><strong>Invoicing</strong></td>
<td>The client invoice at all stages of the waste transfer shall include the unique identification number.</td>
<td>5.7</td>
</tr>
</tbody>
</table>
6 TRANSPORTATION

6.1 INTRODUCTION

The transport of liquid and hazardous wastes is a high-risk activity which can attract a high public profile.

Wastes generally do not present the same degree of hazard as the “new” hazardous substances from which they arise. Most liquid waste will be much less concentrated than the material it was derived from. However, waste is likely to contain a greater range of contaminants than the raw material. The transporter shall therefore ensure that the risks associated with waste collection and transport are addressed, and that the public and emergency services have adequate information to ensure public safety, should an incident arise.

Liquid and hazardous waste operators shall:

- abide by the Land Transport Rule: Dangerous Goods 2005 and the Land Transport Rule: Dangerous Goods Amendment 2010; (collectively referred to as ‘the Dangerous Goods Rule’) and


These publications are the main legislation and guides for transport management in New Zealand.

Download a copy of the Land Transport Rule from:


For the safe transport of liquid and hazardous wastes, operators shall use the Code in conjunction with the following:


- The MfE New Zealand Waste List.
The Code classifies waste into two categories:

1. **Waste dangerous goods**

   These wastes are either specified as dangerous goods by NZS 5433:2007 Transport of Dangerous Goods on Land, or are on the NZ Waste List with an asterisk (*) after their L-Code. In the Code, these are referred to as dangerous goods.

2. **Non-hazardous liquid and chemical wastes**

   A waste is identified as non-hazardous for the purpose of the Code if:
   - it is not marked with an asterisk (*) in the L-List, and
   - it is not classified as a dangerous good in NZS 5433:2007 Transport of Dangerous Goods on Land.

   However, if the waste is carried in a tank that has not been adequately cleaned after transporting a hazardous waste, it is considered contaminated and potentially hazardous. It should also be noted that some wastes classed as non-hazardous using the criteria given above could be hazardous in certain situations, for example milk discharge into stormwater.

   Refer to Chapter 4 for further information on how to classify wastes.
6.2 TRANSPORT MANAGEMENT ISSUES

6.2.1 TANK WAGON SELECTION AND DESIGN

The transport of most bulk liquid and hazardous waste materials does not require the protection offered by approved codes of practice. However, the following wastes require transport in certified vehicles:

- Wastes with a flash point of <60°C shall be transported in a vacuum tanker or a petrol tanker that is certified as compliant with the Flammable Liquids Tank Wagon Code (for vehicles prior to 2004). Tankers built since 2004 shall comply with the HSNO Approved Code of Practice for Flammable Liquids Tank Wagons.

- Strongly corrosive waste products (e.g. spent sulphuric acid) shall be transported in a tank wagon that is compliant with the Tank Wagon Code for Corrosives and Poisons.

- Wastes that meet the criteria under the Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations 2001(SR 2001/117) for toxic, corrosive and ecotoxic hazardous substances shall be transported in a tank wagon that is compliant with the Code of Practice for Toxic, Corrosive and Ecotoxic Liquids Tank Wagons.

Download a copy of the Code of Practice for Flammable Liquids Tank Wagons from:

Download a copy of the Code of Practice for Toxic, Corrosive and Ecotoxic Liquids Tank Wagons from:

6.2.2 PACKAGED WASTE

Waste is often packaged for transport and treatment in containers including 200 litre drums and 1000 litre intermediate bulk containers (IBCs).
The Code requires packaged hazardous wastes to be itemised for transport, using a table format to enable an assessment of the risks. This table can also be used as part of the transport documentation.

Packaged liquid and hazardous waste can be transported in a wider range of vehicles than bulk waste loads. The transporter shall ensure that the generator (consignor) has properly packaged and labelled the packaged waste in accordance with the Dangerous Goods Rule and NZS 5433:2007 Transport of Dangerous Goods on Land. (The transporter/treater may also offer this packaging and labelling as part of their overall service.)

The transporter shall follow the packaging requirements for dangerous goods in Sections 3 and 4 of NZS 5433:2007 Transport of Dangerous Goods on Land. These requirements include:

- Wastes that are classified as dangerous goods shall be packaged in correctly labelled UN-approved packaging or returned in their original container relabelled as a waste. Approved outer (recovery) packaging may also be used.

- The carriage of surplus chemicals in their original packaging is acceptable, provided this packaging is sound and sealed.

- Waste materials that are not dangerous goods shall be packaged in sound, sealed packaging. Any labelling or placarding that misidentifies the waste as a dangerous good shall be removed.

- The transporter shall meet all load security requirements under the Land Transport Act 1998 (LTA) and related rules.

Liquid and hazardous waste operators who transport packaged waste dangerous goods shall be familiar with all the requirements of the Dangerous Goods Rule and NZS 5433:2007 Transport of Dangerous Goods on Land.
6.2.3 **PACKAGED WASTE LABELLING**

Labelling of packaged dangerous goods shall be in accordance with the Dangerous Goods Rule and Section 5 of NZS 5433:2007 Transport of Dangerous Goods on Land.

In summary, the main elements of the Rule and the Standard are that:

- Old labels shall be removed.
- Primary class labels (and secondary class labels if applicable) shall be attached.
- Proper shipping names (PSNs) shall be assigned to pure substances and generic groups of substances. When a chemical waste is transported, the PSN shall include the word ‘WASTE’ in front of it. (The word ‘WASTE’ is not required if it is obvious from the description e.g. ‘SPENT SULPHURIC ACID’). If the term ‘Not Otherwise Specified’ (NOS) is used, a technical name is also required, e.g. ‘WASTE FLAMMABLE LIQUID N.O.S.(contains xylene and benzene)”.
- The UN number is included.
- The Packing Group (PG I, II or III) is included.

Where there are several compatible small packages inside an outer package, the outer package shall be labelled and marked to identify all the dangerous goods inside.

Wastes that are not dangerous goods require minimal labelling, including:

- a descriptive name; and
- the words ‘CONTAIN SPILLAGE’.

6.2.4 **BULK SOLID HAZARDOUS WASTES**

Some bulk hazardous wastes are moved in open trucks e.g. contaminated soils. However, the load shall be covered or sheeted to ensure that the impact on human health and the environment are minimised.
Some dangerous goods, for example metal processing waste such as aluminium smelting or remelting by-products (UN No. 3170), may be transported in sheeted or closed bulk containers (or trucks), but not in open trucks. Materials that do not fit this category are likely to require transport in a specialist, enclosed bucket truck/tank wagon.

The following key issues for the transport of solid hazardous wastes shall be addressed:

- sealing the truck to stop leakage;
- covering the load to stop dust escape and to exclude rain; and

6.3 DRIVER AND VEHICLE PREPARATION

6.3.1 DRIVER TRAINING

All drivers transporting dangerous goods shall be trained and have a dangerous goods endorsement on their driver’s licence.

A transporter shall also have received training in operational procedures, and training specific to the Code and their organisation.

Refer to Chapter 11 for information on training.

6.3.2 VEHICLE PREPARATION

The transporter shall ensure that:

- the company’s vehicles have a current Certificate of Fitness and/or Warrant of Fitness and Road User Charge (RUC);
- the Driver’s Log Book (if required) is completed daily, is accurate and the proposed work shall not put the driver outside permissible log book hours;
• appropriate vehicle signage is displayed; and
• a completed dangerous goods declaration is carried.

The Code recommends:

• checking vehicles and equipment against a company-specific checklist;
• the use of personal protective equipment (PPE);
• the use of emergency response equipment and procedures; and
• carrying instruction manuals which include:

6.3.3 JOB INSTRUCTION DOCUMENT

The transporter shall ensure that each waste collection and disposal has a job instruction, prepared before the collection occurs in accordance with the Code.

6.4 THE MIXING OF WASTE MATERIALS

Mixing incompatible wastes can have disastrous consequences including fire, explosion, destruction of containers and adverse impacts on the environment. The mixing of waste materials (in either a collection vacuum tanker or in tanks at the treatment facility) shall be undertaken with great care and prior consideration.

The Dangerous Goods Rule sets out requirements for segregating incompatible products, including waste products. NZS 5433:2007 Transport of Dangerous Goods on Land provides guidance on segregating dangerous goods to minimise incidents arising from incompatible substances. The decision to mix wastes should be made by the transport co-ordinator and noted in the job instruction.
The waste compatibility matters addressed by the Dangerous Goods Rule, NZS 5433:2007 Transport of Dangerous Goods on Land, the Code, and in other publications such as ‘New Zealand Centre for Advanced Engineering’s (NZCAE) Management of Hazard Waste’ shall be considered before any wastes are mixed. If there is uncertainty about the reaction that may occur, the collection shall not proceed until the issue can be clarified.

The job instruction shall be clear about discharge requirements, to prevent waste incompatibility issues arising when waste is discharged at the treatment site.

Incompatible products that are not permitted on the same vehicle in accordance with the Dangerous Goods Rule, must be transported separately, regardless of whether a vacuum tanker has separate compartments or not.

Refer to Section 6.5.2 for the recommended procedure on cleaning a tank which should be followed before an incompatible product is loaded into it.

The table below summarises the waste incompatibility issues more commonly encountered in New Zealand.

**WASTE INCOMPATIBILITY - LIQUID OR SLUDGE WASTES**

<table>
<thead>
<tr>
<th>Waste 1</th>
<th>Waste 2</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy metal containing waste (sludge)</td>
<td>Organic waste, oil contaminated waste</td>
<td>The mixed waste will need to be treated as a heavy metal waste</td>
</tr>
<tr>
<td>Cyanide residues</td>
<td>Acidic waste</td>
<td>Release of toxic cyanide gas</td>
</tr>
<tr>
<td>Strong alkaline waste (caustic soda)</td>
<td>Strong acid waste (sulphuric acid or hydrochloric acid)</td>
<td>Violent mixing with fumes and heat generation</td>
</tr>
<tr>
<td>Liquid Waste</td>
<td>Acidic Waste</td>
<td>Reaction</td>
</tr>
<tr>
<td>--------------</td>
<td>--------------</td>
<td>----------</td>
</tr>
<tr>
<td>Chlorine-rich waste (spent chlorine-based sanitisers)</td>
<td>Acidic waste</td>
<td>Release of toxic chlorine gas</td>
</tr>
<tr>
<td>Waste with sulphur smell (hydrogen sulphide)</td>
<td>Acidic waste</td>
<td>Release of the strong smelling and toxic hydrogen sulphide gas (“Rotorua smell”)</td>
</tr>
<tr>
<td>Strong alkaline waste (caustic soda)</td>
<td>Dilution by water or water-based waste</td>
<td>Heat generation</td>
</tr>
<tr>
<td>Strong acid waste (sulphuric acid, nitric acid or hydrochloric acid)</td>
<td>Dilution by water or water-based waste</td>
<td>Heat generation</td>
</tr>
<tr>
<td>Oil-rich sludge</td>
<td>Oxidising agent (calcium hypochlorite = pool chlorine)</td>
<td>Spontaneous combustion</td>
</tr>
<tr>
<td>High organic material (septage, food waste)</td>
<td>Oxidising agent (hydrogen peroxide)</td>
<td>Rapid gas evolution. Possible failure of tank or pipes</td>
</tr>
<tr>
<td>Strong acid waste (sulphuric acid, nitric acid or hydrochloric acid)</td>
<td>Oxidising agent (hydrogen peroxide)</td>
<td>Violent mixing with fumes and heat generation</td>
</tr>
<tr>
<td>Oil-rich waste</td>
<td>Strong acid waste (sulphuric acid or hydrochloric acid)</td>
<td>Violent mixing with fumes and heat generation</td>
</tr>
</tbody>
</table>
6.5 TANKER CLEANING

To prevent the build-up of residues in the tank and to reduce the potential for offensive odours, it is recommended that vacuum tankers are regularly washed inside and out.

6.5.1 COMPATIBLE LOADS

If a vacuum tanker or bulk wagon will carry a compatible product in subsequent loads, it is not essential to clean the tank between the loads. If it is to be cleaned, the transporter shall ensure that:

- cleaning takes place in an area where neither environmental pollution nor contact with natural ground will occur, for example on a bunded concrete pad, in a sealed area draining to trade waste or in a purpose-built wash facility); and
- wash-water shall be disposed of in the same manner as waste cleaned from the tank.

6.5.2 INCOMPATIBLE LOADS

If a vacuum tanker is to be loaded with a subsequent load that is incompatible with its previous load, the tank shall be cleaned in accordance with the requirements of NZS 5433:2007 Transport of Dangerous Goods on Land and the Code, as follows:

- Cleaning should take place in an area where neither contact with natural ground nor environmental pollution will occur, for example on a bunded concrete pad, in a sealed area draining to trade waste or in a purpose-built wash facility).
- The tank shall be cleaned using the least-harmful cleaning agent that is sufficiently effective to remove any residual waste. Water under pressure or steam with no added chemicals is preferable. The washwater should be
treated and disposed of in the same way as waste cleaned from the tank. It shall not be disposed of into the stormwater system.

- Internal surfaces (including hoses and fittings) shall be cleaned as far as practicable.
- Off-site cleaning shall follow similar methods to formal wash facilities. It may be necessary to remove the wash-water for treatment if the facility is not permitted to handle the wash-water and contaminants.

Note: The Ministry of Health considers there are currently no disinfectants or cleaning products guaranteed to kill all pathogens that may be present in tanks, containers or portable toilets used to carry infectious substances (Source: NZS 5433:2007 Transport of Dangerous Goods on Land).

6.6 LOAD DOCUMENTATION


6.6.1 THE DANGEROUS GOODS DECLARATION

Dangerous goods in transit shall be accompanied by documentation that identifies the dangerous goods and the hazards they present to any person, property or to the environment. The documentation shall detail the nature, quantity, and use of the dangerous goods.

The transporter shall be familiar with the full requirements of Section 5 of the Dangerous Goods Rule and Sections 6.2 and 7.2.3 of NZS 5433:2007.

Section 5 of the Dangerous Goods Rule states that the dangerous goods declaration shall be:

- in English;
- legible;
• on paper (or similar material) and comprise either:
  o one or more documents, each with a diagonally-striped border or a bold heading to clearly identify it as a dangerous goods document; or
  o several attached documents with the first document having a diagonally-striped border or a bold heading to clearly identify the documents as dangerous goods documents; and

• readily available at all times while dangerous goods are being transported;

• kept separate from the dangerous goods during transport; and

• kept securely in a holder attached to the driver’s door or fixed in a prominent position in the cab (clearly visible and accessible to a person standing on the ground outside the vehicle when the driver’s door is open).

Section 5 of the Dangerous Goods Rule states that a dangerous goods declaration shall contain:

• the UN number;

• the proper shipping name;

• the class and the division, if assigned;

• the packing group, where applicable;

• any technical information necessary to identify the product to ensure the dangerous goods are loaded and segregated correctly, and to advise of any additional precautions that shall be taken;

• the number and type of packages;

• the total quantity of dangerous goods, measured by volume or mass, covered by the description;
• contact information about the consignor, including their signature or that of their agent; and

• the date on which the dangerous goods declaration is prepared.

6.6.2 **EMERGENCY RESPONSE INFORMATION**

Additional emergency response information shall be carried to support the dangerous goods declaration. The transporter shall:

• use an Emergency Procedure Guide specific to the load or

• include the Dangerous Goods Initial Emergency Response Handbook, marked with the appropriate page for the load.

These documents shall be carried in a pocket on the inside driver’s door.

6.6.3 **SCHEDULE OF QUANTITIES**

If a load of dangerous goods is delivered to or collected from more than one location, a dangerous goods declaration shall be carried, but the quantity information may be in the form of a schedule of quantities, or a bill of lading, on a separate page or pages.

6.6.4 **NON-HAZARDOUS LIQUID AND CHEMICAL WASTES.**

Where there is no classified hazard, the class placard (diamond), information panel and dangerous goods declaration shall not be used whilst transporting the waste. Refer to 6.7.6 regarding placarding of tank wagons that have previously contained dangerous goods.

The transport requirements for non-hazardous waste shall be reduced to:

• a descriptive name;

• any documentation required by chapters 9 and 14 of the **Code**; and

• the words ‘CONTAIN SPILLAGE’.
6.7 PLACARDING

The transporter shall placard all vehicles carrying dangerous goods in accordance with Section 9 of NZS 5433:2007 Transport of Dangerous Goods on Land and Section 7 of the Dangerous Goods Rule. The transporter shall be familiar with the full requirements of placarding in the Dangerous Goods Rule and NZS 5433:2007.

6.7.1 BULK TANK WAGON PLACARDING

Tank wagons and other vehicles designed for the transportation of bulk dangerous goods require placarding that meets the following specifications:

- the minimum size for placards on both sides and the rear of each tank unit is 400mm;
- the class placard on the front of the vehicle is to be 250mm edge diamond; and
- secondary class placards shall be used if required.

If placards of the minimum size do not fit, due to the design of the vehicle or the load, then smaller placards may be used. These shall be as large as practicable, and also:

- clean and visible;
- unobscured and positioned on a contrasting background;
- include the proper shipping name, so that it is legible from 10 metres; and
- enable the nature of the load to be identified from 25 metres in daylight.

6.7.2 EMERGENCY INFORMATION PANEL

For bulk dangerous goods, the class label/placard shall be used in conjunction with an emergency information panel. This panel shall contain:

- the HAZCHEM code;
- the UN number;
• the proper shipping name or another name that clearly identifies the nature of the hazard; and
• the 24 hour emergency contact number or ‘DIAL 111’.

One-off placards can be hand-drawn on an orange PVC sheet in a permanent marker, as a practical way to placard loads that are not frequently collected.

6.7.3 **MIXED BULK LOAD PLACARDING**

At times an operator may choose to mix selected loads of dangerous goods at the time of collection, for example septic tank wastes and grease trap wastes.

The transporter shall be familiar with the requirements for placarding mixed loads in the Dangerous Goods Rule and Section 9 of NZS 5433:2007 Transport of Dangerous Goods on Land. Tank wagons and bulk containers shall display class placards to identify the primary and subsidiary risks of all dangerous goods in the load.

A transporter shall seek advice if there is uncertainty about waste mixtures.

6.7.4 **PACKAGED WASTE PLACARDING**

The transporter shall comply with Section 9 of NZS 5433:2007 Transport of Dangerous Goods on Land, which details the placarding requirements for packaged wastes.

For trucks carrying packaged dangerous goods, the requirements are a class placard (250mm-edge diamond) at the front and rear of the truck and trailer unit(s). The remainder of the information shall be included in the dangerous goods declaration and loading information held in the cab.
6.7.5 NON DANGEROUS GOODS

Where dangerous goods are not being carried, class placards (diamonds), information panels and dangerous goods declarations shall not be used. The transport requirements are reduced to:

- a descriptive name;
- any documentation required by chapters 9 and 14 of the Code; and
- the words ‘CONTAIN SPILLAGE’.

6.7.6 PLACARDING OF TANK WAGONS THAT PREVIOUSLY CONTAINED DANGEROUS GOODS

Tank wagons and bulk containers that have previously contained dangerous goods must continue to display placards that identify the last load of dangerous goods, unless dangerous residue has been removed to the satisfaction of the relevant regulatory authority (i.e. the EPA for Classes 1, 2, 3, 4, 5, 6.1, 8 and 9 and the Ministry of Health or Ministry of Agriculture and Forestry for Division 6.2). This applies whether the tanks are empty or contain a load that is not dangerous goods. Documentation should be carried which describes the current load and the last load that was classified as dangerous goods.

6.8 SEGREGATION OF PACKAGED WASTE

Segregating a packaged waste load is managed similarly to waste compatibility in the Code (Section 6.4). Transporters of packaged wastes shall familiarise themselves with the Dangerous Goods Rule and Section 8 of NZS 5433:2007 Transport of Dangerous Goods on Land, which sets out segregation requirements for mixed packaged wastes. It is recommended that the ‘dangerous goods segregation wheel’ or segregation table are carried in the vehicle.

Segregation shall be planned, where possible, when the job instruction is assembled. Many packaged wastes will fall into the Class 9 - Environmentally Hazardous Substance grouping, and shall therefore be subject to fewer restrictions from a vehicle loading
perspective. Load plans (Section 6.2 of NZS 5433:2007 Transport of Dangerous Goods on Land) may be required for long distance haulage of waste materials.

The requirements of the International Marine Organisation (IMO) shall be met for packaged wastes carried by sea (including across Cook Strait). See Section 8.8 of NZS 5433:2007 Transport of Dangerous Goods on Land.

6.9 CARTAGE OF INFECTIOUS SUBSTANCES

Wastes such as sewage, septic tank sludges, animal effluent, grease trap wastes and human wastes in portable toilets are classified for transport as Division 6.2, infectious substances. These wastes may contain pathogens that cause human disease, but are unlikely to be a serious hazard. They are classified as Category B infectious substances, UN number 3373.

The transporter shall be familiar with all requirements for the cartage of infectious substances, as set out in the Dangerous Goods Rule and NZS 5433:2007 Transport of Dangerous Goods on Land, Appendix F, as follows:

All vehicles, portable toilets and containers used to transport infectious effluent and sludges shall be transported as dangerous goods when full or empty.

- They shall remain placarded appropriately;
- The dangerous goods declaration shall also be carried, whether the tank or container is full or empty, and shall correctly describe the load and the quantity of waste product; and
- If the vehicle (portable toilets or containers) are empty, this shall be shown on the documentation.

The vehicle shall be placarded in accordance with the requirements of the Dangerous Goods Rule and NZS 5433:2007, Appendix F. The Standard states that when products other than infectious substances are carried in bulk tanks or containers, the placards and documentation shall be changed as necessary to describe the current load. If a
load that is *not* classified as ‘dangerous goods’ is carried in the tank or container, the tank and the vehicle shall remain placarded for the last load that was dangerous goods. The dangerous goods declaration shall describe the current load and if it is not dangerous goods, it shall also describe the last load that *was* dangerous goods.

6.10 OTHER OBLIGATIONS IN TRANSIT

The transport of waste dangerous goods and non-hazardous wastes carries risks, so all care and courtesy should be taken by the driver.

Vehicles containing waste materials shall be parked safely, to minimise the risk of accidental spillage or loss of load.

The vehicle shall not be parked for more than one hour with its load, unless it is parked in a transport depot. Some waste loads, (e.g. septage and food waste) will change condition and settle or become more odorous and difficult to discharge if they remain in the tanker for too long. The odour may lead to public complaint.

The transporter shall comply with all NZTA requirements, and those for load security in Section 8.2 of the Dangerous Goods Rule.

6.11 EMERGENCY RESPONSE ON THE ROAD

The transporter shall have completed an emergency response plan for the vehicle(s) which includes plans for support from the transport base. The emergency response shall include:

- procedures for all staff, and training in these procedures;
- vehicle-mounted and base equipment; and
- interaction with other agencies who might assist.

The emergency response plan can be based on the guidance from the *Code* or from an alternative source.

The Liquid & Hazardous Waste Code Operators’ Handbook contains the main transport components of this chapter for use by the driver on the road. Useful information on
emergency response is information provided in HB 76:2010 Dangerous Goods Initial Emergency Response Guide.

Should an emergency incident occur at a customer’s site where no special requirements are identified as part of the job instruction, the on-road emergency response measures should be followed.

For an operation where there is depot and other staff, a second tier of emergency response support can be brought to the incident site.

Refer to Chapter 10 for emergency procedure information.

**6.12 REFERENCES**


Land Transport Rule: Dangerous Goods 2005

Land Transport Rule: Dangerous Goods Amendment 2010


NZS 5433:2007 Transport of Dangerous Goods on Land

Management of Hazardous Waste, Centre for Advanced Engineering 2000

The MfE New Zealand Waste List

WasteTRACK

**6.13 MANDATORY CODE REQUIREMENTS**

The table below identifies the mandatory requirements of this section of the Code. This means mandatory in law or regulation or under the Code.
<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Liquid and hazardous waste operators shall use the Code in conjunction with:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• NZS 5433:2007 The Transport of Dangerous Goods on Land.</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>• The MfE New Zealand Waste List.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• WasteTRACK.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The Operators’ Handbook for the Transport of Dangerous Goods by Road.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• HB 76:2010, Dangerous Goods Initial Emergency Response Guide or an equivalent publication.</td>
<td></td>
</tr>
<tr>
<td><strong>Transport management issues</strong></td>
<td>Wastes with a flash point &lt;60°C shall be transported in a vacuum tanker or a petrol tanker that, for vehicles prior to 2004, is certified as compliant with the Flammables Tank Wagon Code. Tankers built since 2004 shall comply with the HSNO Approved Code of</td>
<td>6.2.1</td>
</tr>
<tr>
<td>Practice for Flammable Liquids Tank Wagons.</td>
<td>6.2.1</td>
<td></td>
</tr>
<tr>
<td>Strongly corrosive waste products shall be transported in a tank wagon that is compliant with the Tank Wagon Code for Corrosives and Poisons.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wastes that meet the criteria under HSNO regulations for toxic, corrosive and ecotoxic hazardous substances shall be transported in a tank wagon that is compliant with the Code of Practice for Toxic, Corrosive and Ecotoxic Liquids Tank Wagons.</td>
<td>6.2.1</td>
<td></td>
</tr>
</tbody>
</table>

**Packaged wastes**

<p>| When transporting packaged hazardous wastes, each item shall be listed in a table format to enable an assessment of the risks. | 6.2.2 |
| The transporter shall follow the packaging requirements for dangerous goods in the Dangerous Goods Rule and Sections 3 and 4 of NZS 5433:2007. | 6.2.2 |
| Wastes that are classified as dangerous goods shall be packaged in correctly labelled, UN-approved packaging | 6.2.2 |
| Waste materials that are not dangerous goods shall be packaged in sound, sealed packaging. Any labelling or placarding misidentifying the waste as a dangerous good shall be removed. | 6.2.2 |
| The transporter shall meet all load security requirements under the Land Transport Act and related rules. | 6.2.2 |</p>
<table>
<thead>
<tr>
<th>Package</th>
<th>Waste labelling</th>
<th>Labelling of packaged dangerous goods shall be in accordance with the Dangerous Goods Rule and Section 5 of NZS 5433:2007.</th>
<th>6.2.3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk liquid hazardous wastes</td>
<td>Solid hazardous waste shall be handled in accordance with the Dangerous Goods Rule, NZS 5433:2007 and the Code.</td>
<td>6.2.4</td>
<td></td>
</tr>
<tr>
<td>Driver training</td>
<td>All drivers transporting dangerous goods shall be trained and have received a dangerous goods endorsement on their driver’s licence.</td>
<td>6.3.1</td>
<td></td>
</tr>
<tr>
<td>Vehicle preparation</td>
<td>The transporter shall ensure:</td>
<td>6.3.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• that the company’s vehicles have a current COF/WOF and Road User Charges (RUC);</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• the Driver’s Log Book (if required) is completed daily, is accurate and the proposed work shall not put the driver outside permissible log book hours;</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• appropriate vehicle signage is displayed; and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a completed dangerous goods declaration is carried.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Job instruction document</td>
<td>The transporter shall ensure that each waste collection and/or disposal has a job instruction, prepared before</td>
<td>6.3.3</td>
<td></td>
</tr>
<tr>
<td><strong>The mixing of waste materials</strong></td>
<td>The mixing of waste materials shall be undertaken with great care and prior consideration.</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The discharge requirements in the job instruction shall be clear to avoid waste incompatibility issues whilst discharging at the treater’s site.</td>
<td>6.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Waste compatibility issues shall be considered before any mixing of wastes occurs. If there is uncertainty about the reaction that may occur, the collection shall not proceed.</td>
<td>6.4</td>
<td></td>
</tr>
</tbody>
</table>
| **Tank cleaning** | When cleaning the tank between compatible loads, the transporter shall ensure that:  
  - the cleaning takes place in an area where no contact with natural ground will occur and where no other environmental pollution shall occur; and  
  - Wash-water shall be disposed of in the same manner as the waste being cleaned from the tank. | 6.5.1 |
<p>|  | Before a vacuum tanker is loaded with a waste that is incompatible with the previous load, the tank shall be cleaned following the requirements of NZS 5433:2007 and the Code. | 6.5.2 |
|  | The tank and internal surfaces, including hoses and | 6.5.2 |</p>
<table>
<thead>
<tr>
<th>Load documentation</th>
<th>Off-site cleaning shall follow similar methods to those of a formal wash facility.</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Dangerous goods declaration</th>
<th>Dangerous goods that are being transported shall be accompanied by documentation identifying the dangerous goods and the hazards they present.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>The transporter shall familiarise themselves with the full requirements of the Dangerous Goods Rule and Sections 6.2 and 7.2.3 of NZS 5433:2007.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>The dangerous goods declaration shall be:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>• in English;</td>
<td></td>
</tr>
<tr>
<td>• legible;</td>
<td></td>
</tr>
<tr>
<td>• on paper (or similar material) and comprise either:</td>
<td></td>
</tr>
<tr>
<td>• one or more documents, each with a diagonally-striped border or a bold heading to clearly identify it as a dangerous goods document; or</td>
<td></td>
</tr>
</tbody>
</table>
- several attached documents with the first document having a diagonally-striped border or a bold heading to clearly identify the documents as dangerous goods documents; and
  - readily available at all times while dangerous goods are being transported;
  - kept separate from the dangerous goods during transport; and
  - kept securely in a holder, which is either attached to the driver’s door, or displayed in a prominent position in the cab that is clearly visible and accessible to a person standing on the ground outside the vehicle when the driver’s door is open.

<table>
<thead>
<tr>
<th>Dangerous Goods Declarations shall contain:</th>
<th>6.6.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>• the UN number;</td>
<td></td>
</tr>
<tr>
<td>• the proper shipping name;</td>
<td></td>
</tr>
<tr>
<td>• the class and the division, if assigned;</td>
<td></td>
</tr>
<tr>
<td>• the packing group, where applicable;</td>
<td></td>
</tr>
<tr>
<td>• any technical information necessary to identify the product to ensure the dangerous goods are loaded and segregated correctly, and to advise of any additional precautions</td>
<td></td>
</tr>
</tbody>
</table>
that shall be taken;

- the number and type of packages;
- the total quantity of dangerous goods, measured by volume or mass, that is covered by the description;
- contact information about the consignor, including their signature or that of their agent; and
- the date on which the Dangerous Goods Declaration is prepared.

<table>
<thead>
<tr>
<th>Emergency response information</th>
<th>The Transporter shall:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>- use an emergency procedure guide specific to the load; or</td>
</tr>
<tr>
<td></td>
<td>- include the Dangerous Goods Initial Emergency Response Handbook with the appropriate page for the load marked.</td>
</tr>
<tr>
<td></td>
<td>These booklets or documents shall be carried in a pocket on the inside driver’s door.</td>
</tr>
</tbody>
</table>

| Schedule of quantities          | If a load of dangerous goods is delivered to or collected from more than one location, a Dangerous Goods Declaration shall be carried, but the quantity information may be in the form of a schedule of quantities or a bill of lading on a separate page or pages. |

<table>
<thead>
<tr>
<th>Placarding</th>
<th>The transporter shall placard all vehicles carrying</th>
</tr>
</thead>
</table>

6.6.2

6.6.3

6.7
dangerous goods in accordance with Section 9 of NZS 5433:2007 and Section 7 of the Dangerous Goods Rule.

<table>
<thead>
<tr>
<th><strong>Bulk tank wagon placarding</strong></th>
<th>Bulk tank wagon placarding shall meet the following specifications:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• the minimum size for placards on both sides and the rear of each tank unit is 400mm;</td>
</tr>
<tr>
<td></td>
<td>• the class placard on the front of the vehicle is to be 250mm edge; and</td>
</tr>
<tr>
<td></td>
<td>• use secondary class placards if required</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Emergency information panel</strong></th>
<th>An emergency information panel shall contain:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• the HAZCHEM code;</td>
</tr>
<tr>
<td></td>
<td>• the UN number;</td>
</tr>
<tr>
<td></td>
<td>• the proper shipping name or another name that clearly identifies the nature of the hazard; and</td>
</tr>
<tr>
<td></td>
<td>• the 24 hour emergency contact number or ‘DIAL 111’.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th><strong>Mixed bulk load placarding</strong></th>
<th>The transporter shall be familiar with the requirements for placarding mixed loads in the Dangerous Goods Rule and Section 2 of NZS 5433:2007.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tank wagons and bulk containers shall display class placards to identify the primary and subsidiary risks of all dangerous goods in the load.</td>
</tr>
<tr>
<td></td>
<td>A transporter shall seek advice if there is uncertainty</td>
</tr>
</tbody>
</table>
### Packaged waste placarding

The transporter shall comply with the requirements of Section 9 of NZS 5433:2007.

| 6.7.4 |

### Segregation of packaged wastes

Transporters of packaged wastes shall familiarise themselves with Section 8 of NZS 5433:2007.

| 6.8 |

...Segregation shall be planned, as far as possible, at the time the job instruction is written.

| 6.8 |

### Cartage of infectious substances

All transporters of infectious substances shall be familiar with the requirements of the Dangerous Goods Rule and NZS 5433:2007, Appendix F.

| 6.9 |

...All vehicles, portable toilets and containers that are used to transport infectious effluent and sludges shall be transported as dangerous goods (when full or empty) and be placarded appropriately.

| 6.9 |

...The dangerous goods declaration shall be carried, whether the tank or container is full or empty, and shall correctly describe the load and the quantity of waste product.

| 6.9 |

...The vehicle shall be placarded as per the requirements of NZS 5433:2007, Appendix F.

| 6.9 |

### Other obligations in transit

Vehicles containing waste materials shall be parked safely, to minimise the risk of accidental spillage or loss of load.

| 6.10 |
| **Emergency response on the road** | The transporter shall have completed an Emergency Response Plan for the vehicle(s) and for support from the transport base. It shall include:  
- procedures for all staff and training in these procedures;  
- vehicle mounted and base equipment; and  
- interaction with other agencies who might assist. | 6.11 |

|  | The vehicle shall not be parked for more than one hour with its load, unless it is in a transport depot. | 6.10 |

|  | The transporter shall ensure that all NZTA requirements and the Dangerous Goods Rule Section 8.2 load security requirements are followed. | 6.10 |
7 WASTE TREATMENT

7.1 INTRODUCTION

Waste handlers collect and treat a wide variety of materials in New Zealand. Their services range from simple operations (e.g. septic tank, grease trap and road cesspit servicing) to complex forms of collection and treatment (e.g. taking packaged chemical waste from laboratories and industries and removing large volumes of commercial process by-products). All of these wastes may require some form of treatment before they meet regulatory requirements for disposal.

This chapter outlines the requirements for liquid and hazardous waste operators when treating waste, and the issues they should consider.

There are no specific legal requirements for how wastes should be treated. However, both the Hazardous Substances and New Organisms Act 1996 (HSNO) and the Resource Management Act 1991 (RMA) set controls that, in effect, require wastes to be treated to reduce their hazardous properties.

7.2 WASTE TREATMENT OPTIONS

The Code does not specify which treatment option should be used. It is the responsibility of those treating the waste (‘the treater/s’) to ensure not only that the waste is fully characterised, but that the option chosen will provide the desired level of treatment. It is important that the treatment option selected is appropriate for the type of waste and circumstances.

The Code requires that the treater shall plan the treatment of any wastes they are to receive and accept. If the transporter is not the treater, the transporter shall discuss the nature of the waste transfer with the treater prior to collection.
For practical reasons, wastes are often grouped together for co-treatment. This process shall be undertaken with due care, ensuring the treatment will reduce the hazardous characteristics of the waste to enable it to be disposed of safely in accordance with:

- local sewage network/plant acceptance criteria;
- landfill acceptance criteria;
- resource consent conditions or the requirements of regional plan rules set for discharge to land or water; or
- operator acceptance criteria for re-use.

The requirements of the final disposal site shall be understood so that the correct treatment can be applied. **Dilution is unacceptable.** The operator shall not treat a liquid and/or hazardous waste by dilution with liquid or solids for the purpose of lowering a contaminant level.

The treater shall apply the principles of waste minimisation in the treatment process, to minimise the volume of any waste reaching the final disposal site.

The treater should ensure that all opportunities are taken to fully or partially reuse a waste.

### 7.3 TREATMENT RECORDS

The treater shall record the treatment process and the following information:

- waste type and volume received;
- unique identification number;
- treatment process used, including co-mixed or discreet treatment, dewatering method, and key process parameters met (temperature, pH etc);
- additives used;
• treatment by-product fates (volume to the public sewer, to landfill, to re-use);

• dates of waste receipt at site and transport off the site;

• post-treatment analysis results; and

• reference to final disposal site documentation.

7.3.1 TREATMENT RECORD CHECKLIST

The treater may use the following checklist to develop the treatment record, documenting key features of the waste treatment process that are relevant to the business on a form or in a log:

1. Unique identification number.

2. WasteTRACK tracking form number(s).

3. Date of receipt to plant.

4. Discharge receptacle (tank, sump, quarantine etc).

5. Co-mixed treatment or discrete treatment.

6. Volume received.

7. Date of commencement of treatment.

8. Treatment process by description or code-referenced to an internal treatment procedure.

9. Additive types and volumes.

10. By-products and volumes (trade waste volume, landfill volume).

11. Treatment mass balance.

12. Special treatment notes.

13. Cost information for final charging or cross-checking against sale value.
14. Post-treatment analysis – reasons and results (e.g. TCLP test).

15. Link to final disposal site documentation (e.g. a landfill access application).

More specific features of the waste treatment process may also be included in the treatment record as appropriate.

7.4 WHEN IS TREATMENT COMPLETE?

Treatment shall be considered complete when the by-products of the treatment process are suitable for disposal at the final disposal site. This can be established by monitoring the treated material and showing that it is compliant with the following conditions:

- For a liquid discharge to sewer: the local authority trade waste discharge consent and its specific conditions.
- For a liquid discharge to natural ground or water: the regional council resource consent conditions.
- For the solid phase to landfill: landfill waste acceptance criteria required by landfill consent conditions.
- For any reusable product: by the contract with the company re-using the material. The method or place of reuse may also require local authority approval.

After treatment, the waste has to be re-characterised and re-classified for disposal. (Refer to Chapters 4 and 8).

7.5 UNTREATABLE WASTES

Some waste types cannot currently be treated in New Zealand.

Operators shall ensure that such wastes are transferred to a reputable operation that can provide long-term storage or an off-shore treatment solution. For off-shore treatment, the operator shall ensure that the recipient has the required permits for
export of that material under the Basel and Waigani Convention agreements. These permits are issued by the Ministry for Economic Development.

A list of current permit holders can be found at:

www.epa.govt.nz/hazardous-substances/import-export/permit-holders/Pages/default.aspx

The operator should address ownership issues for these wastes with due care.

7.6 DIRECT DISCHARGE OF WASTE TO NATURAL GROUND OR WATER

Some forms of treatment result in the direct discharge of liquid waste to natural ground or water. This discharge is likely to require resource consent; however, in some cases it may be permitted or prohibited under regional plans.

Refer to Chapter 8 for more information on disposal.

7.7 TREATMENT SITE MANAGEMENT

To avoid a significant adverse impact on the natural environment or the community, a treater shall ensure that:

- the risk of an adverse chemical reaction is minimised via solutions like bunding;
- contaminants are contained;
- storm water is controlled;
- air discharge/odour control is maintained;
- treatment processes are designed around the health and safety of personnel; and
- access to the site is controlled.

If an incident compromises safety or the environment, the treater shall inform the relevant authorities and work with them to mitigate any adverse effects. For more information on spill management see Chapter 10.2.
7.8 **MANDATORY CODE REQUIREMENTS**

The table below identifies the mandatory requirements of this section of the **Code**.

This means mandatory in law or regulation or under the Code.

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment planning</td>
<td>The treater shall research and plan the waste treatment processes.</td>
<td>7.2</td>
</tr>
<tr>
<td></td>
<td>If the transporter is not the treater, the transporter shall discuss the nature of the waste transfer with the treater prior to collection.</td>
<td>7.2</td>
</tr>
<tr>
<td>Waste mixing</td>
<td>The mixing of wastes for co-treatment shall be undertaken with due care.</td>
<td>7.2</td>
</tr>
<tr>
<td>Final disposal site</td>
<td>The requirements of the final disposal site shall be understood so that the correct treatment option is applied.</td>
<td>7.2</td>
</tr>
<tr>
<td>Dilution</td>
<td>The operator shall not treat a liquid and/or hazardous waste by dilution with liquid or solids for the purpose of lowering a contaminant level.</td>
<td>7.2</td>
</tr>
<tr>
<td>Waste minimisation</td>
<td>The operator shall follow the principles of waste minimisation (reduction, re-use, recycling and recovery) wherever possible in treatment solutions.</td>
<td>7.2</td>
</tr>
<tr>
<td>Record requirements</td>
<td>The treater shall record details of the treatment process including the following information:</td>
<td>7.3</td>
</tr>
<tr>
<td></td>
<td>• Waste type and volume received.</td>
<td></td>
</tr>
</tbody>
</table>
- Unique identification number.
- Treatment process used, including co-mixed or discrete treatment, dewatering method, key process parameters met (temperature, pH etc).
- Additives used.
- Treatment by-product fates (volume to the public sewer, to landfill, to re-use).
- Dates of waste receipt at site and transport off the site.
- Post-treatment analysis results.
- Reference to final disposal site documentation.

<table>
<thead>
<tr>
<th>Treatment is complete when...</th>
<th>Treatment shall be considered complete when the by-products of the treatment process are suitable for disposal at the final disposal site.</th>
<th>7.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Untreatable wastes</td>
<td>Untreatable waste shall not be accepted unless an agreement for storage or off-shore treatment has been reached with an approved contractor.</td>
<td>7.5</td>
</tr>
<tr>
<td></td>
<td>For off-shore treatment, the operator shall ensure that the recipient has the required permits for export of that material under the Basel Convention.</td>
<td>7.5</td>
</tr>
<tr>
<td>Environmental management</td>
<td>A treater shall ensure that:</td>
<td>7.7</td>
</tr>
<tr>
<td></td>
<td>• the risk of an adverse chemical reaction is</td>
<td></td>
</tr>
</tbody>
</table>
minimised via solutions like secondary containment;

- contaminants are contained;
- storm water is controlled;
- air discharge/odour control is maintained;
- treatment processes are designed around the health and safety of personnel; and
- access to the site is controlled.
8 DISPOSAL

8.1 INTRODUCTION

This chapter aims to help contractors make informed decisions on the best available methods for waste disposal in New Zealand.

The waste management hierarchy (sometimes called ‘The 5 Rs’) forms the basis of waste management policies, and describes the steps that need to be taken to manage waste as efficiently and cost-effectively as possible. These steps are:

- Reduction - minimising the generation of waste.
- Reuse - the use of a waste material in its current form for its original or similar purpose.
- Recycling - the conversion or processing of a waste into a new material
- Recovery - the recovery of energy or materials from waste for further use or processing. This includes the process of composting.
- Residuals disposal - the disposal of waste that cannot be subjected to any of the above steps.

In New Zealand, the major disposal options are landfills and sewage treatment plants. Land treatment is also used in the agricultural and forestry industries, and other disposal options are used in specific circumstances.

8.2 SOLID WASTES

Landfills (including municipal waste landfills, cleanfills, monofills etc.) are the major means for disposing of solid wastes in New Zealand. Whilst there is no specific legislation for the siting, design, operation or monitoring of landfills, resource consents issued under the Resource Management Act 1991 (RMA) establish site-specific requirements.
8.2.1  **Landfills**  

Most landfills have acceptance criteria that wastes will need to meet in order to be disposed of at the landfill. The Toxicity Characteristic Leaching Procedure (TCLP) contains criteria which are often used to set thresholds for contaminants within the waste that have the potential to leach.

Some contaminants will be assessed using a total concentration.

The specific waste acceptance criteria for the proposed final disposal facility should be known prior to treatment and disposal.

*More information on the TCLP can be found at:*  
[www.epa.gov/osw/hazard/testmethods/faq/faq_tclp.htm](http://www.epa.gov/osw/hazard/testmethods/faq/faq_tclp.htm)

8.2.2  **Cleanfills**

Cleanfills are intended to accept only inert wastes. Acceptance criteria shall be specified in a permitted rule under a district and/or regional plan or specified consent. Cleanfills accept a more limited range of wastes than municipal landfills, and wastes are subject to more stringent acceptance criteria.

Waste shall only be disposed of at a cleanfill in accordance with its waste acceptance criteria.

8.3  **Liquid Waste**

8.3.1  **Sewer Disposal**

Sewer disposal is the major disposal option for trade wastes, liquid wastes from households and commercial liquid wastes. Territorial authorities are empowered to make bylaws to control the discharge of liquid wastes to their sewerage systems.

New Zealand Standard 9201: Part 23: 2004 Model General Bylaw Trade Waste provides regulatory guidance for the disposal of liquid wastes (including tankered wastes) to a council wastewater system and sets contaminant concentration limits.
Liquid wastes shall be disposed of to a sewerage system in accordance with the system operator’s requirements.

8.3.2 DISPOSAL OF AGRICULTURAL WASTES

Pollution from agriculture arises mainly from the processing of pastoral products and the discharge of farmyard effluent. The majority of meatworks, dairy processing factories and casein plants dispose of some or all of their effluent onto land. This activity may be permitted under a rule in a regional plan or require specific consent.

Resource consent requirements should be established by seeking advice from the local authority before any discharge occurs.

8.4 OFFSHORE DISPOSAL

Offshore disposal shall comply with the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal.

For offshore treatment, operators shall ensure they hold any permits required for export of that material under the Basel and Waigani Convention agreements. These permits are issued by the Ministry for Economic Development.

A list of current permit holders can be found at:

www.epa.govt.nz/hazardous-substances/import-export/permit-holders/Pages/default.aspx

8.5 REFERENCES


NZS 9201: Part 23: 2004 Model General Bylaw Trade Waste

8.6 MANDATORY CODE REQUIREMENTS

The table below identifies the mandatory requirements of this section of the Code. This means mandatory in law or regulation or under the Code.
<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid wastes</td>
<td>Waste shall only be disposed of at a consented landfill or cleanfill in accordance with its waste acceptance criteria.</td>
<td>8.2</td>
</tr>
<tr>
<td>Liquid wastes</td>
<td>Trade waste disposal to sewer shall meet the requirements of the relevant trade waste bylaw, or in its absence, the requirements of the NZS 9201: Part 23: 2004 Model General Bylaw Trade Waste.</td>
<td>8.3</td>
</tr>
<tr>
<td>Disposal of agricultural wastes</td>
<td>Prior to disposal, the contractor shall determine from the local authority whether the discharge is a permitted activity or requires resource consent.</td>
<td>8.3.2</td>
</tr>
<tr>
<td></td>
<td>Disposal of agricultural and industrial wastes (both farm and processing) shall meet the requirements of regional plan rules/ resource consent conditions.</td>
<td>8.3.2</td>
</tr>
<tr>
<td></td>
<td>The contractor shall not discharge any effluent unless consents are held, or the activity is permitted in the relevant regional plan.</td>
<td>8.3.2</td>
</tr>
<tr>
<td>Offshore disposal</td>
<td>Offshore disposal shall comply with the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal.</td>
<td>8.4</td>
</tr>
</tbody>
</table>
9 HEALTH AND SAFETY

9.1 INTRODUCTION

This chapter aims to provide liquid and hazardous waste operators with information on their legal responsibilities under the Health and Safety in Employment Act 1992 (HSE) and the Code, and guidance on how to meet those responsibilities.

Health and safety is the responsibility of all those in the workplace whether they are employers, employees, contractors or visitors. Mandatory requirements are designed to help ensure that liquid and hazardous waste operations are managed safely.

The HSE Act promotes the prevention of harm to all persons at work and other persons in, or in the vicinity of, a place of work by:

(a) promoting excellence in health and safety management, in particular through promoting the systematic management of health and safety; and

(b) defining hazards and harm in a comprehensive way so that all hazards and harm are covered, including harm caused by work-related stress and hazardous behaviour caused by certain temporary conditions; and

(c) imposing various duties on persons who are responsible for work and those who do the work; and

(d) setting requirements that—

(i) relate to taking all practicable steps to ensure health and safety; and

(ii) are flexible to cover different circumstances; and

(e) recognising that volunteers doing work activities for other persons should have their health and safety protected because their well-being and work are as important as the well-being and work of employees; and

(f) recognising that successful management of health and safety issues is best achieved through good faith co-operation in the place of work and, in particular, through the input of the persons doing the work; and
(g) providing a range of enforcement methods, including various notices and prosecution, so as to enable an appropriate response to a failure to comply with the Act depending on its nature and gravity; and

(h) prohibiting persons from being indemnified or from indemnifying others against the cost of fines and infringement fees for failing to comply with the Act.

Source: HSE Act, 1992 Part 1 sec 5

The Department of Labour’s Health and Safety website contains resources and information to help comply with the HSE Act. See www.osh.dol.govt.nz/

9.2 HEALTH AND SAFETY RESPONSIBILITIES

Under the HSE Act, employers have legal responsibilities to employees and others. Employees also have legal responsibilities to look after themselves and to ensure that the work they do does not harm anyone else. To meet the requirements of the HSE Act and the Code, all liquid and hazardous waste operators shall have a comprehensive health and safety programme.

The HSE Act sets out duties which are supported by regulations, approved codes of practice, and guidelines developed by, or in co-operation with, the Department of Labour (DoL).

Regulations are enforceable, and breaches may result in prosecution and fines.

Approved codes of practice are guidelines that have been approved by the Minister of Labour under the HSE Act. The requirements of an approved code are not mandatory or enforceable as such, but their observance is accepted in court as evidence of good practice.
Guidelines may not have undergone a formal approval process, but they are nevertheless an important source of guidance for employers and others on how to meet the requirements of the HSE Act.

9.3 LEVELS OF RESPONSIBILITY

Everybody in the workplace has a legal responsibility for health and safety. The level of this responsibility will depend on the structure of the business (for example whether it is a large company with a board of directors and shareholders, or a one-person self-employed operation).

Section 6 of the HSE Act sets out the requirements for all employers as follows:

6. Employers to ensure safety of employees

Every employer shall take all practicable steps to ensure the safety of employees while at work; and in particular shall take all practicable steps to—

(a) provide and maintain for employees a safe working environment; and

(b) provide and maintain for employees while they are at work facilities for their safety and health; and

(c) ensure that plant used by any employee at work is so arranged, designed, made, and maintained that it is safe for the employee to use; and

(d) ensure that while at work employees are not exposed to hazards arising out of the arrangement, disposal, manipulation, organisation, processing, storage, transport, working, or use of things—

(i) In their place of work; or

(ii) Near their place of work and under the employer's control; and

(e) develop procedures for dealing with emergencies that may arise while employees are at work.
Within an organisation, different levels of responsibility can be allocated depending upon the seniority of individuals and the organisation’s size and structure.

9.3.1 **BOARD OF DIRECTORS**

The responsibilities of Boards of Directors should include:

- ensuring health and safety goals have been set;
- ensuring there is a performance-based health and safety plan in place for the organisation;
- ensuring that the Chief Executive Officer (Managing Director) has the necessary authorities and resources to achieve the goals; and
- producing an annual health and safety performance report for shareholders.

9.3.2 **CHIEF EXECUTIVE OFFICER**

The Chief Executive Officer (CEO) has overall managerial responsibility for the operation of the business.

CEO’s shall:

- establish and authorise a written health and safety policy;
- provide leadership, commitment to and compliance with the policy;
- ensure there are sufficient funds and other resources available for health and safety management;
- appoint and authorise key staff to manage day-to-day health and safety issues;
- authorise the health and safety plan;
- ensure that health and safety goals are appropriate for the organisation and are achieved;
• receive and progress recommendations from the health and safety committee and other staff;
• report to the Board of Directors on relevant health and safety matters; and
• prepare the annual health and safety report for the Board of Directors.

9.3.3 MANAGERS AND SUPERVISORS

Any employee who has a management or supervisory role as part of their job also has day-to-day responsibilities for health and safety.

Managers and supervisors shall:

• Establish a system of hazard identification, risk assessment and management for their area of the operation. Documentation of assessments may be required.
• Ensure that employees, visitors and contractors receive training that is appropriate and effective so that their health and safety is not compromised by any work activity.
• Provide and maintain suitable work methods which reduce health and safety risks to as low a level as practicable. These methods may include risk assessments, permits to work, safe equipment, personal protective equipment (PPE), etc.
• Report, investigate, record and make recommendations on all incidents and accidents that caused (or could have caused) harm.
• Ensure sufficient arrangements are provided for first aid.
• Ensure emergency evacuation/disaster plans are appropriate and tested at least six-monthly where possible.
• Keep up-to-date with developments in health and safety that are relevant to their area of operations.
9.3.4 EMPLOYEES

All employees, regardless of their position in the organisation, have duties under the HSE Act.

Employees shall:

- Follow all safety and health requirements and rules.
- Report all hazardous conditions to their immediate supervisor or manager as soon as reasonably practicable.
- Use all equipment controls provided e.g. safety guards, extraction ventilation systems.
- Use personal protective clothing and equipment where required.
- Report any incident which caused harm, or may have caused harm, as soon as reasonably practicable.
- Report any illnesses or injuries which may affect their health and safety or that of others while at work, as reasonably practicable.
- Report any illnesses or injuries that may be (or are) job-related as soon as reasonably practicable.

Employees are NOT to:

- Undertake any operation which they believe to be hazardous, until an appropriate hazard and risk assessment has been undertaken and any recommendations completed.
- Misuse or tamper with any systems, equipment controls or PPE provided for their safety or the safety of others.
• Operate any process or equipment without both proper instructions and authorisation.

• Operate any process or equipment which is damaged or has inadequate safety protection.

9.3.5 SELF EMPLOYED

The self-employed have similar responsibilities to CEOs, managers and supervisors. Every self-employed person shall take all practicable steps to ensure that no action or inaction while at work harms themselves or any other person.

9.4 HAZARD IDENTIFICATION AND MANAGEMENT

Hazard identification and management is one of the most important aspects of health and safety that employers and employees have to comply with. It is the key to preventing harm.

Employers are responsible for ensuring that all hazards in the workplace are identified and that procedures are in place to manage these hazards so they do not cause injury or illness. A hazard is essentially anything that could cause workers some form of harm.

Section 7 of the HSE Act sets out the requirements for all employers to follow in the identification and management of workplace hazards. It states:

7. Identification of hazards

(1) Every employer shall ensure that there are in place effective methods for—

(a) systematically identifying existing hazards to employees at work; and

(b) systematically identifying (if possible before, and otherwise as, they arise) new hazards to employees at work; and

(c) regularly assessing each hazard identified, and determining whether or not it is a significant hazard.
Employers shall carry out hazard identification and risk assessment procedures. They shall:

- record the results of the hazard identification and risk assessment; and
- make sure relevant staff have seen the records and understand them.

Employers shall decide which hazards are **significant**. A **significant hazard** is one that can cause **serious harm**. The definition of serious harm is in Schedule 1 of the HSE Act.

Download the ‘serious harm’ definition from:


Employers shall take all practicable steps to **eliminate**, **isolate** or **minimise** significant hazards.

![Hierarchy of Control](image)

Figure 1: The Hierarchy of Control, ss.7-10 of the Health and Safety in Employment Act 1992

If a hazard cannot practicably be eliminated, it shall be isolated using a barrier or perimeter to prevent access to the hazard. If the hazard cannot successfully be isolated then steps must be put in place to minimise the hazard, for example by providing protective clothing and equipment, and supervising and training employees in safe
work practices. Monitoring of employees’ health in relation to the hazards they are exposed to is required when a hazard can only be isolated or minimised.

9.5 PROVIDING INFORMATION

Section 12 of the HSE Act sets out the employer’s responsibility to provide information to all employees in a manner that is reasonably likely to be understood.

The employer shall provide information on:

- All identified hazards that employees will encounter while doing their work.
- The identified hazards that employees will or may create.
- The steps to take with those hazards to prevent harm.
- What to do in an emergency.
- Where all protective clothing and safety devices, equipment and materials are kept.

A list of procedures shall also be provided for each job so that a person can work safely during routine work.

9.6 TRAINING AND SUPERVISION

Under Section 13 of the HSE Act, employers must ensure that employees have knowledge of the work being undertaken or are supervised by a person with this knowledge.

Employers must also ensure that employees are trained in the safe use of any substances, plant, and protective clothing and equipment that will be used or handled at work.

Refer to Chapter 11 for information on training.
9.7 EMPLOYEE PARTICIPATION

Part 2A of the HSE Act sets out how employers must allow for employee participation in processes relating to health and safety in the place of work. This allows for:

- all persons with relevant knowledge and expertise to help make the place of work healthy and safe; and
- an employer, when making decisions that affect employees and their work, to seek information from employees who face health and safety issues in practice.

An employer shall also provide reasonable opportunities for employees to participate effectively in ongoing processes to improve health and safety in the employees’ places of work.

For more information on employee participation, download the HSE Act:


9.8 HEALTH MONITORING

Where hazards have not been completely isolated, a small risk to health may remain. It may be necessary to monitor the workplace to quantify these health risks, for example by testing noise levels or chemical concentrations.

Employees’ health may need to be checked at work. These checks may be carried out by the employers, or they may need to be carried out by medical professionals. Employers shall provide the results of any workplace monitoring to all employees who work in those areas.

Additional health monitoring may be required for workers involved with the following substances or processes:

- cadmium;
- inorganic arsenic;
• isocyanates;
• lead;
• mercury;
• organophosphate pesticides; and
• solvents.

This monitoring requires specialist knowledge which can be provided by a medical practitioner or occupational health professional. Employers are required to give individuals the results of their employee medical tests and to provide overall results for the team.

9.9 IMMUNISATIONS

Depending on the type of waste worked with, a course of immunisation (vaccination, inoculation) may be a sensible precaution. The Code recommends that everyone involved in the handling of liquid and hazardous wastes be immunised for at least Hepatitis A and B and Tetanus.

All those that work with waste should:

• consult a doctor on what immunisations would be appropriate; and
• give the doctor information on the types of waste handled by the company.

The doctor should advise on the appropriate immunisations based on the risks associated with each particular type of work.

If the doctor consulted is unsure of the appropriate types of immunisations, he or she should consult with an occupational physician from the Department of Labour (DoL) by contacting the local DoL office.

9.10 FIRST AID

First aid kits and equipment shall be provided in the work environment, as appropriate to the risks of injury and illness related to that work. A first aid kit shall be kept at each
workplace and in each vehicle. These kits should be clearly marked, accessible and kept fully stocked.

Additional first aid facilities, for example emergency showers and eye-wash stations, shall be provided where required.

The number of qualified first aid personnel in a place of work is to be based on site-specific requirements.

Download additional first aid information from:


9.11 REPORTING & RECORDING ACCIDENTS

Should anybody suffer a serious injury at work, employers must contact DoL before moving any wreckage, article or interfering with the accident scene.

Employers are required to record information about all accidents in an accident register; to investigate the causes; and to implement steps to prevent the accident from happening again.

**Employers shall:**

- Ensure that there is a documented procedure so that people can check to see what they must do.

- Have an incident/accident register for reporting and recording all near misses, accidents, injuries and ill health.

- Ensure that investigation of all near misses, accidents, injuries and ill-health occurs.

- Document the investigation, covering:
  - what happened;
  - how it happened;
  - how to stop it happening again;
• what is going to be done to fix any problems; and
• who is responsible for making sure the problems are fixed and signed-off.

• Report all incidents where serious harm has occurred, or where an injury might turn into serious harm, to DoL by telephone as soon as possible.

• Follow up telephoned reports with written reports to DoL within seven days.

• Where serious harm has occurred or might develop:
  o look after the victims first;
  o “freeze the scene” (i.e. cordon it off; leave everything as is and do not interfere with it; contact DoL by telephone as soon as possible; do not disturb the scene until you have been told by an inspector that you may do so); and
  o start the investigation immediately.

NB: The only exception to not disturbing the scene is if you have to do something to help victims; to retain access to an essential public facility; or to prevent serious property damage or loss.

If you fail to make timely reports, or interfere with the scene of a serious harm accident, you may be prosecuted for this alone. Treat the scene of a serious harm incident as if it were a crime scene. In some cases, it may be several hours before it becomes apparent that there is serious harm. When to inform DoL is a judgement call, but err on the safe side and be prepared to report an incident as serious harm, even if it eventually proves not to be.

**9.12 MANUAL HANDLING**

Injuries from manual handling are very common. The hazards and risks vary greatly from workplace to workplace; risks also vary between individuals performing the same
tasks in the same workplace. The Code recommends that employees are trained in safe manual handling procedures.

A DoL publication, ‘Code of Practice for Manual Handling’, provides guidance on how to assess, manage and reduce the risks associated with manual handling for a wide range of scenarios.

Download the leaflet from:

www.osh.govt.nz/order/catalogue/a-z.shtml#L

9.13 DEPARTMENT OF LABOUR

The Department of Labour has published a range of documents relating to health and safety in the workplace. Copies may be obtained by contacting your nearest DoL office, or by downloading them from the DoL website.

Download the publications from:

www.osh.govt.nz/

9.14 MANDATORY CODE REQUIREMENTS

The table below identifies the mandatory requirements of this section of the Code. This means mandatory in law or regulation or under the Code.

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levels of responsibility</td>
<td>The CEO shall:</td>
<td>9.3.2</td>
</tr>
<tr>
<td></td>
<td>• Establish and authorise a written health and safety policy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provide leadership in commitment to and compliance with the policy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure there are sufficient funds and other resources available for health and safety</td>
<td></td>
</tr>
</tbody>
</table>
- Appoint and authorise key staff to manage day-to-day health and safety issues.
- Authorise the health and safety plan.
- Ensure that health and safety goals are appropriate for the organisation and are achieved.
- Receive and progress recommendations from the health and safety committee and other staff.
- Report to the Board of Directors on relevant health and safety matters.
- Prepare the annual health and safety report for the Board of Directors.

<table>
<thead>
<tr>
<th align="left">Managers and supervisors shall:</th>
</tr>
</thead>
<tbody>
<tr>
<td align="left">- Establish a system of hazard identification, risk assessment and management for their area of the operation.</td>
</tr>
<tr>
<td align="left">- Ensure that employees, visitors and contractors receive appropriate and effective training, so that their health and safety is not compromised by any work activity.</td>
</tr>
<tr>
<td align="left">- Provide and maintain suitable work methods which reduce health and safety risks to as low as is practicable.</td>
</tr>
</tbody>
</table>
- Report, investigate, record and make recommendations on all incidents and accidents that could have or did cause harm.
- Ensure sufficient arrangements are provided for first aid.
- Ensure emergency evacuation/disaster plans are appropriate and that those plans are tested, where possible, at least every six months.
- Keep up-to-date with developments in health and safety that are relevant to their area of operations.

<table>
<thead>
<tr>
<th>Employees shall:</th>
<th>9.3.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Follow all safety and health requirements and rules.</td>
<td></td>
</tr>
<tr>
<td>• Report all hazardous conditions to their immediate supervisor or manager as soon as reasonably practicable.</td>
<td></td>
</tr>
<tr>
<td>• Use all equipment controls, such as safety guards and extraction ventilation systems, where provided.</td>
<td></td>
</tr>
<tr>
<td>• Use personal protective clothing and equipment where required.</td>
<td></td>
</tr>
<tr>
<td>• Report any incident which may or did cause harm as soon as reasonably practicable.</td>
<td></td>
</tr>
<tr>
<td>• Report any illnesses or injuries which may</td>
<td></td>
</tr>
</tbody>
</table>
| Hazard identification and management | Employers shall carry out hazard identification and risk assessment procedures. They shall:  
• record the results of the hazard identification and risk assessment; and  
• make sure relevant staff have seen the records and understand them. | 9.4 |
<p>| Providing information | The employer shall provide information to all employees in a manner that is reasonably likely to be understood. | 9.5 |
| Training and supervision | Employees shall be either supervised or trained to undertake their work safely. | 9.6 |
| | Employers shall ensure that employees are trained in the safe use of plant, any substances, protective clothing and equipment that will be used or handled at work. | 9.6 |</p>
<table>
<thead>
<tr>
<th><strong>Employee participation</strong></th>
<th>Employers shall allow for employee participation in processes relating to health and safety in the place of work.</th>
<th>9.7</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health monitoring</strong></td>
<td>Health checks should be undertaken where required Employers shall provide the results of any workplace monitoring to all employees who work in those areas.</td>
<td>9.8</td>
</tr>
<tr>
<td><strong>First aid</strong></td>
<td>First aid kits, trained first-aiders and first aid facilities shall be provided to a level appropriate to the working environment. A first aid kit shall be kept at each workplace and in each vehicle.</td>
<td>9.10</td>
</tr>
</tbody>
</table>
| **Reporting & recording accidents** | **Employers shall:**  
  - Ensure that there is a documented procedure so that people can check to see what they must do.  
  - Have an incident/accident register for reporting and recording all near misses, accidents, injuries and ill health.  
  - Investigate all near misses, accidents, injuries and ill-health.  
  - Document investigations, including:  
    - what happened;  
    - how it happened; | 9.11 |
• how to stop it happening again;
• what shall be done to fix any problems; and
• who is responsible for ensuring the problems are fixed and signed-off.

- Report all incidents where serious harm has occurred, or where an injury might turn into serious harm, to DoL by telephone as soon as possible.

- Follow up telephoned reports with written reports to DoL within seven days.

- Where serious harm has occurred or might develop:
  - look after the victims first;
  - "freeze the scene" (i.e. cordon it off; leave everything as is and do not interfere with the scene; contact DoL by telephone as soon as possible; then do not disturb the scene until you have been told by an inspector that you may do so); and
  - start the investigation immediately.
10 EMERGENCY PREPAREDNESS

10.1 INTRODUCTION

Emergencies involving hazardous substances (including liquid and hazardous waste) can arise from any unforeseen or unexpected incident such as:

- transport accidents (land, sea and air);
- industrial accidents or uncontrolled activities;
- fire or explosion; or
- natural events such as storms, floods, earthquakes or volcanic activity.

Each of these incidents can result in a significant emission of hazardous substances into the environment, endangering workers, the public and the environment.

During an emergency, time is of the essence. A pre-prepared emergency plan is a crucial tool to minimise adverse effects, setting out an effective response.

This chapter aims to provide liquid and hazardous waste contractors with guidance on how to prepare for and respond to an emergency.

10.2 EMERGENCY PLAN

For a specific operation, hazard identification and risk assessments should be undertaken to help identify what could go wrong and to determine what to include in an emergency plan. An emergency plan is a written plan describing how incidents, accidents and their consequences should be handled both on- and off-site. The written plan should also identify key personnel and priority actions with regard to a systematic approach to those required to mitigate the emergency.

All sites and facilities shall have an up-to-date emergency plan appropriate to their size and nature.
The emergency plan shall comply with all legal requirements and include:

- a spill response plan;
- an emergency evacuation plan for buildings in the event of a fire or other emergency; and
- a fire evacuation scheme for large buildings or evacuation procedure for smaller premises.

The emergency plan shall identify the types of emergencies which could occur. These include emergencies of a general nature (such as a fire, flood or cyclone) and those specific to the site (e.g. a certain type of chemical spill). The plan shall provide for the safety of people and the environment in each emergency. It shall include layout sketches of the site buildings, departments, dangerous goods and hazardous substance storage areas, bulk tanks, underground services, electricity, gas, water, sewage and trade waste and locations of spill kits.

Safety data sheets (SDSs) shall be available for all hazardous substances held on site.

10.2.1 Spill Response Plan

Unfortunately, clean-up personnel sometimes react to a spill by washing the spilt substance away with water. Washing a spill down the stormwater or wastewater system only transfers the problem to another location, where it may be more difficult to control and is likely to breach Resource Management Act requirements, resulting in possible enforcement action.

Spill response plans (SRPs) are an integral part of the emergency plan, particularly for an industry that handles liquid and hazardous wastes. They aim to achieve a rapid and effective response to a spill to minimise adverse effects on people, property and the environment.

The person(s) responsible for the waste at the time of an incident is responsible for the spill response plan. Prior to relinquishing responsibility for the waste to a third party, owners and contractors shall ensure that the third party has an appropriate SRP.
Liquid and hazardous waste contractors shall have a SRP for their site/facility and for vehicles in transit.

**Spill Response Plan for an Organisation’s Site**

Whatever the size or location of an organisation’s facility (or site), an SRP shall consist of the same basic components:

- Procedures in the event of a spill.
- Plans showing services such as drainage systems and sensitive areas.
- Personnel/organisations to be contacted in the event of a spill, including their responsibilities and contact details.
- Emergency equipment and materials.
- Spill response training.

Each of these components is discussed below.

**Basic Spill Procedure**

In the event of a spill, the following principles should be followed:

- **Protect human safety.** Human safety is the most important priority if a spill occurs. Consider the welfare of all personnel (including yourself) and remove all non-essential personnel from the vicinity of the spill.

- **Identify** the spilt material and the associated hazard. The dangerous goods declaration and placards may be of use.

- **Identify** and put on the appropriate personal protective equipment (PPE) for handling the material.

- **Stop the source.** This may involve turning off a tap, plugging a leak or uprighting a container.
- **Protect the stormwater/wastewater system.** Use interim measures to stop the spill, for example a barrier system from the spill kit, such as a rubber drain mat over the nearest stormwater/wastewater sump.

- **Notify** those on the contact list of the incident. These are likely to include the spill supervisor; the regional council (if the spill is large or has entered the stormwater system); the wastewater treatment plant (if the spill has entered the wastewater system), the Police and the Fire Service (if there is a risk to people and/or property).

- **Clean up and dispose** of spilt material. Using the spill kit and other equipment, the spill shall be cleaned up to avoid further pollution potential from tracking, or contamination of stormwater. Depending on the severity of the spill, the Fire Service, regional council representative or spill supervisor may supervise the clean-up. The spilt material and contaminated materials shall be disposed of appropriately (depending on the nature of the spilt material).

- **Review, restock and improve.** On completion of the spill response, review the SRP and its implementation, restock the spill kits and equipment. Continual improvement of the SRP will allow for more efficient and effective spill response in future.

### 10.2.2 Emergency Evacuation Plans

Owners of all buildings except single residential dwellings are required to have a plan for emergency evacuation in the event of fire or other emergency (HSE Act 1992, Section 6 [e]).

Sections 6(e) and 14(b) require that organisations shall prepare an emergency plan giving all affected employees the opportunity to participate in its development.
Smaller premises and buildings shall have an evacuation procedure which includes:

- exit signs and evacuation procedure notices;
- emergency assembly areas; and
- a means of ensuring that the building has been evacuated.

10.2.3 **Fire Evacuation Schemes**

Under the Fire Safety and Evacuation of Buildings Regulations 2006 and Amendment 2008, if your building is used in whole or in part for the storage or processing of hazardous substances (as defined in Hazardous Substances (Classification) Regulations 2001 (SR 2001/113)) - no matter how many persons are employed - the National Commander of the Fire Service may require the owner of that building to make provision for an evacuation scheme.

Relevant buildings, as defined by the Fire Safety and Evacuation of Buildings Regulations 2006, also need a fire evacuation scheme.

Larger premises and those storing hazardous substances shall have a fire evacuation scheme that includes:

- Fire alarms.
- Exit signs and evacuation procedure notices.
- Fire safety equipment.
- Appointment and training of fire wardens.
- Regular trial evacuations. Part of an evacuation scheme is a requirement to identify the frequency of trial evacuations; typically this is every six months. Trials help to test the evacuation procedure and to train people what to do in the event of a fire to minimise panic in case of an actual emergency.

Fire evacuation schemes shall be approved by the New Zealand Fire Service.
10.3 TRANSPORT

10.3.1 LAND TRANSPORT ACT - LAND TRANSPORT RULE, DANGEROUS GOODS 2005 & 2010 AMENDMENT

As the name suggests, the Land Transport Rule: Dangerous Goods specifically relates to the transport of Dangerous Goods on roads. Section 8.3 requires that:

*a person who transports dangerous goods for hire or reward; or a person who transports dangerous goods for use as tools-of-trade, for agricultural use, or for a commercial purpose; or a person who transports dangerous goods for domestic or recreational purposes when the quantity of goods transported for domestic or recreational purposes exceeds the limits specified in Schedule 1 must:*

(a) *carry emergency response information for all the dangerous goods on the vehicle; and*

(b) *keep the emergency response information in the driver’s cab in an accessible position; and*

(c) *be aware of:*

(i) *the hazards that the dangerous goods present; and*

(ii) *the procedures for their safe loading, handling and storage on the vehicle; and*

(iii) *the emergency procedures stated in the emergency response information.*

8.3(2) *The consignor must supply emergency response information for the dangerous goods being transported unless the driver or operator of the vehicle indicates that he or she already has that information.*
Emergency procedure guide for transportation

Organisations need to have a planned response for emergency incidents on the road as far as possible. Potential incidents include:

- those caused by the contents of the load, by contact or fumes;
- a road accident (no loss of load or fire);
- loss (or partial loss) of the load due to failure of a pipe, hose or tank; or
- a fire in the vehicle or the load.

It is the responsibility of the driver to initiate the emergency plan unless injury prevents this.

Customer site or public road

Should an emergency incident occur at a customer’s site where no special requirements are identified as part of the Job Instruction, the on-road emergency response measures should be followed.

All transport vehicles shall carry an appropriate emergency response kit. This kit can include:

- emergency contact details;
- absorbent material compatible with the waste being carried;
- a disposal container to collect used absorbent material;
- material to temporarily plug small leaks;
- booms; and
- a small spade or broom.
General emergency procedure

The general emergency procedure is as follows:

1. The driver shall avoid personal and public risk.

2. The risk to the environment shall be reduced as much as possible, providing it is safe to do so.

Procedures for specific incidents are as follows:

1. An incident caused by the contents of the load, by contact or fumes
   a) Stop the collection job.
   b) Move away from and upwind of the area.
   c) Administer first aid as necessary (see the emergency procedure guide).
   d) Call the Emergency Services as necessary.

2. Road Accident (no loss of load or fire)
   a) Contact the Emergency Services if there is injury or other services are required.
   b) Deal with injuries to self or others.
   c) Turn on flashing lights if possible.
   d) Put out warning cones.
   e) Assist traffic flow where possible.
3. **Fire in vehicle or load**

This may involve an accident or a leak, so before completing other emergency responses:

a) Attempt to extinguish the fire if it is small enough.

b) Protect the public from the fire.

c) Protect property from the fire.

Then complete all relevant emergency responses where it is safe to do so.

4. **Loss or partial loss of the load due to pipe, hose or tank failure**

In addition to the above, and if any fire does not make it impossible:

a) Put on the PPE that was used in the collection job (i.e. PPE appropriate to the contents of the vehicle).

b) Contact the transport base for back-up equipment and assistance if this would be beneficial. The base should also contact the appropriate authorities, as the incident requires, and the customer.

c) If it is safe to do so, attempt to stop the flow by:

   - blocking the hole/pipe with a wedge, rags, plastic bags, absorbent pillow, etc;

   - covering any sumps to stop ingress;

   - creating a dam to retain the contents; and

   - using on-board recovery drums where this is possible.

d) Complete the clean-up (under the supervision of the Emergency Services where relevant).
If an operation has a transporter base and other staff, a second tier of emergency response support can be supplied to the incident site. This might include:

- recover drums;
- additional spill control and absorbent items;
- additional contacts for assistance e.g. tow truck, council; and
- A 24-hour emergency response phone contact.

**10.4 TRAINING**

All personnel shall be trained in the use of emergency equipment and the emergency plan. Periodic emergency response exercises shall follow the initial training. These shall be undertaken at least six-monthly.

The person responsible for the emergency plan should design different emergency scenarios to allow personnel to be trained in a range of events. Variations should include:

- the time of day or night the spill occurs;
- the location of the emergency e.g. from a vehicle on the road or within the organisation’s premises;
- the form of the emergency; and
- the size of the emergency.

**10.5 ORGANISATIONS THAT MAY NEED TO BE CONTACTED IN AN EMERGENCY**

**10.5.1 Fire Service**

For significant spills that cannot be managed safely by the responsible party, the Fire Service shall be the first point of contact to provide assistance and control the incident.
10.5.2 **REGIONAL COUNCILS/ UNITARY AUTHORITIES – POLLUTION RESPONSE**

If a spill or other emergency has resulted in waste or hazardous substance entering stormwater or a water body, it shall be reported to the council. The council can then decide whether it is necessary to respond to the incident or not.

10.5.3 **WASTEWATER TREATMENT PLANT**

The operators and owners of reticulated wastewater systems and treatment plants shall be notified if a spill or other emergency has resulted in waste or hazardous substance entering the sewerage system. They can then decide what action is required.

10.5.4 **DEPARTMENT OF LABOUR (DoL)**

Where a workplace incident has resulted in serious harm or where an injury may turn into serious harm, this shall be reported to DoL. The scene shall not be interfered with unless it is to protect life or to protect serious loss of property (refer to Section 9.12 ‘Reporting and Recording Accidents’ for details).

10.6 **OTHER GUIDELINE INFORMATION**

Many other organisations provide information relevant to emergency plans. This information includes:

- Responsible Care New Zealand Inc. – HSNO Approved Code of Practice 36-1 - Preparing for a Chemical Emergency
- New Zealand Centre for Advanced Engineering – Management of Hazardous Waste 2000
- New Zealand Standard 5433:2007 Transport of Dangerous Goods on Land
- Operators’ Handbook for the Transport of Dangerous Goods by Road
- Health and Safety in Employment Act codes of practice.

10.7 **MANDATORY CODE REQUIREMENTS**

The table below identifies the mandatory requirements of this section of the Code. This means mandatory in law or regulation or under the Code.

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emergency plan</strong></td>
<td>All sites and facilities shall have an up-to-date emergency plan appropriate to their size and nature.</td>
<td>10.2</td>
</tr>
<tr>
<td></td>
<td>The emergency plan shall comply with all legal requirements and shall include:</td>
<td>10.2</td>
</tr>
<tr>
<td></td>
<td>- a spill response plan;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- an emergency evacuation plan for buildings, for the event of a fire or other emergency; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- a fire evacuation scheme for large buildings or evacuation procedure for smaller premises.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The emergency plan shall identify the likely types of emergencies, both general in nature (such as a fire, flood or cyclone) and specific to the site (a certain type of chemical spill), that could occur.</td>
<td>10.2</td>
</tr>
<tr>
<td></td>
<td>The emergency plan shall provide for the safety of people and the environment.</td>
<td>10.2</td>
</tr>
<tr>
<td><strong>Spill response plan</strong></td>
<td>Liquid and hazardous waste contractors shall have a spill response plan for their site/facility and for vehicles in transit.</td>
<td>10.2.1</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
</tbody>
</table>
| **Emergency evacuation plan** | Smaller premises and buildings shall have an evacuation procedure, which includes:  
• exit signs and evacuation procedure notices;  
• emergency assembly areas; and  
• a means of ensuring that the building has been evacuated. | 10.2.2 |
| **Fire evacuation scheme** | Larger premises and those storing hazardous substances shall have a fire evacuation scheme that shall include:  
• fire alarms;  
• exit signs and evacuation procedure notices;  
• fire safety equipment;  
• appointment and training of fire wardens; and  
• regular trial evacuations. | 10.2.3 |
| **The emergency plan** | The emergency plan shall include layout sketches of the site buildings, departments, dangerous goods and hazardous substance storage areas, bulk tanks, underground services, electricity, gas, water, sewage and trade waste. | 10.2 |
| **Safety data sheets (SDSs)** | Safety data sheets (SDSs) shall be available for hazardous substances held on site. | 10.2 |
| Transport | Liquid and hazardous waste operators shall carry emergency response information for all the dangerous goods on the vehicle. This information should be kept in the driver’s cab in an accessible position. Operators/drivers shall be aware of:  
- the hazards that the dangerous goods present; and  
- the procedures for their safe loading, handling and storage on the vehicle; and  
- the emergency procedures stated in the emergency response information. | 10.3 |
<p>| All transport vehicles shall carry an appropriate emergency response kit. | 10.3 |
| Training | All personnel shall be trained on how to follow the emergency plan and use emergency equipment. Emergency response exercises shall be undertaken at least six-monthly. | 10.4 |
| Fire Service | For significant spills that cannot be safely managed by the responsible party, the Fire Service shall be the first point of contact to provide assistance and control the incident. | 10.5.1 |
| Regional council/unitary | If a spill or other emergency has resulted in a waste or hazardous substance entering stormwater or a water | 10.5.2 |</p>
<table>
<thead>
<tr>
<th><strong>authorities</strong></th>
<th>body, it shall be reported to the council.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Wastewater</strong></td>
<td>The operators and owners of reticulated wastewater systems and treatment plants shall be notified if a spill or other emergency has resulted in waste or hazardous substance entering the sewerage system.</td>
</tr>
<tr>
<td><strong>treatment</strong></td>
<td></td>
</tr>
<tr>
<td><strong>plant</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Department of</strong></td>
<td>Where a workplace incident has resulted in serious harm, or where an injury may turn into serious harm, this shall be reported to DoL.</td>
</tr>
<tr>
<td><strong>Labour</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

10.5.3

10.5.4
11 TRAINING AND AUDITING

11.1 INTRODUCTION

Training is a requirement of many of the rules and regulations relating to the industry. Training and auditing are also an essential part of the Code.

Training and auditing comprise:

• in-house training and auditing; and
• external training and auditing.

An active training and auditing programme at both levels shall be required for an organisation to comply with the Code and achieve certification.

11.2 IN-HOUSE TRAINING

11.2.1 TRAINING COORDINATOR

Every organisation shall have one person in charge of coordinating training for all staff involved in the generation, transport or disposal of liquid and hazardous waste.

11.2.2 TRAINING RECORDS

The training coordinator shall maintain an up-to-date training record for each employee. The record shall include:

• Identification of areas of competence (including those gained through experience).

• A record of formal and informal training undertaken, including the date of the training. (Where possible this training verification should be signed by both the trainer and participant).

• Identification of training needs.

• A training programme to address the defined training needs.

The training record shall be updated as training occurs and shall be reviewed on an annual basis.
The training record and review do not need to be complicated; the record can be maintained in any form that suits the organisation and the review can be built into other reviews such as employee performance reviews.

**11.3 TYPES OF IN-HOUSE TRAINING**

Four types of in-house training shall be undertaken: general induction training, job specific training, emergency training, and retraining.

**11.3.1 GENERAL INDUCTION TRAINING**

All new employees shall be instructed in the following:

- how the site operates;
- the structure of the organisation; and
- the organisation’s policies (health and safety, environmental, etc.).

**11.3.2 JOB SPECIFIC TRAINING**

All employees shall be instructed in the following:

- job-specific use of plant, machinery and equipment;
- job-specific use of storage and handling of substances; and
- job-specific hazard identification, and health and safety procedures, including personal protective clothing and equipment.

**11.3.3 EMERGENCY TRAINING IN VEHICLES AND ON SITE**

All employees shall be instructed in the following:

- emergency preparedness and spill response;
- accident response; and
- fire drills.
11.3.4 RETRAINING

All employees shall receive re-training as required in the following:

- job, equipment, material and procedural changes; and
- regular refresher courses that complement a person’s original training.

11.4 LEGAL TRAINING REQUIREMENTS

11.4.1 ENVIRONMENTAL PROTECTION AND SPILL CONTINGENCY TRAINING

Any person who handles or is responsible for waste shall undertake spill response training. The frequency of the training shall be at least six-monthly.

The training coordinator should design different spill scenarios to allow personnel to be trained in a range of spill events.

Refer to Chapter 10 for information on spill response plans, equipment preparation, signage, etc.

11.4.2 TRAINING FOR THE TRANSPORT OF WASTES

Section 9.1(1) of the Land Transport Rule: Dangerous Goods 2005 requires that persons and organisations involved in the transport of dangerous goods must be able to demonstrate knowledge appropriate to the nature, quantity and use of the dangerous goods transported, as follows:

- the hazards associated with the dangerous goods;
- safe practice relevant to the activities they carry out; and
- emergency procedures.
Section 9.1(2) states that if no other rule/law/regulation requires it, the employer of a person transporting and handling the dangerous goods shall ensure adequate training for them to carry out their duties safely and satisfactorily, as follows:

- general awareness or familiarisation training;
- function-specific training;
- safety training; and
- retraining as appropriate.

The training necessary to comply with this rule shall include, but not be limited to, the successful completion of the Dangerous Goods Driver’s License Endorsement Course conducted by approved training providers.

11.4.3 HEALTH AND SAFETY TRAINING

Under Section 13(a) of the Health and Safety in Employment Act 1992, employers shall ensure employees are either sufficiently experienced to do their work safely or are supervised by an experienced person.

Section 13(b) requires the employee to be adequately trained in the safe use of all plant, objects, substances, protective clothing and equipment that they are required (or may be required) to use or handle.

Health and safety training is required for new and existing employees. This should include:

- how to carry out the job in a safe and healthy manner;
- information on hazardous work practices;
- where applicable, details of any isolation or ‘tag-out’ procedures;
- reporting of accidents or incidents;
- selection, use, fitting, storage, and maintenance of personal protective equipment;
• where to obtain occupational safety and health information; and
• emergency procedures.

Download a copy of the Health and Safety in Employment Act Guide from:
www.osh.dol.govt.nz/order/catalogue/808.shtml

11.4.4 HAZARDOUS SUBSTANCES TRAINING

The Hazardous Substances and New Organisms Act (HSNO) requirements do not apply to most wastes. However, HSNO does relate to waste hazardous substances that may be handled by the industry. Any liquid and hazardous contractor who handles or manages certain hazardous wastes, including waste hazardous substances, shall be certified as an Approved Handler.

HSNO regulations require Approved Handlers to demonstrate knowledge of:

• the HSNO Act and its regulations;
• the content of any Approved Code of Practice that is required for the hazardous substance;
• plant operational procedures (including protective clothing and equipment);
• emergency response procedures; and
• health and safety precautions.

Download a copy of the regulations from:
www.legislation.govt.nz/

Download a copy of the Approved Codes of Practice from:

fire safety and building evacuation training
Where the Fire Service requires a building evacuation scheme, the scheme shall identify the frequency of trial evacuations (which shall be at least once every six months). The trials shall test the evacuation scheme and train people how to respond in an emergency.

Refer to Chapter 10 for information on emergency procedures.

11.5 INDIVIDUAL EXTERNAL QUALIFICATIONS

A New Zealand Qualification Authority (NZQA) qualification, the Transportation of Waste and Recoverable Resources (Liquid and Hazardous Waste) Level 3, has been established through the Tranzqual ITO. The course involves on-job training which can be carried out while the trainee is working in the industry.

Download information on the qualification from:


At an industry level, the benefits of requiring a formalised qualification include:

- increasing the overall knowledge of the industry;
- reducing regulatory non-compliance;
- reducing the number of substandard organisations in the industry; and
- improving the reputation of the industry.

Individuals will benefit from a safer and better working environment and a qualification contributing towards their professional advancement.

11.6 AUDITING AND CERTIFICATION

11.6.1 INTERNAL AUDITS

Regular internal auditing (the assessment of your own organisation) is an important evaluation process, whether you are complying with the Code or the associated regulations. Organisations shall undertake internal audits throughout the year, with a full audit once a year. Larger companies should consider auditing more frequently.
The internal audit shall include the assessment of all documentation required by the Code and by legislation, as well as an assessment of the premises used by the organisation, its equipment and procedures. The audit shall identify areas within the organisation that have achieved compliance and areas where further work is required. The audit can be designed internally or a pre-designed template can be used.

Internal audit documents shall be maintained as evidence of the internal audit and its findings.

The benefits of undertaking internal audits include:

- providing the business with a ‘snapshot’ of its performance;
- focusing limited resources on the most critical issues;
- identifying successes and achievements;
- minimising the risk of legislative non-compliance;
- providing evidence in a due diligence defence;
- potential for saving considerable money by identifying problems early; and
- its use as preparation for an external audit.

An audit checklist is provided in Appendix B.

11.6.2 EXTERNAL CERTIFICATION PROCESS

The code compliance programme was established to provide New Zealand businesses confidence that certified liquid and hazardous waste operators (certified operators) are reliable, of high quality and do not pose hazards to the environment, safety or personal welfare.

It requires an independent assessment of an organisation to determine how it is complying with the requirements of the Code. Once an organisation is certified as code compliant it confirms compliance with the Code, reduces an organisation’s liability and
increases acceptance of the organisation’s work practices by regulatory bodies and clients. It will also allow individual organisations to compete on a level playing field.

The Liquid and Hazardous Waste Operators Certification Council (Certification Council) runs the compliancy programme.

Companies wishing to apply for certification under the Code shall comply with the following:

- Have a current copy of the Code *(the Code* is a critical component of the training requirements and the certification process).
- Be a current financial member of WasteMINZ and pay the other prescribed fees.
- Have signed the Liquid and Hazardous Waste Operators Certification Council Agreement noting their acceptance of the terms within it.
- Have completed the Application for Liquid and Hazardous Waste Operators Certification Council Registration and paid the fees noted on this form.
- Have carried out an internal audit and remedied any areas of concern.
- Requested an external code compliancy audit, which shall be undertaken by an industry-approved management systems auditor appointed by the Certification Council.
- Completed any outstanding issues from the external code compliancy audit in order to achieve certification.

Once the Certification Council has approved the granting of code compliancy status to a company, WasteMINZ shall:

- issue to the company a certificate, stating the company’s code compliancy status, and trademark decals to affix to the company’s vehicles;
- advise the relevant councils of the company’s code compliancy status; and
• notify the public of the company’s code compliancy status by uploading the company’s contact details on the WasteMINZ website.

In order to remain code compliant, companies are required to undergo an external audit every three years, maintain annual membership of WasteMINZ, pay the required fees and continue to operate at the level required by the Code.

Download a copy of the compliancy programme from:


11.6.3 CODE COMPLIANT OPERATORS’ DATABASE

A database of code compliant liquid and hazardous waste operators is maintained by WasteMINZ and is available on their website. This allows customers and regulators to verify the certification of an organisation in relation to a specified job.

A list of the current code compliant liquid and hazardous waste operators can be found here:

www.wasteminz.org.nz/sectorgroups/hazardous/LHWOCC2.htm

11.7 MANDATORY CODE REQUIREMENTS

The mandatory requirements of this section of the Code (legislative or regulatory requirements) are set out in the following table.

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-house</td>
<td>Every organisation shall have one person in charge of coordinating training of all staff.</td>
<td>11.2.1</td>
</tr>
<tr>
<td>training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>The training coordinator shall maintain an up-to-date training record for each employee.</td>
<td>11.2.2</td>
</tr>
<tr>
<td>records</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td>Training records shall be updated as training occurs and be reviewed on an annual basis.</td>
<td>11.2.2</td>
</tr>
<tr>
<td>records</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training Type</td>
<td>Description</td>
<td>Section</td>
</tr>
<tr>
<td>-------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>General induction training</td>
<td>All new employees shall receive induction training.</td>
<td>11.3.1</td>
</tr>
<tr>
<td>Job-specific training</td>
<td>All employees shall be instructed in job-specific training.</td>
<td>11.3.2</td>
</tr>
<tr>
<td>Emergency training</td>
<td>All employees shall be instructed in emergency training.</td>
<td>11.3.3</td>
</tr>
<tr>
<td>Retraining</td>
<td>All employees shall receive retraining as required.</td>
<td>11.3.4</td>
</tr>
<tr>
<td>Spill contingency training</td>
<td>Any person who handles or is responsible for waste shall undertake spill response training.</td>
<td>11.4.1</td>
</tr>
<tr>
<td>Training for the transport of wastes</td>
<td>Any person who transports wastes shall hold a ‘D’ endorsement and receive additional training.</td>
<td>11.4.2</td>
</tr>
<tr>
<td>Health and safety training</td>
<td>Health and safety training shall be undertaken for new and existing employees.</td>
<td>11.4.3</td>
</tr>
<tr>
<td>Hazardous substances training</td>
<td>If required, HSNO training shall be undertaken.</td>
<td>11.4.4</td>
</tr>
<tr>
<td>Internal audits</td>
<td>Organisations shall undertake internal audits on an annual basis and documentation shall be maintained as evidence of the audit and its findings.</td>
<td>11.6.1</td>
</tr>
<tr>
<td>External audit</td>
<td>Organisations are required to have a current copy of the</td>
<td>11.6.2</td>
</tr>
<tr>
<td>Code compliancy</td>
<td>Liquid and hazardous waste operators are to undergo an external audit every three years.</td>
<td>11.6.2</td>
</tr>
<tr>
<td>-----------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td></td>
<td>To maintain code compliancy status, organisations shall be a current and financial member of WasteMINZ.</td>
<td>11.6.2</td>
</tr>
</tbody>
</table>
12  SYSTEM MANAGEMENT

12.1  INTRODUCTION

Management systems need to remain dynamic to ensure that procedures are current and reflect recent internal or external issues. Even a small business needs a management system to comply with its legal requirements – preferably one that is simple, integrated and easy to manage.

General management issues are not covered in the Code.

12.2  SYSTEM MANAGEMENT

This Code requires liquid and hazardous waste generators, transporters and receivers to implement a range of management controls, including requirements for documentation.

Operators shall ensure that the various management controls summarised in this section of the Code (and those required by other legislation and regulations) are addressed. The Code recommends that organisations simplify management systems by integrating the occupational health and safety process with environmental, personnel and general management.

The Code recommends that the liquid and hazardous waste operator should start with an environmental policy. This helps to focus on the objectives in this area. It is a statement of what the business wants to achieve for environmental protection and improvement. Similarly, the Department of Labour (DoL) requires companies to have a health and safety policy. The business should consider combining these two policies.

12.2.1  HEALTH AND SAFETY

Operators shall ensure that all health and safety management requirements (including reporting) are addressed. These include, but are not limited to:

- accident reporting;
- incident recording;
• the convening of regular staff meetings/tool box meetings to cover health and safety issues;
• ongoing hazard review and control;
• training in processes and emergency response;
• reviewing, auditing and reporting cycles;
• a location test certificate;
• an Approved Handlers certificate;
• an offensive trades licence;
• a fire scheme or plan; and
• health monitoring and preventative measures.

12.2.2 **ENVIRONMENTAL MANAGEMENT**

Operators shall ensure their environmental management issues are addressed by systems appropriate to the nature and scale of their activity and any actual or potential effects on the environment, for example via:

• a stormwater management plan and an emergency plan;
• on-going review and control of environmental risks;
• keeping up to date with national regional and local requirements;
• training in processes and emergency response;
• using WasteTRACK to track all waste;
• trade waste discharge consent monitoring;
• air discharge consent monitoring; and
• stormwater discharge consent monitoring.

These shall form part of your Environmental Management Plan.
12.2.3 **PERSONNEL TRAINING AND MANAGEMENT**

Training of all staff shall be undertaken in accordance with Chapter 11 of the Code. This includes training for:

- health and safety;
- transport of waste; and
- environmental issues.

It should also include business operations and processes.

12.2.4 **PROCESS MANAGEMENT AND IMPROVEMENT**

It makes good business sense to work on process improvement. Improvement can lead to new services and cost savings throughout the business, which should be recorded to improve business efficiency, including waste minimisation objectives. Process improvement measures can include:

- in-house process measurement; and
- waste stream load analysis and documentation.

12.2.5 **PREVENTATIVE MAINTENANCE – STATIC PLANT**

Apart from keeping the business operational and efficient, a preventative maintenance programme will reduce risks and demonstrate diligence in:

- health and safety;
- environmental risk reduction; and
- periodic checks of critical areas.

Physical maintenance of static plant and buildings includes:

- checking the integrity of processing tanks, bunds, drains, plant and hoses;
- scheduled time-based equipment servicing requirements;
- checking emergency response equipment (such as fire extinguishers);
• checking health, safety and environmental monitoring equipment (such as gas detection systems);
• mains water supply backflow prevention certification; and
• building Warrant of Fitness.

12.2.6 PREVENTATIVE MAINTENANCE - VEHICLES

A preventative maintenance programme shall be operated for vehicles owned by the business. Depending on the nature of the vehicle fleet, mandatory requirements can include:

• tank wagon certification;
• tank wagon full inspection;
• Certificate of Fitness vehicle inspections;
• twist lock testing; and
• check of emergency response equipment.

12.2.7 CODE UPDATES

A liquid and hazardous waste business shall use an up-to-date copy of the Code. The Code is part of the documentation required to maintain the overall code compliancy of a company.

12.2.8 DOCUMENT CONTROL

All documentation associated with the requirements in sections 12.2.1 to 12.2.7 shall be:

• completed accurately; and
• filed and retained for the required period.
12.2.9 AUDITING REQUIREMENTS

The Code requires that each liquid and hazardous waste business undertakes a full internal audit annually and a three-yearly external audit.

Refer to Chapter 11 for further information on auditing requirements.

12.3 INTEGRATED MANAGEMENT SCHEDULE

Many aspects of work in the waste handling industry are legally required to be documented and reported. Good management practices require other aspects of work to be documented. Organisations can choose appropriate timeframes for these requirements if mandatory timeframes are not specified.

<table>
<thead>
<tr>
<th>Time frames</th>
<th>Requirements</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily (or as required)</td>
<td>Driver/vehicle checks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Serious harm accidents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Health and safety incidents</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Spills</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Issues as brought to notice by staff, clients and contractors</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Road User Charge purchase</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Job and transport documentation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WasteTRACK tracking documentation</td>
<td></td>
</tr>
<tr>
<td>Monthly</td>
<td>Health and safety meetings</td>
<td>Consider combining all meetings</td>
</tr>
<tr>
<td>Frequency</td>
<td>Activity</td>
<td></td>
</tr>
<tr>
<td>---------------</td>
<td>--------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Environmental meetings</td>
<td>into one</td>
<td></td>
</tr>
<tr>
<td>General staff meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow up on outstanding items from previous meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Driver log book completion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Site stormwater and wastewater systems (dry and wet weather)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Three-monthly</strong></td>
<td>Vehicle inspections – mechanic</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Equipment for health, safety and environmental risk reduction</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Processing plant maintenance</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Staff training, as per individual requirements</td>
<td></td>
</tr>
<tr>
<td><strong>Six-monthly</strong></td>
<td>Fire/evacuation trial run</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review of health and safety hazards</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Review of environmental risks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Certificate of Fitness for vehicles</td>
<td></td>
</tr>
<tr>
<td><strong>Annually</strong></td>
<td>Building Warrant of Fitness</td>
<td>If required</td>
</tr>
<tr>
<td></td>
<td>Backflow prevention</td>
<td></td>
</tr>
<tr>
<td>Requirement</td>
<td>Interval</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>-------------------------------</td>
<td></td>
</tr>
<tr>
<td>Offensive trades licence renewal</td>
<td>If required</td>
<td></td>
</tr>
<tr>
<td>Twist lock checking</td>
<td>If required</td>
<td></td>
</tr>
<tr>
<td>First aid certificate</td>
<td>24-monthly</td>
<td></td>
</tr>
<tr>
<td>Dangerous Goods Endorsement renewal</td>
<td>Five yearly</td>
<td></td>
</tr>
<tr>
<td>Vehicle servicing – distance based</td>
<td>Various and as required by resource consent</td>
<td></td>
</tr>
<tr>
<td>Plant servicing – time based</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health surveillance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vaccinations (preventative medicine)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trade waste discharge consent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stormwater discharge consent</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Code recommends that waste operators amend this table to include their own site-specific requirements. The intervals can be set to suit the business. The requirements can be set up either on an electronic or paper time-planning calendar, reducing the chances of items being overlooked. Spreading the requirements over the year will help to make them more manageable.

12.4 MANDATORY CODE REQUIREMENTS

The table below identifies the mandatory requirements of this section of the Code. This means mandatory in law or regulation or under The Code.
<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and safety</td>
<td>Operators shall ensure that all health and safety management (including reporting) requirements are addressed.</td>
<td>12.2.1</td>
</tr>
<tr>
<td>Environmental management</td>
<td>Operators shall ensure their environmental management requirements are addressed.</td>
<td>12.2.2</td>
</tr>
<tr>
<td>Personnel training and management</td>
<td>Training for all staff shall be undertaken as per the requirements of the Code.</td>
<td>12.2.3</td>
</tr>
<tr>
<td>Preventative maintenance - vehicles</td>
<td>A preventative maintenance programme shall be operated for vehicles owned by the business.</td>
<td>12.2.6</td>
</tr>
<tr>
<td>Code updates</td>
<td>A liquid and hazardous business shall have an up to date copy of the Code.</td>
<td>12.2.7</td>
</tr>
<tr>
<td>Document control</td>
<td>All documentation associated with the requirements in sections 12.3.1 to 12.3.7 shall be accurately completed, filed and retained for the required period.</td>
<td>12.2.8</td>
</tr>
<tr>
<td>Auditing requirements</td>
<td>An annual internal audit and a three-yearly external audit shall be undertaken for each liquid and hazardous waste business.</td>
<td>12.2.9</td>
</tr>
</tbody>
</table>
13 SITE DESIGN

13.1 INTRODUCTION

This chapter provides guidance for designing a site to minimise impacts on the surrounding environment and risks to workers.

A liquid and hazardous waste transport and treatment facility is treated as a chemical storage and processing site. It shall be designed to minimise health and environmental issues. Problems with site layout and the ground level across the site, for example, can significantly affect the long-term liability of a business.

Compliance with the recommendations and requirements of this chapter will help the facility operator comply with the Resource Management Act 1991 (RMA). Requirements for RMA compliance shall, however, be identified for each site. The facility operator shall ensure there is no unauthorised discharge to the environment.

13.2 SITE DESIGN ISSUES

It is beyond the scope of this Code to address all issues associated with site design.

Instead, this chapter addresses those key features that can be built or retrofitted into a liquid and hazardous waste facility to reduce risks to the environment and human health – and therefore the liabilities of the operator.

The Code recommends that the operator liaise closely with local authorities (both district and regional councils) in the planning stages of the project to ensure that all council requirements are included in the development of the treatment facility.

Liquid and hazardous waste facilities shall operate with:

- no adverse effects on groundwater or stormwater discharged from the site;
- no contamination of the natural ground on or under the site;
• a trade waste discharge that is compliant; and
• odour and dust control measures that are acceptable to neighbours and compliant with the district plan or resource consent requirements.

These ‘clean plant’ requirements should be identified in the facility’s business plan, along with plans and a timeline for compliance.

13.2.1 SITE SELECTION AND LAYOUT

Operators should consider the following features when selecting a site:

• site position relative to neighbours and areas of natural risk;
• proximity to water supply and sewer services; and
• proximity to a suitable landfill.

13.2.2 STORMWATER CONTROL

Stormwater management is often overlooked in design. However, inadequate management often causes major compliance issues, and leads to significant costs. Stormwater is described as ‘clean rainwater’.

Operators shall ensure that only clean stormwater is discharged to the stormwater system or soak pits. Anything other than clean stormwater will need a preventative or remedial solution. If you require this you should contact a suitably qualified engineer or your local authority.

The separation of process areas and waste materials from areas that receive stormwater is a critical management issue. This separation will affect the day-to-day functioning of the business, as well as site risks and the magnitude of any clean-up operations. The following should be considered:

• Construct treatment areas on higher points of the site.
• Plan to cover all unloading and process areas immediately. If this is not possible, significant secondary containment (bunding) of limited areas will
be required. The stormwater in these areas shall be treated and disposed of as wastewater. This may require specific council approval.

- Keep dirty water inside the secondary containment area and clean water outside.
- Develop the stormwater network so that it can be intercepted in the event of a spill to prevent off-site discharge. Ensure that your Environmental Management Plan specifies how you will manage stormwater.
- Leave as much vegetation on the site as possible; it can improve site aesthetics and provide some stormwater treatment. Devices such as vegetative filter strips, swales and sand filters, for example, can remove sediment and contamination.

13.2.3 **TRADE WASTE**

A liquid and hazardous waste facility shall comply with the conditions of its trade waste consent. These conditions vary throughout New Zealand and are specific to individual treatment facilities.

Trade waste compliance is governed by individual councils, and is addressed further in Chapter 8.

13.2.4 **UNLOADING**

The facility should have designated areas for offloading wastes delivered to the site.

Unloading systems shall be developed and operated in a manner that:

- protects the operator from acute or chronic exposure to harmful chemicals or microbes;
- protects people on- and off-site;
- protects the environment; and
- shall not cause an unexpected chemical reaction.
Before unloading takes place, ensure the load will enter the correct treatment or storage area and that the driver’s delivery information is correct.

**Bulk Waste Loads**

Unloading systems for bulk materials can be significant sources of odour at a waste facility. The design of an unloading facility should consider the following:

- In all cases, a covered facility is favoured. This is less essential if a waste is to be pumped out of a tanker in a closed system (possible for very few wastes).
- At-risk stormwater sumps should be covered or sealed.
- Pits need to be large enough to contain any splash and constructed from a material that is easily cleaned (to remove both chemical and biological hazards). The method and speed of the discharge should be controlled to reduce the generation of droplets or mist.
- Secondary containment is required around the area.
- An air extraction system should be used to draw fine droplets and odour away from the operator, with air being discharged to a treatment system.
- The facility needs to be isolated from the public and non-essential staff to avoid health risks. Effective hand- and face-washing facilities need to be included at the site exit. A safety shower should be considered if there is not one in close proximity.

**Packaged Waste Loads**

There are fewer risks with packaged wastes, but consideration should be given to:

- unloading in covered areas with secondary containment (recommended for spill control); and
- checking packages against the inventory during unloading.
In all cases, if an incorrect load has been delivered, do not unload it until an agreement has been reached between the generator, transporter and treater and all necessary documentation transferred.

**13.2.5 STORAGE AND QUARANTINE ARRANGEMENTS**

Quarantine storage should be provided to hold packaged and bulk materials until they are accepted for treatment.

Hazardous substances shall be segregated to reduce the risk of reaction or combustion in a fire. The segregation table (wheel) in New Zealand Standard 5433:2007 Transport of Dangerous Goods on Land is recommended as a good rule of thumb for segregation.

Operators shall have secondary containment for all storage areas. Roofing of storage areas is recommended to prevent stormwater contamination.

**13.2.6 SITE SIGNAGE**

Signs for all bulk and packaged waste storage areas shall comply with regulatory requirements.

General direction signs are also recommended.

**13.2.7 VEHICLE AND EQUIPMENT CLEANING**

Vehicles shall be cleaned on a concrete wash pad to avoid stormwater and ground contamination.

All wash water shall be treated and disposed of as wastewater.

**13.2.8 ODOUR AND DUST**

Dust and odour shall be controlled by the operators in accordance with district and regional plan requirements and any resource consents for the site.

Any material that may affect the quality of stormwater or groundwater at the site shall not be used to suppress dust.
13.2.9 **ACCESS AND SECURITY**

Sites shall be secured to prevent unauthorised access.

After-hours access by contractors shall be safe and controlled.

An appropriate safety induction shall be completed for all contractors and visitors.

13.2.10 **EMERGENCY PREPAREDNESS**

Liquid and hazardous waste facilities shall have an emergency plan at a level appropriate to the organisation.

Refer to Chapter 10 for further information.

13.3 **MANDATORY CODE REQUIREMENTS**

The table below identifies the mandatory requirements of this section of the **Code**.

This means mandatory in law or regulation or under the **Code**.

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMA compliance</td>
<td>The facility operator shall ensure there is no unauthorised discharge to the environment.</td>
<td>13.1</td>
</tr>
<tr>
<td>Site design issues</td>
<td>Liquid and hazardous waste facilities shall operate with:</td>
<td>13.2</td>
</tr>
<tr>
<td></td>
<td>• no adverse effects on groundwater or stormwater discharged from the site;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• no contamination of the natural ground on or under the site;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a trade waste discharge that is compliant; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• odour and dust control measures that are acceptable to neighbours and compliant</td>
<td></td>
</tr>
<tr>
<td><strong>Section</strong></td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td><strong>Stormwater</strong></td>
<td>The facility operator shall ensure that only clean stormwater is discharged onto or from the site.</td>
<td>13.2.2</td>
</tr>
<tr>
<td><strong>Trade waste</strong></td>
<td>The facility operator shall only discharge waste in compliance with a trade waste permit or resource consent.</td>
<td>13.2.3</td>
</tr>
<tr>
<td><strong>Unloading</strong></td>
<td>During waste unloading, the facility operator shall protect personnel and protect the natural environment from contamination.</td>
<td>13.2.4</td>
</tr>
<tr>
<td><strong>Storage</strong></td>
<td>The facility operator shall provide compliant storage areas that have adequate secondary containment and signage.</td>
<td>13.2.5</td>
</tr>
<tr>
<td><strong>Site signage</strong></td>
<td>All bulk and packaged storage areas shall comply with regulatory requirements for signage.</td>
<td>13.2.6</td>
</tr>
<tr>
<td><strong>Vehicle cleaning</strong></td>
<td>The facility operator shall not discharge vehicle cleaning wash water onto natural ground or into stormwater.</td>
<td>13.2.7</td>
</tr>
<tr>
<td></td>
<td>All wash water shall be treated and disposed of as wastewater.</td>
<td></td>
</tr>
<tr>
<td><strong>Odour &amp; dust</strong></td>
<td>The facility operator shall control odour and dust.</td>
<td>13.2.8</td>
</tr>
<tr>
<td></td>
<td>Any material that may affect the quality of stormwater or groundwater at the site shall not be used to suppress dust.</td>
<td></td>
</tr>
<tr>
<td>Access</td>
<td>The facility operator shall control access to the site.</td>
<td>13.2.9</td>
</tr>
<tr>
<td>---------------------</td>
<td>--------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td><strong>Emergency preparedness</strong></td>
<td>The facility operator shall have a written emergency plan.</td>
<td>13.2.10</td>
</tr>
</tbody>
</table>
14 WASTETRACK

14.1 INTRODUCTION

A waste tracking system tracks the movement of waste from its point of generation through transportation, storage, to treatment and/or disposal.

The objectives of a waste tracking system are:

- to ensure the safe transportation of waste to an approved location;
- to monitor and track waste to prevent unauthorised discharge to the environment;
- to collate information to help central and local government identify priority waste management issues at a local and national level;
- to provide an independent system for companies in the waste management industry; and
- to ensure accountability by the generator of the waste for its safe and appropriate disposal.

14.2 WASTETRACK BACKGROUND INFORMATION

In 2004, the Ministry for the Environment (MfE), the New Zealand Water and Wastes Association (now Water New Zealand) and the Liquid Waste Contractors’ Special Interest Group highlighted that a waste tracking system was required for New Zealand. The Controlled Waste Tracking System (CWTS) developed by the Department of Environment & Conservation (DEC) in Western Australia was found to be the most appropriate system for New Zealand. WasteTRACK was developed from this system and initially trialled in 2005. In 2006, MfE was granted a licence to operate WasteTRACK in perpetuity.

WasteTRACK is now administered under contract to MfE. WasteTRACK is the tracking system available to all contractors within the liquid and hazardous waste industry, and is the tracking system specified in the Code.
Code compliant contractors shall use WasteTRACK to track all movements of liquid and hazardous wastes carried by the contractor on public roads.

14.3 WHAT IS WASTETRACK?

WasteTRACK is an internet-based database which is available from any web-enabled computer. It consolidates facility and carrier data to track liquid and hazardous wastes from their point of generation, through transport, to treatment and/or disposal. This system allows for independent verification of appropriate treatment and/or disposal, and allows local and central government access to the data for reporting.

14.4 HOW TO USE WASTETRACK

The code compliancy programme requires contractors to use WasteTRACK to track all movements of liquid and hazardous wastes carried by the contractor on public roads.

Before a waste contractor can begin using WasteTRACK, information on their company is entered into the system. A user name and password are then generated for the contractor, allowing them limited access to WasteTRACK.

The waste contractor creates a tracking form with a unique number that follows that waste from collection through to final treatment/disposal. This allows each individual waste movement to be monitored.

To create a tracking form, the following information is entered into WasteTRACK:

- type of waste (septic, bulk or packaged);
- vehicle;
- driver;
- the waste category; and
- nominated treatment plant.

The waste generator’s details can be loaded either when creating a tracking form, or after the collection has occurred. More than one waste generator can be loaded onto
a tracking form provided the wastes can be mixed and the collected volume does not exceed the capacity of the vehicle.

Treatment plants (disposal sites) are entered into WasteTRACK, enabling them to ‘accept’ the disposal of wastes into their site.

Only the wastes that can be accepted by a given disposal facility are displayed in WasteTRACK, preventing contractors from choosing disposal facilities that cannot accept particular categories of wastes.

No user is required to pay fees for accessing or using WasteTRACK.

14.5 DATA SECURITY

WasteTRACK has different levels of access. These access restrictions ensure that waste contractors cannot access the data of other contractors. They can also only access their own clients’ data. Confidentiality is assured for all parties using WasteTRACK.

Levels of access can also be set up for each company. For example, managers may be permitted full access to company information, while administrative staff and drivers may have restricted access.

WasteTRACK and the User Guide are accessible at:

www.wastetrack.co.nz

14.6 MANDATORY CODE REQUIREMENTS

The table below identifies the mandatory requirements of this section of the Code.
This means mandatory in law or regulation or under the Code.
<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>WasteTRACK</td>
<td>To be code compliant, contractors shall use WasteTRACK to track all movements of liquid and hazardous wastes carried by the contractor on public roads.</td>
<td>14.2 &amp; 14.4</td>
</tr>
</tbody>
</table>
15 PORTABLE TOILETS

15.1 INTRODUCTION

The use of portable toilets in New Zealand has increased in recent years due to both a growing awareness of the social and environmental impacts of long-drop (hole in the ground) style toilets, and the need to provide sufficient facilities for major events.

A portable toilet is a transportable, self-contained toilet generally manufactured of molded lightweight plastic with a holding tank for the temporary storage of human wastes. Portable toilets are usually designed for a single occupant, but larger facilities can have multiple toilet configurations.

Portable toilets are used where temporary toilets are required, or to supplement existing toilet facilities, for example at building sites, large-scale sporting or cultural events, field operations (e.g. pruning or harvesting) and in emergencies.

A portable toilet may also be referred to as a ‘Portaloo’, ‘chemical toilet’, ‘portable loo’, or a ‘Porta potti’.

Throughout this chapter and the Code, ‘portable toilet’ refers to any portable toilet whether it is for single or multiple occupancy.

15.2 TRANSPORTATION

The Code applies to all companies involved in the commercial provision of portable toilet services, irrespective of the volume of waste or number of toilets transported.

The Code does not cover vehicles and drivers transporting portable toilet units for domestic or recreational use, unless they exceed:

- 250 litres of waste; or
- 2 portable toilets.
15.2.1 PLACARDING


Portable toilets containing human wastes are classified for transportation as Division 6.2, infectious substances. These wastes may contain pathogens that cause human disease, but they are unlikely to pose a serious hazard. They are classified as Category B infectious substances, UN number 3373.

The transporter shall comply with the full placarding requirements for the cartage of infectious substances as set out in the Dangerous Goods Rule and NZS 5433:2007 Transport of Dangerous Goods on Land, Appendix F, as follows:

- each portable toilet shall be labelled and marked in accordance with Section 4 of the Dangerous Goods Rule;
- all vehicles, portable toilets and containers used to transport infectious effluent and sludges shall be transported as dangerous goods, whether full or empty;
- they shall remain appropriately placarded;
- the dangerous goods declaration shall be carried whether the toilets or containers are full or empty, and shall correctly describe the load and the quantity of waste product; and
- if the vehicle is carrying empty portable toilets or containers, this shall be shown on the documentation.
15.2.2 **Placement of Placards**

Vehicles used to transport portable toilets require placarding as follows:

- the minimum size for placards on both sides and the rear of a tank wagon is 400mm; and
- the Class 6.2 placard on the front of the vehicle is to have a minimum edge of 250mm.

If placards of the minimum size do not fit due to the design of the vehicle, then smaller placards may be used; however, these shall be as large as practicable and comply with the following requirements:

- be clean and visible;
- be unobscured and positioned on a contrasting background;
- include the proper shipping name, legible from 10 metres; and
- ensure the nature of the load is identifiable from 25 metres in daylight.

When portable tanks or other bulk containers are used for carrying portable toilet effluent the placards shall be:

- at least 250 mm measured along any edge; and
- be displayed on opposite sides or front and rear.

All vehicles shall be placarded as per the requirements of the Dangerous Goods Rule and NZS 5433:2007 Transport of Dangerous Goods on Land, Appendix F.

15.2.3 **Emergency Information Panel**

Tank wagons and bulk containers of portable toilet effluent shall display an Emergency Information Panel containing:

- the HAZCHEM code;
- the UN number;
• the proper shipping name or another name that clearly identifies the nature of the hazard; and

• the 24 hour emergency contact number or ‘DIAL 111’.

15.2.4 THE DANGEROUS GOODS DECLARATION

A dangerous goods declaration shall be carried when transporting portable toilets. The dangerous goods declaration shall identify the dangerous goods and the hazards they present to any person, property or to the environment. The documentation shall detail the nature and quantity of the dangerous goods.

The transporter shall familiarise themselves with the full requirements of Section 5 of the Dangerous Goods Rule and Sections 6.2 and 7.2.3 of NZS 5433:2007 Transport of Dangerous Goods on Land.

15.2.5 LOAD SECURITY

Portable toilets should be securely loaded on a vehicle, and restrained to prevent movement when vehicles pass over road undulations, change direction, brake or accelerate. It is essential that the load is secure to prevent movement in any direction relative to the vehicle.

Devices that pass from the deck on one side of the vehicle, over the load, to the anchor point on the other side of the deck, shall be used to secure portable toilets transported on a vehicle platform.

When portable toilets are not loaded against a headboard, the securing devices shall have a combined rated strength of at least twice the weight secured.

The Land Transport Act 1998 and the Official New Zealand Truck Loading Code set out the requirements for securing loads.

Download the Land Transport Act from:

Download the Official New Zealand Truck Loading Code from:

Refer to Chapter 6 for further information on transportation requirements.

15.3 **TOILET SERVICING**

New Zealand has no specific requirements regarding how often portable toilets should be serviced. The company and the client hiring the portable toilets often determine this. The Code recommends that a portable toilet on long-term hire should be serviced and cleaned at least weekly, and more frequently if necessary.

A unit on short-term or daily hire may not require servicing during the hire period, but if it is being used at a busy event, it may require servicing and cleaning throughout the event.

Servicing of the units shall include:

- internal cleaning;
- replenishing of consumables, e.g. toilet paper, soap or hand sanitizer;
- emptying the holding tank; and
- recharging the holding tank with water, chemical and/or deodorant.

15.4 **WASTE DISPOSAL**

All wastes from the holding tanks of portable toilets shall be disposed of in accordance with waste treatment plant operator and local authority requirements.

15.5 **STORAGE OF PORTABLE TOILETS**

Companies that store portable toilets shall ensure that all local authority requirements are met. Requirements can include a land use consent or an offensive trades licence.
15.6 DOCUMENTATION

The company shall keep a record of servicing for all hired portable toilets in addition to other documentation requirements of the Code.

Refer to Chapter 5 for further information on documentation and record keeping.

15.7 HEALTH AND SAFETY

15.7.1 MANUAL HANDLING

The manoeuvring of portable toilets requires care due to their size, weight and shape. To avoid injuries, portable toilets should be manoeuvred into position using a sack barrow or Hiab crane where possible. The Code recommends that employees are trained in safe manual handling procedures.

The Department of Labour’s Code of Practice for Manual Handling provides guidance on how to assess, manage and reduce the risks associated with manual handling for a wide range of scenarios.

Download the leaflet from:

www.osh.govt.nz/order/catalogue/a-z.shtml#L

15.7.2 HANDLING SEWAGE FROM PORTABLE TOILETS

Portable toilet companies need to ensure that employees are not exposed to hazards when servicing and cleaning portable toilets. All employees involved in cleaning and servicing shall be trained in the safe removal of wastes from portable toilets, to reduce the risk of contamination and illness. All employees shall also wear suitable PPE, including gloves while cleaning and servicing.

The Code recommends that everyone involved in the handling of sewage and human effluent wastes is immunised for Hepatitis A and B and Tetanus, and other vaccinations in accordance with the advice from their medical practitioner.
The potential hazards associated with foreign objects (e.g. needles and syringes) disposed of in portable toilets shall be documented and discussed with all employees as part of their initial and ongoing health and safety training.

15.7.3 **HANDLING TOILET CHEMICALS**

To reduce odours, chemical deodorisers are added to the wastewater holding tank of portable toilets. The most common deodorisers contain two or three primary ingredients: a dark blue dye (which hides the waste), a fragrance, and biocide (which prevent odours by eliminating all biological activity and bacterial growth in the holding tank).

Biocides are often harsh chemicals that can pose a threat to human and environmental safety. The instructions supplied with the chemicals shall be followed to protect the safety of customers, operators and the environment.

Refer to Chapter 9 for detailed health and safety information.

15.8 **NUMBER OF TOILETS REQUIRED**

When supplying portable toilets for a large event, local authority requirements shall be adhered to. Factors that should be taken into account include:

- the length of the event;
- the number attending;
- the female / male split; and
- whether alcohol or food will be consumed.

The Portable Sanitation Association International has produced a special event guide detailing the number of portable toilets required for the estimated number of attendees at an event.

15.9 REFERENCES

Portable Sanitation Association International [www.psa.org]
Portable Sanitation Europe Ltd [www.pse.org.uk]

NZS 5433:2007 Transport of Dangerous Goods on Land

Official New Zealand Truck Loading Code

Land Transport Act 1998

Land Transport Rule: Dangerous Goods 2005

Land Transport Rule: Dangerous Goods Amendment 2010

15.10 MANDATORY CODE REQUIREMENTS

The table below identifies the mandatory requirements of this section of the Code.

This means mandatory in law or regulation or under the Code.

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Placarding</strong></td>
<td>The transport of portable toilets shall comply with the requirements of Section 7 of the Dangerous Goods Rule and Section 9 of NZS 5433:2007 Transport of Dangerous Goods on Land. Each portable toilet shall be labelled and marked in accordance with Section 4 of the Dangerous Goods Rule.</td>
<td>15.2.1</td>
</tr>
<tr>
<td></td>
<td>The transporter shall be familiar with the requirements of NZS 5433:2007 Appendix F:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• all vehicles, portable toilets and containers that are used to transport infectious</td>
<td>15.2.1</td>
</tr>
</tbody>
</table>
| **Emergency Information Panel** | Effluent and sludges shall be transported as dangerous goods when full or empty; 
- portable toilets shall remain labelled and marked and vehicles shall remain placarded appropriately; 
- the dangerous goods declaration shall also be carried, whether the toilets or containers are full or empty, and it shall correctly describe the load and the quantity of waste product; and 
- if the vehicle is carrying empty portable toilets or containers, this shall be shown on the documentation. |
| **Vehicles shall be placarded as per the requirements of the Dangerous Goods Rule and NZS 5433:2007, Appendix F.** | 15.2.2 |
| **Dangerous Goods Declaration** | Tank wagons and bulk containers transporting portable toilet effluent shall display an Emergency Information Panel. |
| **A dangerous goods declaration shall be carried when transporting portable toilets.** | 15.2.3 |
| **The transporter shall familiarise themselves with the full requirements of Section 5 of the Dangerous Goods Rule and Sections 6.2 and 7.2.3 of NZS 5433:2007.** | 15.2.4 |
| **Load security** | Portable toilets loaded onto a vehicle for transportation shall be sufficiently restrained to prevent movement when vehicles pass over road undulations, change direction, brake or accelerate. | 15.2.5 |
| **Toilet servicing** | Servicing of the units shall include:  
- internal cleaning;  
- replenishing of consumables, e.g. toilet paper, soap or hand sanitiser;  
- emptying the holding tank; and  
- recharging the holding tank with water and/or chemical and/or deodorant. | 15.3 |
| **Waste disposal** | All wastes from the holding tanks of portable toilets shall be disposed of in accordance with the requirements of the waste treatment plant operator and/or local authority. | 15.4 |
| **Storage of portable toilets** | Companies that store portable toilets shall ensure that all local authority requirements are met. | 15.5 |
| **Documentation** | The company shall keep a record of servicing for all portable toilet services. | 15.6 |
| **Handling sewage from portable toilets** | All employees involved in the cleaning and servicing of portable toilets shall be trained in the safe removal of wastes from portable toilets.  
Employees shall wear suitable PPE, including gloves | 15.7.2 |
<table>
<thead>
<tr>
<th>When cleaning and servicing portable toilets.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The potential hazards associated with foreign objects (e.g. needles and syringes) disposed of in portable toilets shall be documented and discussed with all employees as part of their initial and on-going health and safety training.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Handling toilet chemicals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructions supplied with the chemicals used in portable toilets shall be followed.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Handling toilet chemicals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructions supplied with the chemicals used in portable toilets shall be followed.</td>
</tr>
</tbody>
</table>
16 ANIMAL EFFLUENT

16.1 INTRODUCTION

Animal effluent is regarded as a Class 6.2 Infectious Substance, which therefore needs to be handled in accordance with New Zealand Standard 5433:2007 Transport of Dangerous Goods on Land. Whenever a liquid waste contractor handles any volume of stock animal effluent in their vacuum tanker, all transport laws and code conditions shall be followed.

Animal effluent includes wastes from animal processing facilities; pig, dairy and chicken farming; stock effluent disposal sites; and stock truck washes. It does not include wastes discharged from animals while they are being transported in vehicles.

The Code excludes effluent contained in stock trucks transporting animals.

16.2 HANDLING REQUIREMENTS

16.2.1 Placarding requirements

NZS 5433:2007 Transport of Dangerous Goods on Land required that the wording on the orange Emergency Information Panel for transporting animal effluents includes:

- the UN number for animal effluents - UN 3373;
- the proper shipping name - Biological Substances, Category B; and
- 24 hour emergency telephone number.

The supplementary shipping name on the dangerous goods declaration is ‘Animal Effluent’.
The Class 6.2 Infectious Substances placard shall be displayed as per the Land Transport Rule: Dangerous Goods 2005 and the Land Transport Rule: Dangerous Goods Amendment 2010. That is, the placards shall be fastened to a vehicle or vehicle combination transporting the stock animal effluents, as follows:

a) For a single tank wagon, class placards at the front, both sides and at the rear; emergency information panels at the rear and both sides.

b) When the tanker is part of a vehicle combination, the class placard shall be at the front of the vehicle combination and the class placards and emergency information panels at the rear and on both sides.

Refer to Chapter 6 for further information on placarding.

16.2.2 WASTETRACK

WasteTRACK shall be used to track all movements of animal effluents carried on public roads.

Refer to Chapter 14 for further information.

16.3 INFORMATION FOR LIQUID WASTE CONTRACTORS

The removal of animal effluent from disposal sites should be undertaken by liquid and hazardous waste contractors. However, in some cases companies will manage the disposal of effluent within their own organisation, while other disposal sites may be connected to the reticulated wastewater network if located in a serviced area.

There are four main collection points that animal effluent could be removed from:

- Roadside Transfund provided sites.
- Stock transport company depots or vehicles.
- Animal processing companies.
- Farm holding tanks or ponds.
Contractors servicing roadside disposal sites need to be aware that there are no controls over what materials are disposed of into these sites. Sites may contain general waste or have been used to dispose of motor home or caravan waste which will contain human effluent.

While this practice is discouraged and information provided to motor home and caravan operators on where they can safely dispose of their waste, it may still occur, compromising what the liquid waste operator can do with the effluent once it is collected.

Where disposal sites are operated by transport companies, there may also be fertiliser and other commodities carted by the transport operation to be removed from the sump. Again, this may compromise the ultimate disposal arrangements.

If the effluent is uncontaminated, it may be possible to apply it directly to pasture land in accordance with the Resource Management Act 1991 and local authority requirements (including any resource consents required for ‘discharge to land’). The contractor is responsible for ensuring that the effluent is uncontaminated.

Other options available in the area may include composting or use as a feed stock in worm farms. Dewatering may be required before effluent can be used in these ways.

16.4 REFERENCES

Land Transport Rule: Dangerous Goods 2005

Land Transport Rule: Dangerous Goods Amendment 2010


16.5 MANDATORY CODE REQUIREMENTS

The table below summarises the mandatory requirements of this section of the Code. This means mandatory in law or regulation or under the Code.
<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placarding</td>
<td>Tankers carrying stock animal effluent shall display placards with the following details:</td>
<td>16.2.1</td>
</tr>
<tr>
<td></td>
<td>a) For a single vehicle, Class 6.2 Infectious Substances placards at the front, both sides and at the rear; emergency information panels displaying the Hazchem code, UN 3373 the proper shipping name - Biological Substances, Category B and 24 hour emergency telephone number at the rear and both sides.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) When the tanker is part of a vehicle combination, the Class 6.2 Infectious Substances placard shall be at the front of the vehicle combination and both the class placards and emergency information panels displaying the Hazchem code, UN 3373, the proper shipping name - Biological Substances, Category B and 24 hour emergency telephone number at the rear and both sides.</td>
<td></td>
</tr>
<tr>
<td>WasteTRACK</td>
<td>WasteTRACK shall be used to track all movements of animal effluents carried on public roads.</td>
<td>16.2.2</td>
</tr>
<tr>
<td>Disposal</td>
<td>Disposal of animal effluents shall comply with local authority requirements.</td>
<td>16.3</td>
</tr>
</tbody>
</table>
### 17 APPENDIX A – GLOSSARY

<table>
<thead>
<tr>
<th>Term</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approved Handler</td>
<td>An individual who has certified to have reached the required level under the Hazardous Substances and New Organisms (Personnel Qualifications) Regulations 2001 (SR 2001/122) to manage a specific class of hazardous substance for a specific stage in its life cycle.</td>
</tr>
<tr>
<td>Certified Operator</td>
<td>A liquid and hazardous waste operator who has been audited to have met the requirements of The Code and have been awarded certification by the Liquid and Hazardous Waste Operators Certification Council.</td>
</tr>
<tr>
<td>Code Compliant</td>
<td>A liquid and hazardous waste operator who has been audited and has been shown to have met the requirements of The Code</td>
</tr>
<tr>
<td>CoF Council</td>
<td>Certificate of Fitness</td>
</tr>
<tr>
<td>Council</td>
<td>Territorial authority, unitary authority or regional council</td>
</tr>
<tr>
<td>Dangerous Goods or DG</td>
<td>Substances or articles specifically listed in NZS 5433– these shall have hazardous properties such as explosive, flammable, capacity to oxidise, toxic, infectious, corrosive or environmentally harmful.</td>
</tr>
<tr>
<td>DoL</td>
<td>Department of Labour</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Authority (<a href="http://www.epa.govt.nz">http://www.epa.govt.nz</a>)</td>
</tr>
<tr>
<td>Emergency Procedure Guide (EPG)</td>
<td>A planned response for potential emergency incidents that can be specific to a certain waste or generic for the type of activity but shall be of a level of detail to manage potential incidents.</td>
</tr>
<tr>
<td>Emergency Plan (EP)</td>
<td>A plan that identifies the types of emergencies which could occur on a site and how these emergencies shall be managed.</td>
</tr>
</tbody>
</table>
Final Disposal Site: The point where a waste is discharged into the environment, held in a landfill, enters a sewer or enters a reuse process.

Generator: Produces the waste material.

Hazardous: A term used to describe a waste that is potentially harmful to human health and/or the environment.


IBC: Intermediate Bulk Container.

Identify: To obtain and/or provide information about the waste that gives knowledge of the chemical or biological content of the waste.

IMO: International Marine Organisation.

Industry: Includes all sections of the liquid and hazardous wastes sector from the Generator, the Transporter, the Treaters and the Final Disposal Site.

Infectious Waste: Waste known or reasonably expected to contain pathogens.


Landfill: A site where unwanted waste material is buried or filled. This includes, municipal waste landfills, cleanfills, monofills etc.
LGA  Local Government Act 1974 and 2002

Liquid and Hazardous Waste Operators Certification Council (Certification Council)

A body elected from members of the WasteMINZ Liquid and Hazardous Waste Sector Group to implement the Liquid and Hazardous Waste Operators’ Code Compliancy Programme

Local Authority

A regional council or territorial authority

LTA  Land Transport Act 1998


Municipal wastewater treatment plants

A treatment facility that is owned and operated by a local authority or a Council Controlled Organisation

**New Zealand Waste List (L-List)**

A guide for the classification of wastes generated by New Zealand industry. It contains 20 waste categories, some of which are process-based and some that are generic. Each waste is assigned a unique six-digit code (L-Code). Wastes marked with an asterisk (*) after their L-Code should be treated as hazardous.

NZCAE  New Zealand Centre for Advanced Engineering
NZTA: New Zealand Transport Agency

Operator: The person or organisation responsible for an activity involving liquid and hazardous wastes, i.e., handler, sole trader, trader, company, employer or contractor.

Portable Toilet: A transportable toilet that is not connected to a reticulated sewer system.

PPE: Personal Protective Equipment

RMA: Resource Management Act 1991

Receiver: An operator receiving waste.

Safety Data Sheets (SDS): A document required under HSNO that contains information concerning the specific safety, health and environmental protection issues of a hazardous substance.

Shall: This is used within this document to identify when something is stipulated by legislation, regulation or The Code.

Should: This is used within this document to identify when something is considered good practice.

Strategy: The New Zealand Waste Strategy 2010

TCLP: Toxicity Characteristic Leaching Procedure contains criteria which are often used to set thresholds for contaminants within the waste that have the potential to leach.

Territorial Authority: A city council or district council named in Part 2 of Schedule 2 of the Local Government Act 2002.
The Code  The Liquid and Hazardous Wastes Code of Practice

Transporter  Operator carrying the waste

Treater  The liquid and hazardous waste operator or anyone who undertakes treatment of the waste

Treatment  Any physical, chemical or biological change applied to a waste material prior to its release to a disposal facility or the environment

Truck  Generic term for the vehicle carrying the waste

Unitary  A territorial authority that has the responsibilities, duties and powers of a regional council conferred on it under

(a)  the provisions of any Act; or
(b)  an Order in Council giving effect to a reorganisation scheme

United Nations (UN)  A four-digit number that identifies hazardous substances, and articles (such as explosives, flammable liquids, toxic substances, etc.) in the framework of international and local transport.

Waste  Any material, solid, liquid or gas that is unwanted and/or unvalued, discarded or discharged (as defined in the New Zealand Waste Strategy 2010)

Waste Acceptance Criteria  Threshold placed on the chemical and physical properties of a waste above which it shall not be accepted

WasteTRACK  A waste tracking system tracks the movement of waste from its point of generation through transportation, storage, to treatment and/or disposal. ([http://www.wastetrack.co.nz](http://www.wastetrack.co.nz)).
WMA  Waste Minimisation Act 2008

WMMP  Waste Minimisation and Management Plans
The table below summarises the mandatory requirements of the Code. This means mandatory in law or regulation or under the Code. Use this table as part of your management programme to ensure you have met all the Code requirements.

<table>
<thead>
<tr>
<th>Ownership</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ownership</td>
<td>Ownership shall be retained by the generator indefinitely unless a contract states otherwise.</td>
<td>3.2</td>
</tr>
<tr>
<td></td>
<td>Any waste transfer shall state the ownership status of the waste.</td>
<td>3.2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Responsibility</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responsibility</td>
<td>Persons responsible for a waste shall comply with all legal requirements.</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Persons responsible for a waste shall comply with all code requirements.</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Persons shall be responsible for agents (e.g. contractors) working on their behalf.</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>Persons shall ensure the subsequent person accepting the waste is able to comply with the Code and legal requirements associated with the waste.</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>You shall ensure that all liquid and hazardous waste contractors undertaking work on your</td>
<td>3.3</td>
</tr>
<tr>
<td>Liability</td>
<td>In the event of a breach of legislation, the person(s) responsible and /or the owners may be found liable by the relevant regulatory authority.</td>
<td>3.4</td>
</tr>
</tbody>
</table>
| Liability for uncontrolled discharges | No person(s) shall discharge waste:  
- to air;  
- into water; or  
- onto land in an uncontained area which may result in ground or surface water contamination;  
unless it is allowed by a resource consent or a rule in a plan.  
Emergency response shall be the responsibility of the person(s) responsible for the waste at that time. | 3.4.4 |
| Responsibility under the HSE Act | Persons shall take all practicable steps to protect themselves and others while working.  
Persons shall familiarise themselves and others with potentially dangerous situations. | 3.6 |
| Site contamination | Land owners / occupiers and polluters may be responsible for remediation of a | 3.6 |
### The generator shall...

- own their waste indefinitely unless stated otherwise. 3.8
- be responsible for the waste while it is on their site. 3.8
- be responsible for health and safety and any site emergency on their site. 3.8
- classify and identify their waste and sign a waste declaration. 3.8
- be responsible for contracting a suitable transporter. 3.8
- be liable for the actions of their agents, if they have not shown due diligence. 3.8

### The transporter shall...

- only accept waste for which they have received adequate information and for which they are willing and able to take responsibility. 3.9
- be responsible for the waste on accepting it, until such time as the responsibility is handed over to a third party who the transporter has assessed is competent to accept the waste. 3.9
- comply with all the legislative and code requirements in relation to a waste, including 3.9
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>be responsible for health and safety and any site emergency on their site.</td>
<td>3.9</td>
</tr>
<tr>
<td>be responsible for mixing the waste in an appropriate manner.</td>
<td>3.9</td>
</tr>
<tr>
<td>maintain WasteTRACK tracking records of wastes for which they have been responsible.</td>
<td>3.9</td>
</tr>
<tr>
<td>only accept waste for which they are willing and able to take responsibility.</td>
<td>3.10</td>
</tr>
<tr>
<td>be responsible for health and safety and any emergency on their site.</td>
<td>3.10</td>
</tr>
<tr>
<td>be responsible for the waste on accepting it, until such time as the responsibility is handed over to a third party.</td>
<td>3.10</td>
</tr>
<tr>
<td>comply with all the legislative and code requirements in relation to a waste.</td>
<td>3.10</td>
</tr>
</tbody>
</table>
## HOW TO IDENTIFY YOUR WASTE

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Classification</strong></td>
<td>Prior to transportation of a waste, all wastes shall be classified under WasteTRACK and NZS 5433:2007 Transport of Dangerous Goods on Land.</td>
<td>4.2</td>
</tr>
<tr>
<td></td>
<td>Prior to acceptance by a second party, the waste shall be identified and classified.</td>
<td>4.3</td>
</tr>
<tr>
<td><strong>Waste testing and chemical analyses</strong></td>
<td>Laboratory analysis and/or testing, if required, shall be carried out to ensure the waste meets the disposal site waste acceptance criteria or sewer trade waste bylaws.</td>
<td>4.5</td>
</tr>
<tr>
<td><strong>Field observations</strong></td>
<td>A written description of the waste (type, quantity, source and testing) shall be kept for seven years.</td>
<td>4.6</td>
</tr>
</tbody>
</table>

## DOCUMENTATION AND RECORD KEEPING

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Storage of document</strong></td>
<td>Waste transfer documents shall be retained for seven years.</td>
<td>5.1.2</td>
</tr>
<tr>
<td><strong>Tracking requirements</strong></td>
<td>Contractors shall use WasteTRACK to track all movements of liquid and hazardous wastes carried by the contractor on public</td>
<td>5.2</td>
</tr>
<tr>
<td>Table Heading</td>
<td>Description</td>
<td>Page Numbers</td>
</tr>
<tr>
<td>---------------</td>
<td>-------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Job enquiry record</td>
<td>The enquiry by the potential client shall be recorded.</td>
<td>5.3.1, 5.3.2</td>
</tr>
<tr>
<td>Waste declaration</td>
<td>The generator, or their agent, shall complete the waste declaration for all waste transfers.</td>
<td>5.3.2, 5.3.3</td>
</tr>
<tr>
<td>Contract</td>
<td>For significant and risky wastes the generator and operator shall complete a written contract.</td>
<td>5.3.4</td>
</tr>
<tr>
<td>Job instruction</td>
<td>The operator shall complete a job instruction for all jobs that incorporate a standard or job-specific collection procedure.</td>
<td>5.3.5, 5.4.1</td>
</tr>
<tr>
<td>Service docket</td>
<td>The operator shall complete a service docket for all waste transfers.</td>
<td>5.4.3</td>
</tr>
<tr>
<td>Dangerous goods declaration</td>
<td>The generator, or their agent, shall complete the dangerous goods declaration for all dangerous goods transfers.</td>
<td>5.4.4</td>
</tr>
<tr>
<td>Waste treatment</td>
<td>The transporter/treater shall know the treatment destination for the liquid and hazardous waste before it is collected.</td>
<td>5.5</td>
</tr>
<tr>
<td>Receipt by transporter</td>
<td>The treater shall sign for the waste transfer from the transporter when they accept the</td>
<td>5.5.1</td>
</tr>
<tr>
<td>Heading</td>
<td>Description</td>
<td>Section</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Treatment record</td>
<td>The treater shall maintain records of all transfers.</td>
<td>5.5.2</td>
</tr>
<tr>
<td>Final disposal site</td>
<td>The treater shall complete any documentation required by the final disposal site or user of the treated waste.</td>
<td>5.5.3</td>
</tr>
<tr>
<td>Receipt by final disposal site</td>
<td>The final disposal site shall provide written acceptance of the waste including the identification of any disposal conditions to the transporter.</td>
<td>5.6.1</td>
</tr>
<tr>
<td>Invoicing</td>
<td>The client invoice at all stages of the waste transfer shall include the unique identification number.</td>
<td>5.7</td>
</tr>
</tbody>
</table>

**TRANSPORTATION**

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Liquid and hazardous waste operators shall use the Code in conjunction with:</td>
<td>6.1</td>
</tr>
<tr>
<td>Transport management issues</td>
<td>Wastes with a flash point &gt;60°C shall be transported in a vacuum tanker or a petrol tanker that, for vehicles prior to 2004, is certified as compliant with the Flammables Tank Wagon Code. Tankers built since 2004 shall comply with the HSNO Approved Code of Practice for Flammable Liquids Tank Wagons.</td>
<td>6.2.1</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td></td>
<td>Strongly corrosive waste products shall be transported in a tank wagon that is compliant with the Tank Wagon Code for Corrosives and Poisons.</td>
<td>6.2.1</td>
</tr>
<tr>
<td></td>
<td>Wastes that meet the criteria under HSNO regulations for toxic, corrosive and</td>
<td>6.2.1</td>
</tr>
<tr>
<td><strong>Packaged wastes</strong></td>
<td>When transporting packaged hazardous wastes, each item shall be listed in a table format to enable an assessment of the risks.</td>
<td>6.2.2</td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td>The transporter shall follow the packaging requirements for dangerous goods in Sections 3 and 4 of NZS 5433:2007.</td>
<td>6.2.2</td>
</tr>
<tr>
<td></td>
<td>Wastes that are classified as dangerous goods shall be packaged in correctly labelled, UN-approved packaging</td>
<td>6.2.2</td>
</tr>
<tr>
<td></td>
<td>Waste materials that are not dangerous goods shall be packaged in sound, sealed packaging. Any labelling or placarding misidentifying the waste as a dangerous good shall be removed.</td>
<td>6.2.2</td>
</tr>
<tr>
<td></td>
<td>The transporter shall meet all load security requirements under the Land Transport Act and related rules.</td>
<td>6.2.2</td>
</tr>
<tr>
<td><strong>Packaged waste labelling</strong></td>
<td>Labelling of packaged dangerous goods shall be in accordance with Section 5 of</td>
<td>6.2.3</td>
</tr>
<tr>
<td><strong>Bulk solid hazardous wastes</strong></td>
<td>Solid hazardous waste shall be handled in accordance with the Dangerous Goods Rule, NZS 5433:2007 and the Code</td>
<td>6.2.4</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>------------------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>Driver training</strong></td>
<td>All drivers transporting dangerous goods shall be trained and have received a dangerous goods endorsement on their driver’s licence</td>
<td>6.3.1</td>
</tr>
<tr>
<td></td>
<td>A transporter shall have received training in operational procedures and training specific to the Code and their organisation</td>
<td>6.3.1</td>
</tr>
<tr>
<td><strong>Vehicle preparation</strong></td>
<td>The transporter shall ensure:</td>
<td>6.3.2</td>
</tr>
<tr>
<td></td>
<td>• that the company’s vehicles have a current COF/WOF and Road User Charges (RUC);</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• the Driver’s Log Book (if required) is completed daily, is accurate and the proposed work shall not put the driver outside permissible log book hours;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• appropriate vehicle signage is displayed; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a completed dangerous goods</td>
<td></td>
</tr>
<tr>
<td><strong>Job instruction document</strong></td>
<td>The transporter shall ensure that each waste collection and/or disposal has a job instruction, prepared before the collection occurs in accordance with the Code.</td>
<td>6.3.3</td>
</tr>
<tr>
<td>----------------------------</td>
<td>-------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td><strong>The mixing of waste materials</strong></td>
<td>The mixing of waste materials shall be undertaken with great care and prior consideration</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>The discharge requirements in the job instruction shall be clear to avoid waste incompatibility issues whilst discharging at the treater’s site.</td>
<td>6.4</td>
</tr>
<tr>
<td></td>
<td>Waste compatibility issues shall be considered before any mixing of wastes occurs. If there is uncertainty about the reaction that may occur, the collection shall not proceed.</td>
<td>6.4</td>
</tr>
<tr>
<td><strong>Tank cleaning</strong></td>
<td>When cleaning the tank between compatible loads, the transporter shall ensure that:</td>
<td>6.5.1</td>
</tr>
<tr>
<td></td>
<td>• the cleaning takes place in an area where no contact with natural ground will occur and where no other environmental pollution shall occur; and</td>
<td></td>
</tr>
</tbody>
</table>
- Wash-water shall be disposed of in the same manner as the waste being cleaned from the tank.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>6.5.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Before a vacuum tanker is loaded with a waste that is incompatible with the previous load, the tank shall be cleaned following the requirements of NZS 5433:2007 and the Code.</td>
<td>6.5.2</td>
<td></td>
</tr>
<tr>
<td>The tank and internal surfaces, including hoses and fittings, shall be cleaned using the least harmful cleaning agent that will adequately clean the tank.</td>
<td>6.5.2</td>
<td></td>
</tr>
<tr>
<td>Off-site cleaning shall follow similar methods to those of a formal wash facility.</td>
<td>6.5.2</td>
<td></td>
</tr>
</tbody>
</table>

| Load documentation | Load documentation and placarding of vehicles carrying liquid and hazardous waste shall be in accordance with the Dangerous Goods Rule and as described in NZS 5433:2007. | 6.6 |
| Dangerous goods declaration | Dangerous goods that are being transported shall be accompanied by documentation identifying the dangerous goods and the hazards they present | 6.6.1 |
|                          | The transporter shall familiarise | 6.6.1 |
themselves with the full requirements of the Dangerous Goods Rule and Sections 6.2 and 7.2.3 of NZS 5433:2007.

<table>
<thead>
<tr>
<th>The dangerous goods declaration shall be:</th>
<th>6.6.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>• in English;</td>
<td></td>
</tr>
<tr>
<td>• legible;</td>
<td></td>
</tr>
<tr>
<td>• on paper (or similar material) and comprise either:</td>
<td></td>
</tr>
<tr>
<td>• one or more documents, each with a diagonally-striped border or a bold heading to clearly identify it as a dangerous goods document; or</td>
<td></td>
</tr>
<tr>
<td>• several attached documents with the first document having a diagonally-striped border or a bold heading to clearly identify the documents as dangerous goods documents; and</td>
<td></td>
</tr>
<tr>
<td>• readily available at all times while dangerous goods are being transported;</td>
<td></td>
</tr>
<tr>
<td>• kept separate from the dangerous goods during transport; and</td>
<td></td>
</tr>
<tr>
<td>• kept securely in a holder, which</td>
<td></td>
</tr>
</tbody>
</table>
is either attached to the driver’s door, or displayed in a prominent position in the cab that is clearly visible and accessible to a person standing on the ground outside the vehicle when the driver’s door is open.

<table>
<thead>
<tr>
<th>Dangerous Goods Declarations shall contain:</th>
<th>6.6.1</th>
</tr>
</thead>
<tbody>
<tr>
<td>• the UN number;</td>
<td></td>
</tr>
<tr>
<td>• the proper shipping name;</td>
<td></td>
</tr>
<tr>
<td>• the class and the division, if assigned;</td>
<td></td>
</tr>
<tr>
<td>• the packing group, where applicable;</td>
<td></td>
</tr>
<tr>
<td>• any technical information necessary to identify the product to ensure the dangerous goods are loaded and segregated correctly, and to advise of any additional precautions that shall be taken;</td>
<td></td>
</tr>
<tr>
<td>• the number and type of packages;</td>
<td></td>
</tr>
<tr>
<td>• the total quantity of dangerous</td>
<td></td>
</tr>
<tr>
<td>Emergency response information</td>
<td>The Transporter shall:</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>--------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>• use an emergency procedure guide specific to the load; or</td>
</tr>
<tr>
<td></td>
<td>• include the Dangerous Goods Initial Emergency Response Handbook with the appropriate page for the load marked.</td>
</tr>
<tr>
<td></td>
<td>These booklets or documents shall be carried in a pocket on the inside driver’s door.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Schedule of quantities</th>
<th>If a load of dangerous goods is delivered to or collected from more than one location, a Dangerous Goods Declaration shall be carried, but the quantity information may be in the form of a schedule of quantities or a bill of lading on a separate page or</th>
<th>6.6.3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Placarding</strong></td>
<td>The transporter shall placard all vehicles carrying dangerous goods in accordance with Section 9 of NZS 5433:2007 and Section 7 of the Dangerous Goods Rule.</td>
<td>6.7</td>
</tr>
<tr>
<td><strong>Bulk tank wagon placarding</strong></td>
<td>Bulk tank wagon placarding shall meet the following specifications:</td>
<td>6.7.1</td>
</tr>
<tr>
<td></td>
<td>- the minimum size for placards on both sides and the rear of each tank unit is 400mm;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- the class placard on the front of the vehicle is to be 250mm edge; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- use secondary class placards if required</td>
<td></td>
</tr>
<tr>
<td><strong>Emergency information panel</strong></td>
<td>An emergency information panel shall contain:</td>
<td>6.7.2</td>
</tr>
<tr>
<td></td>
<td>- the HAZCHEM code;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- the UN number;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- the proper shipping name or another name that clearly identifies the nature of the hazard; and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- the 24 hour emergency contact</td>
<td></td>
</tr>
<tr>
<td>Table Heading</td>
<td>Description</td>
<td>Section</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td><strong>Mixed bulk load placarding</strong></td>
<td>The transporter shall be familiar with the requirements for placarding mixed loads in Section 2 of NZS 5433:2007. The class placard required by the most toxic or reactive component of the load shall be used. A transporter shall seek advice if there is uncertainty about waste mixtures.</td>
<td>6.7.3</td>
</tr>
<tr>
<td><strong>Packaged waste placarding</strong></td>
<td>The transporter shall comply with the requirements of Section 9 of NZS 5433:2007.</td>
<td>6.7.4</td>
</tr>
<tr>
<td><strong>Segregation of packaged wastes</strong></td>
<td>Transporters of packaged wastes shall familiarise themselves with Section 8 of NZS 5433:2007. Segregation shall be planned, as far as possible, at the time the job instruction is written.</td>
<td>6.8</td>
</tr>
<tr>
<td><strong>Cartage of infectious substances</strong></td>
<td>All transporters of infectious substances shall be familiar with the requirements of the Dangerous Goods Rule and NZS 5433:2007, Appendix F. All vehicles, portable toilets and containers that are used to transport infectious substances.</td>
<td>6.9</td>
</tr>
</tbody>
</table>
### Effluent and Sludges

- Effluent and sludges shall be transported as dangerous goods (when full or empty) and be placarded appropriately.

- The dangerous goods declaration shall be carried whether the tank or container is full or empty, and shall correctly describe the load and the quantity of waste product.

- The vehicle shall be placarded as per the requirements of NZS 5433:2007, Appendix F.

#### Other Obligations in Transit

- Vehicles containing waste materials shall be parked safely, to minimise the risk of accidental spillage or loss of load. The vehicle shall not be parked outside a transport depot for more than one hour with its load.

- The vehicle shall not be parked outside a transport depot for more than one hour with its load.

- The transporter shall ensure that all NZTA requirements and the Dangerous Goods Rule Section 8.2 load security requirements are followed.

#### Emergency

- The transporter shall have completed an
response on the road

Emergency Response Plan for the vehicle(s) and for support from the transport base. It shall include:

- procedures for all staff and training in these procedures;
- vehicle mounted and base equipment; and
- interaction with other agencies who might assist.

## WASTE TREATMENT

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment planning</td>
<td>The treater shall research and plan the waste treatment processes.</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>If the transporter is not the treater, the transporter shall discuss the nature of the waste transfer with the treater prior to collection.</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td>Waste mixing</td>
<td>The mixing of wastes for co-treatment shall be undertaken with due care.</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td>Final disposal site</td>
<td>The requirements of the final disposal site shall be understood so that the correct treatment option is applied.</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td>Dilution</td>
<td>The operator shall not treat a liquid and/or</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td><strong>Waste minimisation</strong></td>
<td>The operator shall follow the principles of waste minimisation (reduction, re-use, recycling and recovery) wherever possible in treatment solutions.</td>
<td>7.2</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>-----</td>
<td></td>
</tr>
<tr>
<td><strong>Record requirements</strong></td>
<td>The treater shall record details of the treatment process including the following information:</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td>• Waste type and volume received.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Unique identification number.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Treatment process used including co-mixed or discrete treatment, dewatering method, key process parameters met (temperature, pH etc).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Additives used.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Treatment by-product fates (volume to the public sewer, to landfill, to re-use)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Dates of waste receipt at site and transport off the site.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Post-treatment analysis results.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Reference to final disposal site</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Treatment is complete when...</strong></td>
<td>Treatment shall be considered complete when the by-products of the treatment process are suitable for disposal at the final disposal site.</td>
<td>7.4</td>
<td></td>
</tr>
<tr>
<td><strong>Untreatable wastes</strong></td>
<td>Untreatable waste shall not be accepted unless an agreement for storage or off-shore treatment has been reached with an approved contractor.</td>
<td>7.5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>For off-shore treatment, the operator shall ensure that the recipient has the required permits for export of that material under the Basel Convention.</td>
<td>7.5</td>
<td></td>
</tr>
</tbody>
</table>
| **Environmental management** | A treater shall ensure that:  
• the risk of an adverse chemical reaction is minimised via solutions like secondary containment;  
• contaminants are contained;  
• storm water is controlled;  
• air discharge/odour control is maintained;  
• treatment processes are designed around the health and safety of personnel; and | 7.7 |
- access to the site is controlled.

## DISPOSAL

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid wastes</td>
<td>Waste shall only be disposed of at a consented landfill or cleanfill in accordance with its waste acceptance criteria.</td>
<td>8.2</td>
</tr>
<tr>
<td>Liquid wastes</td>
<td>Trade waste disposal to sewer shall meet the requirements of the relevant trade waste bylaw, or in its absence, the requirements of the NZS 9201: Part 23: 2004 Model General Bylaw Trade Waste.</td>
<td>8.3</td>
</tr>
<tr>
<td>Disposal of agricultural wastes</td>
<td>Prior to disposal, the contractor shall determine from the local authority whether the discharge is a permitted activity or requires resource consent.</td>
<td>8.3.2</td>
</tr>
<tr>
<td>Disposal of agricultural and industrial wastes</td>
<td>Disposal of agricultural and industrial wastes (both farm and processing) shall meet the requirements of regional plan rules/ resource consent conditions.</td>
<td>8.3.2</td>
</tr>
<tr>
<td></td>
<td>The contractor shall not discharge any effluent unless consents are held, or the activity is permitted in the relevant regional plan.</td>
<td>8.3.2</td>
</tr>
</tbody>
</table>
Offshore disposal shall comply with the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal.

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Levels of responsibility</td>
<td>The CEO shall:</td>
<td>9.3.2</td>
</tr>
<tr>
<td></td>
<td>• Establish and authorise a written health and safety policy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provide leadership, commitment to and compliance with the policy.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure there are sufficient funds and other resources available for health and safety management.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Appoint and authorise key staff to manage day-to-day health and safety issues.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Authorise the health and safety plan.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure that health and safety goals are appropriate for the organisation and are achieved.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Receive and progress recommendations from the health and safety committee and other staff.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Report to the Board of Directors on relevant health and safety matters.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Prepare the annual health and safety report for the Board of Directors.</td>
<td></td>
</tr>
<tr>
<td><strong>Managers and supervisors</strong> shall:</td>
<td>9.3.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Establish a system of hazard identification, risk assessment and management for their area of the operation.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Ensure that employees, visitors and contractors receive appropriate and effective training, so that their health and safety is not compromised by any work activity.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Provide and maintain suitable work methods which reduce health and safety risks to as low as is practicable.</td>
<td></td>
</tr>
</tbody>
</table>
|  | • Report, investigate, record and
<table>
<thead>
<tr>
<th>Employees shall:</th>
<th>9.3.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Follow all safety and health requirements and rules.</td>
<td></td>
</tr>
<tr>
<td>• Report all hazardous conditions to their immediate supervisor or manager as soon as reasonably practicable.</td>
<td></td>
</tr>
<tr>
<td>• Use all equipment controls, such as safety guards and extraction ventilation systems, where provided.</td>
<td></td>
</tr>
</tbody>
</table>
- Use personal protective clothing and equipment where required.
- Report any incident which may or did cause harm as soon as reasonably practicable.
- Report any illnesses or injuries which may affect their health and safety while at work, or that of others, as soon as reasonably practicable.
- Report any illnesses or injuries that may be or are job-related as soon as reasonably practicable.

Every **self-employed** person shall take all practicable steps to ensure that no action or inaction while at work harms themselves or any other person.

<table>
<thead>
<tr>
<th>Hazard identification and management</th>
<th>Employers shall carry out hazard identification and risk assessment procedures. They shall:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• record the results of the hazard identification and risk assessment; and</td>
</tr>
<tr>
<td></td>
<td>• make sure relevant staff have</td>
</tr>
</tbody>
</table>
Employers shall take all practicable steps to **eliminate, isolate or minimise** the significant hazards.

<table>
<thead>
<tr>
<th>Providing information</th>
<th>The employer shall provide information to all employees in a manner that is reasonably likely to be understood.</th>
<th>9.4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Training and supervision</td>
<td>Employees shall be either supervised or trained to undertake their work safely.</td>
<td>9.5</td>
</tr>
<tr>
<td></td>
<td>Employers shall ensure that employees are trained in the safe use of plant, any substances, protective clothing and equipment that will be used or handled at work.</td>
<td>9.6</td>
</tr>
<tr>
<td>Employee participation</td>
<td>Employers shall allow for employee participation in processes relating to health and safety in the place of work.</td>
<td>9.7</td>
</tr>
<tr>
<td>Health monitoring</td>
<td>Health checks should be undertaken where required</td>
<td>9.8</td>
</tr>
<tr>
<td></td>
<td>Employers shall provide the results of any workplace monitoring to all employees who work in those areas.</td>
<td>9.8</td>
</tr>
<tr>
<td>First aid</td>
<td>First aid kits, trained first-aiders and first aid facilities shall be provided to a level appropriate to the working environment.</td>
<td>9.10</td>
</tr>
<tr>
<td>-----------</td>
<td>-----------------------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td></td>
<td>A first aid kit shall be kept at each workplace and in each vehicle.</td>
<td>9.10</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Reporting &amp; recording accidents</th>
<th>Employers shall:</th>
<th>9.11</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Ensure that there is a documented procedure so that people can check to see what they must do.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Have an incident/accident register for reporting and recording all near misses, accidents, injuries and ill health.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Investigate all near misses, accidents, injuries and ill-health.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Document investigations, including:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o what happened;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o how it happened;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o how to stop it happening again;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>o what shall be done to fix any problems; and</td>
<td></td>
</tr>
</tbody>
</table>
• who is responsible for ensuring the problems are fixed and signed-off.

• Report all incidents where serious harm has occurred, or where an injury might turn into serious harm, to DoL by telephone as soon as possible.

• Follow up telephoned reports with written reports to DoL within seven days.

• Where serious harm has occurred or might develop:
  
  o look after the victims first;
  
  o “freeze the scene” (i.e. cordon it off; leave everything as is and do not interfere with the scene; contact DoL by telephone as soon as possible; then do not disturb the scene until you have been told by
an inspector that you may do so); and

- start the investigation immediately.

## EMERGENCY PREPAREDNESS

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency plan</td>
<td>All sites and facilities shall have an up-to-date emergency plan appropriate to their size and nature.</td>
<td>10.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The emergency plan shall comply with all legal requirements and shall include:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a spill response plan;</td>
<td>10.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• an emergency evacuation plan for buildings, for the event of a fire or other emergency; and</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• a fire evacuation scheme for large buildings or evacuation procedure for smaller premises.</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>The emergency plan shall identify the likely types of emergencies, both general in nature (such as a fire, flood or cyclone) and specific to the site (a certain type of chemical spill), that could occur.</td>
<td>10.2</td>
<td></td>
</tr>
<tr>
<td><strong>Spill response plan</strong></td>
<td>Liquid and hazardous waste contractors shall have a spill response plan for their site/facility and for vehicles in transit.</td>
<td>10.2.1</td>
<td></td>
</tr>
<tr>
<td>------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
<td>--------</td>
<td></td>
</tr>
</tbody>
</table>
| **Emergency evacuation plan** | Smaller premises and buildings shall have an evacuation procedure, which includes:  
- exit signs and evacuation procedure notices;  
- emergency assembly areas; and  
- a means of ensuring that the building has been evacuated. | 10.2.2 |
| **Fire evacuation scheme** | Larger premises and those storing hazardous substances shall have a fire evacuation scheme that shall include:  
- fire alarms; | 10.2.3 |

The emergency plan shall provide for the safety of people and the environment.  

The emergency plan shall include layout sketches of the site buildings, departments, dangerous goods and hazardous substance storage areas, bulk tanks, underground services, electricity, gas, water, sewage and trade waste.  

Safety data sheets (SDSs) shall be available for hazardous substances held on site.
- exit signs and evacuation procedure notices;
- fire safety equipment;
- appointment and training of fire wardens; and
- regular trial evacuations.

| Transport  | Liquid and hazardous waste operators shall carry emergency response information for all the dangerous goods on the vehicle. This information should be kept in the driver’s cab in an accessible position. Operators/drivers shall be aware of:
|            | • the hazards that the dangerous goods present; and
|            | • the procedures for their safe loading, handling and storage on the vehicle; and
|            | • the emergency procedures stated in the emergency response information. |
|            | All transport vehicles shall carry an appropriate emergency response kit. |
| Training   | All personnel shall be trained on how to follow the emergency plan and use emergency equipment. Emergency |
|            | 10.4 |
response exercises shall be undertaken at least six-monthly.

<table>
<thead>
<tr>
<th><strong>Fire Service</strong></th>
<th>For significant spills that cannot be safely managed by the responsible party, the Fire Service shall be the first point of contact to provide assistance and control the incident.</th>
<th>10.5.1</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Regional council/unitary authorities</strong></td>
<td>If a spill or other emergency has resulted in a waste or hazardous substance entering stormwater or a water body, it shall be reported to the council.</td>
<td>10.5.2</td>
</tr>
<tr>
<td><strong>Wastewater treatment plant</strong></td>
<td>The operators and owners of reticulated wastewater systems and treatment plants shall be notified if a spill or other emergency has resulted in waste or hazardous substance entering the sewerage system.</td>
<td>10.5.3</td>
</tr>
<tr>
<td><strong>Department of Labour</strong></td>
<td>Where a workplace incident has resulted in serious harm, or where an injury may turn into serious harm, this shall be reported to DoL.</td>
<td>10.5.4</td>
</tr>
</tbody>
</table>

**TRAINING AND AUDITING**

<table>
<thead>
<tr>
<th><strong>Heading</strong></th>
<th><strong>Description</strong></th>
<th><strong>Section</strong></th>
<th><strong>Completed</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In-house training</strong></td>
<td>Every organisation shall have one person in</td>
<td>11.2.1</td>
<td></td>
</tr>
<tr>
<td>Training records</td>
<td>The training coordinator shall maintain an up-to-date training record for each employee.</td>
<td>11.2.2</td>
<td></td>
</tr>
<tr>
<td>Training records</td>
<td>Training records shall be updated as training occurs and be reviewed on an annual basis.</td>
<td>11.2.2</td>
<td></td>
</tr>
<tr>
<td>General induction training</td>
<td>All new employees shall receive induction training.</td>
<td>11.3.1</td>
<td></td>
</tr>
<tr>
<td>Job-specific training</td>
<td>All employees shall be instructed in job-specific training.</td>
<td>11.3.2</td>
<td></td>
</tr>
<tr>
<td>Emergency training</td>
<td>All employees shall be instructed in emergency training.</td>
<td>11.3.3</td>
<td></td>
</tr>
<tr>
<td>Retraining</td>
<td>All employees shall receive retraining as required.</td>
<td>11.3.4</td>
<td></td>
</tr>
<tr>
<td>Spill contingency training</td>
<td>Any person who handles or is responsible for waste shall undertake spill response training.</td>
<td>11.4.1</td>
<td></td>
</tr>
<tr>
<td>Training for the transport of wastes</td>
<td>Any person who transports wastes shall hold a ‘D’ endorsement and receive additional training.</td>
<td>11.4.2</td>
<td></td>
</tr>
<tr>
<td>Health and safety training</td>
<td>Health and safety training shall be undertaken for new and existing</td>
<td>11.4.3</td>
<td></td>
</tr>
</tbody>
</table>
If required, HSNO training shall be undertaken.

Organisations shall undertake internal audits on an annual basis and documentation shall be maintained as evidence of the audit and its findings.

Organisations are required to have a current copy of the Code.

Liquid and hazardous waste operators are to undergo an external audit every three years.

To maintain code compliancy status, organisations shall be a current and financial member of WasteMINZ.

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health and safety</td>
<td>Operators shall ensure that all health and safety management (including reporting) requirements are addressed.</td>
<td>12.2.1</td>
</tr>
<tr>
<td>Environmental management</td>
<td>Operators shall ensure their environmental management requirements are addressed.</td>
<td>12.2.2</td>
</tr>
<tr>
<td>Personnel training and management</td>
<td>Training for all staff shall be undertaken as per the requirements of the Code.</td>
<td>12.2.3</td>
</tr>
<tr>
<td>Preventative maintenance - vehicles</td>
<td>A preventative maintenance programme shall be operated for vehicles owned by the business.</td>
<td>12.2.6</td>
</tr>
<tr>
<td>Code updates</td>
<td>A liquid and hazardous business shall have an up to date copy of the Code.</td>
<td>12.2.7</td>
</tr>
<tr>
<td>Document control</td>
<td>All documentation associated with the requirements in sections 12.3.1 to 12.3.7 shall be accurately completed, filed and retained for the required period.</td>
<td>12.2.8</td>
</tr>
<tr>
<td>Auditing requirements</td>
<td>An annual internal audit and a three-yearly external audit shall be undertaken for each liquid and hazardous waste business.</td>
<td>12.2.9</td>
</tr>
</tbody>
</table>

### SITE DESIGN

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>RMA compliance</td>
<td>The facility operator shall ensure there is no unauthorised discharge to the environment.</td>
<td>13.1</td>
</tr>
</tbody>
</table>
| Site design issues | Liquid and hazardous waste facilities shall operate with:  
  • no adverse effects on groundwater or stormwater discharged from the | 13.2 |
- no contamination of the natural ground on or under the site;
- a trade waste discharge that is compliant; and
- odour and dust control measures that are acceptable to neighbours and compliant with the district plan or resource consent.

<table>
<thead>
<tr>
<th>Stormwater</th>
<th>The facility operator shall ensure that only clean stormwater is discharged onto or from the site.</th>
<th>13.2.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade waste</td>
<td>The facility operator shall only discharge waste in compliance with a trade waste permit or resource consent.</td>
<td>13.2.3</td>
</tr>
<tr>
<td>Unloading</td>
<td>During waste unloading, the facility operator shall protect personnel and protect the natural environment from contamination.</td>
<td>13.2.4</td>
</tr>
<tr>
<td>Storage</td>
<td>The facility operator shall provide compliant storage areas that have adequate secondary containment and signage.</td>
<td>13.2.5</td>
</tr>
<tr>
<td>Site signage</td>
<td>All bulk and packaged storage areas shall comply with regulatory requirements for signage.</td>
<td>13.2.6</td>
</tr>
</tbody>
</table>
### Vehicle cleaning
The facility operator shall not discharge vehicle cleaning wash water onto natural ground or into stormwater. All wash water shall be treated and disposed of as wastewater.

### Odour & dust
The facility operator shall control odour and dust.

*Any material that may affect the quality of stormwater or groundwater at the site shall not be used to suppress dust.*

### Access
The facility operator shall control access to the site.

### Emergency preparedness
The facility operator shall have a written emergency plan.

### WASTETRACK

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>WasteTRACK</td>
<td>To be code compliant, contractors shall use WasteTRACK to track all movements of liquid and hazardous wastes carried by the contractor on public roads.</td>
<td>14.2 &amp; 14.4</td>
<td></td>
</tr>
</tbody>
</table>
## PORTABLE TOILETS

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
<th>Completed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placarding</td>
<td>The transport of portable toilets shall comply with the requirements of Section 7 of the Dangerous Goods Rule and Section 9 of NZS 5433:2007 Transport of Dangerous Goods on Land.</td>
<td>15.2.1</td>
<td></td>
</tr>
</tbody>
</table>

The transporter shall be familiar with the requirements of NZS 5433:2007 Appendix F:

- all vehicles, portable toilets and containers that are used to transport infectious effluent and sludges shall be transported as dangerous goods when full or empty;
- they shall remain placarded appropriately;
- the dangerous goods declaration shall also be carried, whether the toilets or containers are full or empty, and it shall correctly describe the load and the quantity of waste product; and
<table>
<thead>
<tr>
<th><strong>Emergency information panel</strong></th>
<th>Vehicles transporting portable toilets shall display an Emergency Information Panel.</th>
<th>15.2.3</th>
</tr>
</thead>
</table>
| **Dangerous Goods Declaration** | A dangerous goods declaration shall be carried when transporting portable toilets.  
The transporter shall familiarise themselves with the full requirements of Section 5 of the Dangerous Goods Rule and Sections 6.2 and 7.2.3 of NZS 5433:2007. | 15.2.4 |
| **Load security** | Portable toilets loaded onto a vehicle for transportation shall be sufficiently restrained to prevent movement when vehicles pass over road undulations, change direction, brake or accelerate. | 15.2.5 |
| **Toilet servicing** | Servicing of the units shall include:  
  - internal cleaning;  
  - replenishing of consumables, e.g. toilet paper, soap or hand sanitiser; | 15.3 |

- if the vehicle is carrying empty portable toilets or containers, this shall be shown on the documentation.

Vehicles shall be placarded as per the requirements of NZS 5433:2007, Appendix F.
- emptying the holding tank; and
- recharging the holding tank with water and/or chemical and/or deodorant.

**Waste disposal**

| Waste disposal | All wastes from the holding tanks of portable toilets shall be disposed of in accordance with the requirements of the waste treatment plant operator and/or local authority. | 15.4 |

**Storage of portable toilets**

| Storage of portable toilets | Companies that store portable toilets shall ensure that all local authority requirements are met. | 15.5 |

**Documentation**

| Documentation | The company shall keep a record of servicing for all portable toilet services. | 15.6 |

**Handling sewage from portable toilets**

| Handling sewage from portable toilets | All employees involved in the cleaning and servicing of portable toilets shall be trained in the safe removal of wastes from portable toilets. | 15.7.2 |
| | Employees shall wear suitable PPE, including gloves when cleaning and servicing portable toilets. | 15.7.2 |
| | The potential hazards associated with foreign objects (e.g. needles and syringes) disposed of in portable toilets shall be documented and discussed with all | 15.7.2 |
employees as part of their initial and ongoing health and safety training.

| Handling toilet chemicals | Instructions supplied with the chemicals used in portable toilets shall be followed. | 15.7.3 |

### ANIMAL EFFLUENT

<table>
<thead>
<tr>
<th>Heading</th>
<th>Description</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>Placarding</td>
<td>Tankers carrying stock animal effluent shall display placards with the following details:</td>
<td>16.2.1</td>
</tr>
<tr>
<td></td>
<td>a) For a single vehicle, Class 6.2 Infectious Substances placards at the front, both sides and at the rear; emergency information panels displaying UN 3373 and the proper shipping name - Biological Substances, Category B at the rear and both sides.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>b) When the tanker is part of a vehicle combination, the Class 6.2 Infectious Substances placard shall be at the front of the vehicle combination and both the class placards and emergency information panels displaying UN 3373 and the proper shipping name -</td>
<td></td>
</tr>
<tr>
<td>WasteTRACK</td>
<td>WasteTRACK shall be used to track all movements of animal effluents carried on public roads.</td>
<td>16.2.2</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Disposal</td>
<td>Disposal of animal effluents shall comply with local authority requirements.</td>
<td>16.3</td>
</tr>
</tbody>
</table>
APPENDIX C – REFERENCES

Industry Code of Practice for the Minimisation of Stock Effluent Spillage from Trucks on Roads, Road Transport Forum, April 1999

Land Transport Act 1998

Land Transport Rule: Dangerous Goods 2005

Land Transport Rule: Dangerous Goods Amendment 2010


Liquid and Hazardous Waste Operators’ Code Compliancy Programme 2007

Liquid and Hazardous Waste Code of Practice 2003


Management of Hazardous Waste, Centre for Advanced Engineering 2000

Ministry for the Environment - New Zealand Waste List

NZS 4304:2002 Management of Healthcare Waste

NZS 5433:2007 Transport of Dangerous Goods on Land

NZS 9201: Part 23: 2004 Model General Bylaw Trade Waste

Official New Zealand Truck Loading Code

Portable Sanitation Association International [www.psa.org]

Portable Sanitation Europe Ltd [www.pse.org.uk]


WasteTRACK