Part 2: District-Wide Matters

HAZARDS AND RISKS

CONTENTS

CL

CONTAMINATED LAND - WHENUA POKE

Status: CL is Operative.

INTRODUCTION

The Resource Management Act 1991 (the Act) gives both the regional and district councils responsibilities and functions with regards to contaminated land.

Rotorua District Council has functions under section 31 of the Act relating to contaminated land. These are to control any actual or potential effects of the use, development, or protection of land for the purpose of preventing or mitigating any adverse effects of the development, subdivision or use of contaminated land.

Section 30 of the Act assigns other functions to regional councils relating to contaminated land. This includes the investigation of land for the purposes of identifying and monitoring contaminated land. Both the Bay of Plenty Regional Council (BOPRC) and Waikato Regional Council (WRC) maintain Selected Land Use Registers for contaminated sites.

The Waikato Regional Plan also describes the role territorial authorities play working in partnership with WRC and other stakeholders to develop strategies for managing risk on contaminated land; including seeking site assessments prior to allowing subdivision or redevelopment of land where any historical use may have caused land contamination.

All territorial authorities (district and city councils) are required to observe and enforce the requirements of the National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS).

ISSUES

CL-I1 Protection of human health and the environment from the risks of contaminated land

Contaminated land is land that has a hazardous substance in or on it that has, or is likely to have adverse effects on human health and the environment. Use, subdivision and development of contaminated land can potentially expose people and the environment to increased levels of contaminants. The development of land can expose previously contained contaminants, discharge contaminants within or outside the site, and result in the movement of contaminated soils into inappropriate areas. Earthworks and change of use on contaminated land can create an exposure pathway from the contaminant to people and the receiving environment.

OBJECTIVES

Protection of human health and the environment from the risks of contaminated land

CL-O1 *[16.3.4]*	Prevent or mitigate adverse effects and significant risk from contaminated land on human health and the receiving environment. *Policies CL-P1 to CL-P3*

POLICIES

Protection of human health and the environment from the risks of contaminated land

Objective CL-O1

CL-P1 *[16.3.4.1]*	Ensure use, subdivision and development of contaminated land is managed or restricted in such a way to prevent or mitigate adverse effects and significant risk on human health and the environment.
CL-P2 *[16.3.4.2]*	Ensure contaminated land is managed or remediated or contained or disposed off-site, to prevent or mitigate adverse effects and significant risk from contaminated land on human health and the receiving environment, so that the land is fit for the purpose intended.
CL-P3 *[16.3.4.3]*	Ensure potentially contaminated land is identified and investigated, to determine if the piece of land is contaminated, and what level of risks is posed to human health and the receiving environment for the proposed use, subdivision or development.

RULES

Advice Note:

There are no rules contained in this chapter. Reference should instead be made to the rules contained in the Resource Management (National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011.

ANTICIPATED ENVIRONMENTAL RESULTS

CL-AER1	Reduce the risk to the environment or human health and property as a result of the adverse effects of contaminated land.

HAZS

HAZARDOUS SUBSTANCES – MATŪ MŌREAREA

Status: HAZS is operative.

INTRODUCTION

This chapter establishes a district-wide framework for managing hazardous facilities under the Resource Management Act 1991 (the Act) to avoid or minimise adverse effects and the risk associated with hazardous substances. "Hazardous facilities" is the general term used in this part to describe any site or part of a site where hazardous substances are stored, used, transported or disposed. Some activities involving hazardous substances are excluded from the definition of hazardous facilities, use and storage. Check the definitions first to see if this chapter applies.

It is recognised that the storage, use, disposal or transportation of hazardous substances is an accepted and essential part of many industrial and rural activities such as farming, forestry and horticulture. Hazardous substances are required to be managed to ensure that the districts' industries are able to continue to produce high quality output without compromising the district's sensitive environments including our lakes, rivers, streams, wetlands and geothermal areas that are sensitive to contamination from hazardous substance spillage within their catchment.

Most industrial land use activities in the district are located within or in close proximity to the Lake Rotorua water catchment. In addition, agricultural activities can require the storage and use of substantial amounts of hazardous substances. Several of the lake catchments within the Rotorua district contain farming activities which, if there was a spill or accidental release of hazardous substances, would impact on sensitive lake and river systems. There are also a number of land use activities which use hazardous substances within some of the District's groundwater recharge areas, which are also used as potable water supplies. Some of these areas are also within a lake catchment.

The Hazardous Substances and New Organisms Act 1996 (HSNO) regulates the management of hazardous substances. It sets minimum performance standards for all hazardous substances, regardless of where they are used, stored, transported or disposed of; i.e. they are not site specific. Regulations for hazardous substances under HSNO are administered primarily by the Environmental Protection Authority and Work Safe NZ.

In the context of controls on hazardous substances, the Resource Management Act 1991 is focused on site-specific controls of the use of land to manage risks to the local environment. It requires councils to take an effects-based approach to managing land use activities which use, store, dispose or transport hazardous substances. The threat of a fire, explosion, liquid spill or toxic gas release is the hazard; while the probability of this occurring and the consequences of such an incident is the risk. Risk can range from low to high levels of risk.

The two Acts work together. HSNO provides the framework for managing hazardous substances anywhere in New Zealand, and the Act, through the District Plan, provides additional controls for hazardous facilities at the particular site. These controls may vary from industrial activities to residential areas or natural areas worthy of conservation, depending on the local environment and its level of sensitivity. Under Section 142 of HSNO, where necessary, more stringent measures than those required under the provisions of the HSNO Act and regulations may be imposed to manage the risk to more sensitive environments.

The regional councils have the functions of controlling discharges of hazardous substances into water, onto land in circumstances which may result in contaminants entering water, or into air. The Bay of Plenty Regional Council (BOPRC) Regional Policy Statement requires territorial authorities to regulate activities using or storing hazardous substances, or disposing of hazardous waste, through the District, the land use consent process and provisions of other legislation.

Under the Water Services and Trade Waste Bylaw 2017, Rotorua District Council also manages geothermal fluids and stormwater entering into Rotorua District Council Wastewater Services. This is required to ensure conditions of discharge consents council holds on behalf of the community are complied with. Compliance with council's discharge consents ensures waterways and lake water quality is safeguarded. The bylaw is administered as an asset management function of council and does not remove any requirement to comply with the District Plan in terms of this section or any regional council requirements.

The issues detailed below have shaped the hazardous substances policy framework. While many issues have required consideration, and the objectives and policies are comprehensive, most are related to achieving one of the following major outcomes:

1. To clarify council's role in managing the land use aspects of hazardous substances, and avoid duplication of the responsibilities of other agencies;
2. To advise the community when resource consent will be required for the amount and type of substances to be managed on a site;
3. To achieve acceptable risk levels to human health and safety from hazardous substance incidents.
4. To protect the lakes and water bodies from spillages and prevent land from becoming contaminated by hazardous substances; and
5. To inform the community on how to manage spillage or leakages and identify ways to avoid these events.

ISSUES

HAZS-I1 Protection of the environment from short and long-term damage caused by hazardous substances

If not managed effectively hazardous substances have the potential to cause short or long-term damage to the environment and ecosystems. This can be caused by the accidental, unintentional or uncontrolled release of hazardous substances resulting in contamination of water, soil and air. There will be some locations such as next to waterways, above aquifers or close to environmentally sensitive areas such as Rotorua's lakes, rivers, streams and wetlands where risks will be unacceptable. Indirect effects also need to be managed to avoid the accumulation of a substances or sediment within sensitive environments.

HAZS-I2 Protection of human safety/health and property form adverse effects risk caused by hazardous substances

Hazardous substances need to be responsibly managed in terms of how they are handled, stored and disposed of which extends to planning for sites and facilities. Of importance is the awareness of environmental risk associated with the storage, use, disposal or transport of hazardous substances, and how best to mitigate or reduce these risks. If not managed effectively, hazardous substances have the potential to cause damage to human health and property. This can occur through:

1. Unintended ignition or explosion resulting in heat and overpressure;
2. Toxic material being released directly or indirectly resulting in acute health effects; or

3. The accumulation of persistent substances in the bodies of humans and animals, resulting in chronic toxicity and/or long-term damage to health.

It may also be important to protect existing hazardous facilities, or areas identified for major hazardous facilities, from encroachment of more sensitive land uses. Existing facilities may need some assurance that they can continue their lawfully established activities without unreasonable constraints due to changes of land use activities potentially affected by hazardous substance risks.

HAZS-I3 Avoid future site contamination by hazardous substances

Performance standards, assessment criteria and consent conditions, if consent is required, can be used to manage the likely effects of hazardous substances at all stages of a process including raw materials, production, storage and use. There are other controls and legislative requirements for transport and disposal of hazardous substances.

OBJECTIVES

Protection of the environment from short and long-term damage caused by hazardous substances

HAZS-O1 *[16.3.1]*	Rotorua's lakes, rivers and the margins, and other sensitive environments are protected from unacceptable adverse effects and risks from activities involving the use and/or storage, disposal and transport of hazardous substances. *Polices HAZS-P1 to HAZS-P5*

Protection of human safety/health and property form adverse effects risk caused by hazardous substances

HAZS-O2 *[16.3.2]*	Protect the Rotorua community and its assets from adverse effects and unacceptable risks from hazardous facilities. *Policies HAZS-P6 to HAZS-P8*

POLICIES

Protection of the environment from short and long-term damage caused by hazardous substances

Objective HAZS-O1

HAZS-P1 *[16.3.1.1]*	Identity through the use of the Maximum Combined Quantities of Hazardous Substances table those activities involving the use, storage and/or disposal of hazardous substances which could pose a risk to the natural environment or to public health and safety.
HAZS-P2 *[16.3.1.2]*	Ensure activities involving the use, storage and/or disposal of hazardous substances are located, designed and constructed and managed in such a way that avoids, remedies or mitigates adverse effects and unacceptable risks to the environment including: 1. Contamination of water, soil and air 2. Short and long-term damage to ecosystems 3. Damage through fire and explosion events.
HAZS-P3 *[16.3.1.3]*	Promoting a clean production ethic and best practice methods appropriate to the environment of the district for all hazardous facilities.

HAZS-P4 *[16.3.1.4]*	Ensure adverse cumulative effects from activities involving the use, storage, disposal and transport of hazardous substances on the environment and on the health and safety of the community are avoided, remedied or mitigated.
HAZS-P5 *[16.3.1.5]*	Avoid locating activities involving the use, storage, disposal and transportation of hazardous substance where levels of risk are incompatible with those of surrounding land use activities and identified natural hazards.

Protection of human health and property from adverse effects/risks caused by hazardous substances

Objective HAZS-O2

HAZS-P6 *[16.3.2.1]*	Ensure hazardous facilities are located, designed constructed, and managed in such a way that avoids, remedies or mitigates adverse effects and unacceptable risks to human health and property, including: 1. Damage through fire and explosion events 2. Accumulation of persistent substances in the bodies of humans and animals, resulting in chronic toxicity and/or long-term damage to their health 3. Acute damage to human health through exposure to substances affecting skin, mucous membranes, respiratory and digestive systems 4. Events at hazardous facilities triggered by natural hazards which result in adverse effects of hazardous substances.
HAZS-P7 *[16.3.2.2]*	Avoid the establishment of sensitive land uses in close proximity to existing hazardous facilities or areas identified for hazardous facilities, to allow such facilities to carry out their operations without unreasonable constraints.
HAZS-P8 *[16.3.2.3]*	Minimise the potential for further contamination of land by controlling hazardous facilities.

RULES

The rules in the table below apply in addition to:

- the rules in Part 3 – Area Specific Matters (zone chapters and development area chapters); and
- the rules in the other chapters of Part 2 – District-wide Matters.

For certain activities, consent may be required by rules in more than one chapter in the Plan. Unless expressly stated that a rule overrides another rule, consent is required under each of those rules. The steps plan users should take to determine what rules apply to any activity, and the status of that activity, are provided in Part 1, How the Plan Works.

Links to the rule categories can be found below:

<table>
<tr><th colspan="3">General</th></tr>
<tr><th>HAZS-R1</th><th colspan="2">Use, storage, disposal and transportation of hazardous substances not otherwise addressed in rules</th><th>[16.5(2)(1)(21), 16.5(2)(1)(20)]</th></tr>
<tr><td>Applicable Spatial Layers
All Zones</td><td colspan="3">1. Activity Status: Permitted
Where:
The substances classes are not covered by Appendix HAZS-APP1.</td></tr>
<tr><td>Applicable Spatial Layers
All Zones</td><td>2. Activity Status: Permitted
Where:
The substances classes are covered by Appendix HAZS-APP1 and the maximum quantities for a permitted activity are not exceeded.
Performance Standards:
a. Design and management HAZS-S1;
b. Waste management HAZS-S2;
c. Signs HAZS-S3; and
d. Emergency management HAZS-S4.</td><td colspan="2" rowspan="2">4. Activity Status: Discretionary
Where:
Compliance not achieved with the performance standards in HAZS-R1(2) or HAZS-R1(3).
Assessment Criteria:
a. Risk assessment HAZS-AC1.</td></tr>
<tr><td>Applicable Spatial Layers
All Zones</td><td>3. Activity Status: Controlled
Where:
The substances classes are covered by Appendix HAZS-APP1 and the maximum quantities exceed those for a permitted activity but do not exceed those for a controlled activity.
Performance Standards:
a. Design and management HAZS-S1;
b. Waste management HAZS-S2;
c. Signs HAZS-S3; and
d. Emergency management HAZS-S4.
Matters of Control:
a. General HAZS-MC1.</td></tr>
</table>

Hazardous Substances Associated with Bulk Earthworks and Road Construction Activities		
HAZS-R2	**The storage or use of hazardous substances in conjunction with bulk earthworks and road construction activities (e.g. road construction and improvement activities)**	*[16.5(2)(1)(10) 16.5(2)(1)(11) 16.8(2)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted **Performance Standards:** a. Design and management HAZS-S1; b. Waste management HAZS-S2; c. Signs HAZS-S3; and d. Emergency management HAZS-S4.	**2. Activity Status:** Restricted Discretionary **Where:** Compliance not achieved with the performance standards in HAZS-R2(1). **Matters of Discretion:** a. The effects of the non-compliance on the purpose of the performance standard and any relevant objectives and policies; and b. Measure to minimize or mitigate potential adverse effects that may result from natural hazards identified on the planning maps.
Storage and/or Retailing of CNG, LPG, Petroleum and Diesel facilities		
HAZS-R3	**Storage and/or dispensing facilities for CNG outlets**	*[16.5(2)(1)(12)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Controlled **Performance Standards:** a. CNG storage is up to 1000m3 in cascades (AS/NZS 1696:2008 Storage and Handling of LP Gas). **Matters of Control:** a. General HAZS-MC1.	**2. Activity Status:** Discretionary **Where:** Compliance not achieved with the performance standards in HAZS-R3(1). **Assessment Criteria:** a. Risk assessment HAZS-AC1.
HAZS-R4	**Storage and/or dispensing for LPG products at retail outlets permitted as per levels in Appendix HAZS-APP1 and controlled up to 6 tonnes water capacity**	*[16.5(2)(1)(13)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Controlled **Performance Standards:** a. The storage is: i. in a single above ground storage vessel; or ii. in exchange facilities for portable LPG cylinders; iii. or up to 24 tonnes in an underground storage vessel b. The storage complies with AS/NZS 1596:2008 Storage and Handling of LP Gas. **Matters of Control:**	**2. Activity Status:** Discretionary **Where:** Compliance not achieved with the performance standards in HAZS-R4(1). **Assessment Criteria:** a. Risk assessment HAZS-AC1.

	a. General HAZS-MC1.		
HAZS-R5	**Storage of up to 6 tonnes water capacity of LPG for use in "industrial fuel burning equipment"**		*[16.5(2)(1)(14)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Controlled **Performance Standards:** a. It complies with AS/NZS 1596:2008 Storage and Handling of LPG. **Matters of Control:** a. General HAZS-MC1.	**2. Activity Status:** Discretionary **Where:** Compliance not achieved with the performance standards in HAZS-R5(1). **Assessment Criteria:** a. Risk assessment HAZS-AC1.	
HAZS-R6	**Storage and/or dispensing (facilities) for petroleum products at a fuel retail outlet permitted as per the levels in Appendix HAZS-APP1 and controlled up to 160,000 litres**		*[16.5(2)(1)(15)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Controlled **Performance Standards:** a. Storage is underground with 60,000 litres maximum capacity for any individual compartment; and b. Storage complies with: i. Below Ground Stationary Container Systems for Petroleum – Design and Installation HSNOCOP 44, Environmental Protection Agency, May 2012; and ii. Below Ground Stationary Container Systems for Petroleum - Operation HSNOPCOP 45, Environmental Protection Agency, May 2012. **Matters of Control:** a. General HAZS-MC1.	**2. Activity Status:** Discretionary **Where:** Compliance not achieved with the performance standards in HAZS-R6(1). **Assessment Criteria:** a. Risk assessment HAZS-AC1.	
HAZS-R7	**Storage and/or dispensing (facilities) at diesel fuel retail outlets in any above ground or underground tank permitted as per the levels in Appendix HAZS-APP1 and controlled with up to 50,000 litres maximum capacity**		*[16.5(2)(1)(16)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Controlled **Performance Standards:** a. Storage complies with the following where relevant: i. Below Ground Stationary Container Systems for Petroleum – Design and Installation HSNOCOP 44,	**2. Activity Status:** Discretionary **Where:** Compliance not achieved with the performance standards in HAZS-R7(1). **Assessment Criteria:** a. Risk assessment HAZS-AC1.	

	Environmental Protection Agency, May 2012; ii. Below Ground Stationary Container Systems for Petroleum - Operation HSNOPCOP 45, Environmental Protection Agency, May 2012; and iii. Above Ground Bulk Tank Containment Systems – HSNOCOP24 Above ground stationary tanks with integral secondary containment. **Matters of Control:** a. General HAZS-MC1.	
HAZS-R8	**Storage and/or dispensing facilities for Jet A1 fuel and/or Av gas**	*[16.5(2)(1)(17) 16.5(2)(1)(18)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Controlled **Where:** Storage is in above ground storage tanks. **Performance Standards:** a. Storage is up to 200,000 litres with 60,000 litres maximum capacity for any individual compartment; and b. It complies with Above Ground Bulk Tank Containment Systems – Ministry for the Environment 1995. **Matters of Control:** a. General HAZS-MC1.	**2. Activity Status:** Discretionary **Where:** Compliance not achieved with the performance standards in HAZS-R8(1). **Assessment Criteria:** a. Risk assessment HAZS-AC1.
Applicable Spatial Layers All Zones	**3. Activity Status:** Controlled **Where:** Storage is in underground storage tanks. **Performance Standards:** a. Storage is up to 140,000 litres with 60,000 litres maximum capacity for any individual compartment; and b. It complies with: i. Below Ground Stationary Container Systems for Petroleum - Design and Installation HSNOCOP 44, Environmental Protection Agency, May 2012; and	**4. Activity Status:** Discretionary **Where:** Compliance not achieved with the performance standards in HAZS-R8(3). **Assessment Criteria:** a. Risk assessment HAZS-AC1.

	ii. Below Ground Stationary Container Systems for Petroleum - Operation HSNOCOP 45, Environmental Protection Agency, May 2012. **Matters of Control:** a. General HAZS-MC1.	
Hazardous substances associated with teaching, research and laboratories		
HAZS-R9	**Storage (not including bulk hazardous substance storage facilities), handling, use, transport and disposal of hazardous substances by teaching, research and hospital laboratories**	*[16.5(2)(1)(19)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Controlled **Performance Standards:** a. It complies with the following where relevant: i. AS 2982-2010 - Laboratory Construction; ii. AS 2243.1-2005 - Safety in Laboratories Planning and operational aspects; iii. AS 2243.2-2006 - Safety in Laboratories Part 2: Chemical aspects; iv. AS 2243.3-2002 - Safety in Laboratories Part 3: Microbiology; v. AS 2243.5-2004 - Safety in Laboratories Part 5: Non-Ionising Radiation; vi. AS 2243.6-1990 - Safety in Laboratories Part 6: Mechanical Aspects; and vii. AS 2243.9 2009 - Safety in Laboratories Part 9: Recirculating Fume Cabinets. b. Design and management HAZS-S1; c. Waste management HAZS-S2; d. Signs HAZS-S3; and e. Emergency management HAZS-S4. **Matters of Control:** a. General HAZS-MC1.	**2. Activity Status:** Discretionary **Where:** Compliance not achieved with the performance standards in HAZS-R9(1). **Assessment Criteria:** a. Risk assessment HAZS-AC1.

Radioactive Substances			
HAZS-R10	**Any use or storage of radioactive substances**		*[16.5(2)(1)(22), 16.5(2)(1)(23), 16.5(2)(1)(24), 16.5(2)(1)(25)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted **Performance Standards:** a. The activity is specified as exempt in the Radiation Protection Regulations 1982, except smoke detectors are exempt from the requirements.	**2. Activity Status:** Discretionary **Where:** Compliance is not achieved with performance standards in HAZS-R10(1). **Performance Standards:** a. Radioactive substances are less than 1,000 terabecqueral.	
Applicable Spatial Layers All Zones	**3. Activity Status:** Prohibited **Where:** Radioactive substances are in excess of 1,000 terabecqueral ($1x10^{16}$).		
Fertilisers			
HAZS-R11	**Temporary storage of fertiliser**		*[16.5(2)(1)(26)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted **Where:** a. The storage is for a period of up to six weeks; and b. Storage is up to 100T and in a fertiliser bin. **Performance Standards:** a. Design and management HAZS-S1; b. Waste management HAZS-S2; c. Signs HAZS-S3; and d. Emergency management HAZS-S4.	**2. Activity Status:** Discretionary **Where:** Compliance not achieved with the performance standards in HAZS-R11(1). **Assessment Criteria:** a. Risk assessment HAZS-AC1.	
Hazardous Substances Associated with Geothermal Steamfields			
HAZS-R12	**The storage and/or use of hazardous substances associated with the ongoing lawful operation of geothermal steamfield activities on the Eastern Steamfield (forming part of the Ohaaki Geothermal System) including intermittent activities such as well drilling and maintenance activities**		*[16.5(2)(1)(27)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted		

HAZS-R13	**Storage and/or use of hazardous substances accessory to the principal activity at any geothermal electricity generation facility and steamfield activities on the Taheke Geothermal System within the areas A,C,D, E and G of the Taheke Development Plan**	*[16.5(2)(1)(28)]*

Applicable Spatial Layers All Zones	**1. Activity Status:** Controlled **Where:** Quantities are above the permitted level in Appendix HAZS-APP1. **Performance Standards:** a. Design and management HAZS-S1; b. Waste management HAZS-S2; c. Signs HAZS-S3; and d. Emergency management HAZS-S4.	**2. Activity Status:** Discretionary **Where:** Compliance not achieved with the performance standards in HAZS-R13(1). **Assessment Criteria:** a. Risk assessment HAZS-AC1.

Other Activities

HAZS-R14	**Transportation of hazardous substances unless otherwise stated**	*[16.5(2)(1)(1)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted	
HAZS-R15	**Fuel in motor vehicles, boats and small engines such as weed-eaters, lawnmowers, chainsaws etcetera**	*[16.5(2)(1)(2)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted	
HAZS-R16	**Retail outlets for the sale of hazardous consumer products for domestic purposes (such as supermarkets, hardware shops, pharmacies)**	*[16.5(2)(1)(3)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted	
HAZS-R17	**Pole mounted transformers and street transformers for the transmission of electric power**	*[16.5(2)(1)(4)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted **Where:** Transformers contain 500 litres or less of transformer oil within the equipment.	
Advice Note: Refer to the general rule HAZS-R1 for transformers containing more than 500 litres of transformer oil and not covered by Rule HAZS-R17.		

HAZS-R18	UN Class 1 blasting explosives used as one off operations, as controlled under HSNO, associated regulations and the Health and Safety in Employment Act 1992	*[16.5(2)(1)(5)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted **Where:** Up to 60kgs of explosives is used.	
Advice Note: Refer to the general rule HAZS-R1 where more than 60kg of explosives are used and the activity is not covered by Rule HAZS-R18.		

HAZS-R19	Trade waste sewer facilities such as grease traps and interceptors	*[16.5(2)(1)(6)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted	
Advice Note: a. Notwithstanding any provisions in this part, the discharge of liquid and solid trade wastes onto land or into a sewer serviced by the Rotorua Wastewater Treatment Plant, or to a storm water drain must comply with the councils Water Services and Trade Waste Bylaw 2017. b. The issue of trade waste consent does not constitute compliance or substitute liability to comply with the requirements under the District Plan, Regional Council or other legislation.		

HAZS-R20	Use, storage or transportation of hazardous substances by any temporary military training activity	*[16.5(2)(1)(7)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted **Performance Standards:** a. Design and management HAZS-S1; b. Waste management HAZS-S2; c. Signs HAZS-S3; and d. Emergency management HAZS-S4.	**2. Activity Status:** Discretionary **Where:** Compliance not achieved with the performance standards in HAZS-R20(1). **Assessment Criteria:** a. Risk assessment HAZS-AC1.

HAZS-R21	Storage and processing of milk (including milk products and by-products) on farms or in factories	*[16.5(2)(1)(8)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted **Performance Standards:** a. Any spillage is prevented from entering a water body, or from seeping into groundwater; b. Design and management HAZS-S1; c. Waste management HAZS-S2; d. Signs HAZS-S3; and	**2. Activity Status:** Discretionary **Where:** Compliance not achieved with the performance standards in HAZS-R21(1). **Assessment Criteria:** a. Risk assessment HAZS-AC1.

	e. Emergency management HAZS-S4.	
HAZS-R22	**Storage and/or use of hazardous substances accessory to the principal activity at the Reporoa Diary Manufacturing site**	*[16.5(2)(1)(9)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Controlled **Where:** Quantities are above the permitted levels in Appendix HAZS-APP1. **Matters of Control:** a. General HAZS-MC1	

Advice Note:

1. The activity status for all other new hazardous facilities (not identified in the above table) is determined through the Activity Status Appendix of this chapter HAZS-APP1. The calculation of the quantities of hazardous substances within Appendix HAZS-APP1 does not include hazardous substances that are stored in vehicles being used in transit on public or private roads or within the strategic transport corridor for the transport of hazardous substances.
2. For further clarification, refer to the explanation below APPENDIX HAZS-APP1.

Performance Standards

The following performance standards apply if listed in the rule table for the relevant activity.

HAZS-S1 Site design and management

[16.6.1]

1. The following Site Design and Management standards are in addition to, and not in substitution of the performance standards of the relevant zone and other legislation that deals with hazardous substances. Any part of a site where hazardous substances are contained, used or stored, or otherwise handled shall have a spill containment system that is designed, constructed and managed to prevent any adverse effects extending outside the area where the particular activity is to be carried out and shall be protected by a spill containment system.

   The spill containment system shall include at least the following:

   a. Be constructed from impervious materials that are resistant to the hazardous substances involved, except that this clause shall not apply to geothermal steamfield activities; and

   b. For pooling hazardous substances: be able to contain the maximum volume of the largest tank present plus have an additional depth of 200mm for tanks located in an uncovered area to allow for stormwater or fire water.

   c. For drums or other smaller containers: able to contain half of the maximum volume of substances stored, plus have an additional depth of 200mm for containers located in an uncovered area to allow for stormwater or fire water; and

   d. Be designed, constructed and managed so that any spill or release of any hazardous substance and any stormwater that may have entered and become contaminated in the spill containment system is:

i. Prevented from discharging into or onto land or groundwater, into any water body, or into any potable water supply unless permitted by a rule in a regional plan or proposed regional plan or a regional resource consent has been obtained; and

ii. Prevented from entering the stormwater drainage system unless allowed by the Water Services and Trade Waste Bylaw 2010 (or any later version) or by a rule in a regional plan or Proposed Regional plan or a regional resource consent has been obtained.

2. Underground storage tanks shall be designed and constructed to contain any leakage. A leak detection system shall be integrated into the design of the tank and backed up with an effective monitoring programme. Underground tanks for storage of petroleum products shall be designed, constructed and managed in accordance with the Below Ground Stationary Container Systems for Petroleum - Design and Installation HSNOCOP 44, Environmental Protection Agency, May 2012 and Below Ground Stationary Container Systems for Petroleum - Operation HSNOPCOP 45, Environmental Protection Agency, May 2012, and any requirements of HSNO Act and regulations.

3. All stormwater grates shall be clearly marked to ensure that hazardous substances are not inadvertently released into the stormwater system.

4. The part of the site where vehicles, equipment or containers (that are or may have become contaminated with hazardous substances) are washed, shall be designed and constructed so that any contaminated effluent from the wash-down area or washing facility cannot be discharged into the stormwater system, into a sewer, into or onto land, into groundwater or any water body, or to a potable water supply unless the discharge is permitted by a rule in a regional plan or proposed regional plan or by a resource consent, or allowed by the Network Utility Operator.

Advice Note:

It is anticipated that the following practices will occur in relation to site design and management:

1. The storage and dispensing of LPG carried out in accordance with AS/NZ 1596 : 2008 LP Gas Storage and Handling, and HSNO Act requirements and regulations; or

2. The implementation of best management practices during operation of vehicles such as mobile trailer fuel tanks, asphalt trucks, bitumen spray trucks and bulk tanker trailers.

HAZS-S2 Waste management

1. Any waste including trade wastes or waste containing hazardous substances, shall comply with any relevant requirements of HSNO Act and regulations, and NZS 8409:2004 Management of Agrichemicals (where relevant), and shall be managed so they are not:

   a. Discharged on to land or into any stormwater drain; or

   b. Discharged into sewers serviced by the Rotorua Wastewater Treatment Plant unless authorised under council's Water Services and Trade Waste Bylaw 2010; or

   c. Discharged into or onto land, groundwater, any water body, or potable water supply unless a resource consent from a regional council allows otherwise, or the discharge complies with Appendix S of NZS 8409:2004 Management of Agrichemicals.

2. The storage of any waste containing hazardous substances shall be in a manner that prevents:

   a. The exposure to ignition sources;

   b. The corrosion or other alteration of the containers used for the storage of waste;

   c. The unintentional release of the waste.

Wastes containing hazardous substances shall be disposed of within the Rotorua District only in facilities formally approved by the Rotorua District Council, unless covered by a resource consent issued by a regional council.

HAZS-S3 Signs

1. All hazardous facilities shall be sign posted to indicate the nature of the substance stored, used or otherwise handled; and shall be in accordance with the Environmental Protection Authority (EPA) approved Code of Practice for Signage for Premises Storing Hazardous Substances and Dangerous Goods HSNO COP 2-1 09-04; and any requirements of the HSNO Act and regulations.
2. All signs required to comply with this provision will be exempt from the signs provisions within the zone/s the activity locates.

HAZS-S4 Emergency Management Plans

1. All hazardous facilities shall have an emergency management plan in place which deals with possible accidents involving hazardous substances.

Matters of Control

The following matters of control apply if listed in the rule table for the relevant activity.

HAZS-MC1 General

[16.7(1)]

1. The proposed operation and site layout.
2. Identification and management of potential on-site hazards and exposure pathways arising from the proposed facility.
3. The nature and extent of proposed emergency management planning (spills, fire and other relevant hazards).
4. The nature and extent of proposed monitoring and maintenance schedules.
5. The degree of compliance with relevant Codes of Practice and standards.
6. Measures to minimise or mitigate potential adverse effects that may result from natural hazards identified on the planning maps.

Assessment Criteria

Whilst not limiting the exercise of its discretion, Council may consider the particular matters below where indicated in the table above.

HAZS-AC1 Risk assessment for activities involving the use, storage, disposal or transportation of hazardous substances

[16.9(2)]

1. A risk assessment, identifying any risks to the environment or health and safety of the community shall be required with any resource consent. The level of detail required will depend on the scale and intensity of the proposed hazardous facility. A risk assessment shall include an assessment of the following matters.
    a. Separation distances to people and sensitive activities, especially land use activities such as schools, rest homes, hospitals, marae and shopping centres; and
    b. the location of the hazardous facility in relation to aquifers, streams or lakes; and

c. the nature of the site's subsoil and/or geology; and

d. the distance to sensitive habitats in the area or water catchments; and

e. the cumulative and/or synergistic effect, eco-toxicity and bio-accumulation of hazardous substances used or stored; and

f. fire safety and fire water management; and

g. the extent to which the adherence to health and safety, code of practice, or environmental management system is relevant to the particular circumstances of the application or will lead to improved environmental outcomes. Where appropriate, council recommends the use of a national and/or international standard, such as the NZCIC Responsible Car Programme, the ISO 9000 system, the ISO 14000 system, the ISRS system and the BS 7750 system, as well as compliance with the requirements of the HSNO Act and regulations. The council will give consideration to any other alternative site management system which will achieve the same intent of any of the above systems; and

h. spill contingency and emergency planning, monitoring and maintenance schedules; and

i. site drainage and off-site infrastructure (e.g. storm water, sewer and capacity); and

j. the level of risk associated with the transportation of hazardous substances, both for the roading network and for the amenity and environment through which the transport route concerned passes; and

k. management of hazardous wastes and off-site disposal; and

l. whether proposed site management systems are appropriate. Consideration will be given to spill contingency plans, health and safety systems, energy procedures, storm water treatment and disposal procedures for hazardous wastes, fire safety, transport, monitoring and maintenance procedures, including compliance with the requirements of the HZNO Act and regulations; and

m. measures to minimise or mitigate potential adverse effects that may result from natural hazards identified on the planning maps.

ANTICIPATED ENVIRONMENTAL RESULTS

HAZS-AER1	Reduce the risk to the environment or human health and property as a result of the adverse effects of hazardous substances.

APPENDICES

HAZS-APP1 – Maximum Combined Quantities of Hazardous Substances for Use and Storage

			LAND USE	INDZ1, INDZ2, BIZ			CCZ, COMZ, INDZ1E, RURZ			RESZ, WZ and Designated Reserves	
RULE NR	HAZARDOUS SUBSTANCE PROPERTY	CLASS	HSNO Subclass	Permitted	Controlled	Discretionary	Permitted	Controlled	Discretionary	Permitted	Discretionary
1	EXPLOSIVE	1	1.1 (all-storage)	<0.05	0.05-0.1	>0.1	<0.02	0.02-0.04	>0.04	0	>0
2			1.2 (all-storage)	<0.5	0.5-1	>1	<0.2	0.2-0.4	>0.4	0	>0
3			1.3 (all-storage)	<1.5	1.5-3	>3	<0.5	0.5-1	>1	0	>0
4			1.2/1.3 with 1.1*	<0.05	0.05-0.1	>0.1	<0.02	0.02-0.04	>0.04	0	>0
5	FLAMMABLE (GASES) (AEROSOLS)	2	2.1 (all)	<1/ 2,000	1-2/ 2000-4000	>2/ 4,000	<0.5 /1000	0.5-1/ 1000-2000	>1/ 2,000	<0.02/40	>0.02/40
6			2.1 (within 50 m of m.s.z.)	<0.2 /400	0.2-0.5 /400-1000	>0.5/ 1000	<0.1/200	0.1-0.2 /200-400	>0.2/400	na	na
7			All other non-hazardous	5/ 10,000	5-10 /10,000 - 20,000	>5/ 20,000	<2/ 4,000	2-4/ 4,000-8,000	>4/ 8,000	<0.1/200	>0.1/200
8			LPG	<3	3-6	>6	<1.5	1.5-3	>3	<0.2	>0.2
9			LPG (within 50 m of m.s.z.)	<1	1-2	>2	<0.5	0.5-1	>1	na	na
10	FLAMMABLE (LIQUIDS)	3	3.1A, 3.1B	<6	6-12	>12	<2	2-4	>4	<0.1	>0.1
11			3.1A/B (within 50 m of m.s.z.)	<2	2-4	>4	<0.6	0.6-1.2	>1.2	na	na
12			3.1C	<20	20-40	>40	<6	6-12	>12	<0.3	>0.3
13			3.1D	<60	60-120	>120	<20	20-40	>40	<1	>1
14			3.2 (all)	<3	3-6	>6	<1	1-2	>2	<0.05	>0.05
15	FLAMMABLE (SOLIDS)	4	4.1 (all)	<3	3-6	>6	<1	1-2	>2	<0.05	>0.05
16			4.2 (all)	<1	1-2	>2	<0.4	0.4-1	>1	<0.02	>0.02
17			4.3 (all)	<1	1-2	>2	<0.4	0.4-1	>1	<0.02	>0.02
18	OXIDISING CAPACITY	5	5.1.2 Gases	<1,000	1,000-2,000	>2,000	<400	400-1,000	>1,000	<40	>40
19			5.1.1 (all)	<3	3-6	>6	<1.5	1.5-3	>3	<0.05	>0.05
20			5.2 (all)	<1	1-2	>2	<0.5	0.5-1	>1	<0.02	>0.02
21	TOXIC	6	6.1A	<0.5	0.5-1	>1	<0.2	0.2-0.4	>0.4	0	>0
22			6.1 Gases	<300	300-600	>600	<100	100-200	>200	0	>0
23			6.1A (within 50 m of m.s.z.)	<0.2/100	0.2-0.4/ 100-200	>0.4/200	<0.1/50	0.1-0.2/ 50-100	>0.2/100	0	>0
24			6.1B	<6	6-12	>12	<2	2-4	>4	<0.05	>0.05
25			6.1B (within 50 m of m.s.z.)	<2	2-4	>4	<1	1-2	>2	na	na
26			6.1C, 6.3(All)-6.9(All)	<20	20-40	>40	<6	6-12	>12	<0.3	>0.3
27			6.1C, 6.3(All)-6.9(All) (within 50 m of m.s.z.)	<6	6-12	>12	<2	2-4	>4	na	na
28	CORROSIVE	8	8.1A, 8.2A, 8.3A	<6	6-12	>12	<2	2-4	>4	<0.05	>0.05
29			8.2 B/C	<20	20-40	>40	<10	10-20	>20	<0.3	>0.3
30	ECO-TOXIC	9	9.1A, 9.2A, 9.3A, 9.4A	<0.5	0.5-1	>1	<0.5	0.5-1	>1	<0.5	>0.1
31			(within 30 m of watercourse)	<0.1	0.1-0.3	>0.3	<0.1	0.1-0.3	>0.3	<0.1	>0.1
32			9.1B, 9.2B, 9.3B, 9.4B	<10	10-20	>20	<10	10-20	>20	<10	>10
33			(within 30 m of watercourse)	<3	3-6	>6	<3	3-6	>6	<3	>3

34			9.1C, 9.2C, 9.3C, 9.4C	<30	30-60	>60	<30	30-60	>60	<30	>30
35			(within 30 m of watercourse)	<10	10-20	>20	<10	10-20	>20	<10	>10
36	HIGH BOD_5 (>10,000 mg/l)	-	-	<100	100-200	>200	<40	40-80	>80	<40	>40
37			(within 30 m of watercourse)	<40	40-80	>80	<20	20-40	>40	<20	>20

Note: The measure in the he table is in tonnes (t) apart from Class 2.1, 5.1 and 6.1 permanent or compressed gases which are in m^3 at standard temperature/pressure (20 deg. C/1013 kPa).

Advice Notes:

1. "all" means all HSNO subclasses within the class, e.g. 6.3 to 6.9 (all includes subclass 6.3A and 6.3B.
2. Class 1.2 and 1.3 (explosive) substances are to be treated as if they are Class 1.1 substances if they are stored together with any 1.1 substances.
3. The table does not apply to activities that are specifically excluded from the definitions of 'storage' and 'use' of the hazardous substances or the definition of 'hazardous facility'.
4. The hazard classification is based on the criteria and numbering as specified in the HSNO Classification Regulations 2001. All approved hazardous substances in New Zealand have a HSNO hazard classification.
5. It should be noted that many substances have more than one hazardous property, and the activity status is to be determined for each hazard class. The most stringent activity status will determine if and which consent application is required. Petrol for example is classified as a highly flammable liquid (3.1A), acutely toxic (6.1E), mildly irritating to skin (6.3B), a suspected human carcinogen (6.7B) and eco-toxic to the aquatic environment (9.1B). Diesel is classified as flammable liquid (3.1D) and also acutely toxic (6.1E), mildly irritating to the skin (6.3B), a suspected human carcinogen (6.7B and eco-toxic to the aquatic environment (9.1B).

NH

NATURAL HAZARDS – MŌREAREA TŪTURU

Status: NH is Operative.

ISSUES

Refer to Part 2, District Wide Matters, SD- Strategic Direction.

OBJECTIVES

Refer also to Part 2, District Wide Matters, SD- Strategic Direction.

Flooding in the Waikato River catchment

NH-O1 *[9.3(7)]*	Manage subdivision, use and development in areas within the Waikato River catchment that are subject to high risk flood hazard to minimise risk to people and property. *Policies NH-P1*

POLICIES

Refer also to Part 2, District Wide Matters, SD- Strategic Direction.

Buildings in Areas Susceptible to Flooding

NH-PA	Manage the risks to people, property and the environment associated with development in areas susceptible to flooding by: 1. In areas where the anticipated flood depths are low and, therefore, the likely risks to people and property are less, requiring new buildings and larger additions to existing buildings to have floor levels above the flood level for the 1% AEP event with an allowance for climate change and freeboard. 2. In areas where anticipated flood depths are higher and, therefore the potential risks to people and property are greater, requiring a flood risk assessment for new buildings and larger additions to existing buildings and their associated site works to ensure the associated flood risks are acceptable. The assessment shall correspond to the nature and scale of the anticipated flooding on site and shall include assessment of: a. The extent to which the flood risks (including residual risks) on site are managed to an acceptable level; b. Whether the development will increase risks (including residual risks) to other people, property, infrastructure or the environment; c. Safe evacuation routes and refuges; and d. Impacts on overland flowpaths and river corridors.

Overland flowpaths and river corridors

NH-PB	Maintain the function of overland flowpaths and river corridors to safely convey flood water and reduce risk to life, property and infrastructure by: 1. Maintaining the water carrying capacity of overland flowpaths and river corridors; 2. Maintaining the water storage capacity of major overland flowpaths and river corridors; 3. Restricting activities that may obstruct an overland flowpath; and 4. Assessing the impact of any changes to the entry or exit points of overland flowpaths on a site and the impact on other sites and infrastructure.

Impervious surfaces

NH-PC	Restrict impervious surfaces to reduce the cumulative effect of stormwater run-off on flooding.

Flooding in the Waikato River catchment

Objective NH-O1

NH-P1 *[9.3(7)(1)].*	Manage land use and development in areas subject to high risk flood hazard within the Waikato River catchment, including avoiding the placement of habitable structures which would be vulnerable to flood events and mitigating risks for non-habitable structures through design and location measures.

Land instability in Rural Zones

NH-P2 *[9.3(2)(1)]*	Ensure buildings and activities do not increase land instability by requiring stabilisation measures where necessary.

Geothermal Hazards

NH-P3 *[4.3.4.1]*	Enable the continued co-existence of residential activities in the Te Arawa villages of Ōhinemutu and Whakarewarewa with the geothermal features throughout each village, whilst ensuring future development is undertaken with an acknowledgement of risks.
NH-P4	Manage the risks to people and property from geothermal hazards, including by: 1. Requiring building setbacks from geothermal surface features and bores; 2. Requiring site-specific geothermal assessments to be submitted for subdivision detailing the effects of the geothermal activity on the subdivision and subsequent use of the land or buildings, the effects on surface geothermal surface features, risks and proposed mitigation measures to ensure the suitability of the land for subdivision and the intended use; 3. Requiring site-specific geothermal assessments to be submitted at the time of application for building consent to identify the hazards and how risks are being mitigated; and 4. Assessing the impact on geothermal hazards and risk when zone standards for impervious surfaces are exceeded within geothermal systems.

RULES

The rules in the table below apply in addition to:

- the rules in Part 3 – Area Specific Matters (zone chapters and development area chapters); and
- the rules in the other chapters in Part 2 – District-wide Matters.

For certain activities, consent may be required by rules in more than one chapter in the Plan. Unless expressly stated that a rule overrides another rule, consent is required under each of those rules. The steps plan users should take to determine what rules apply to any activity, and the status of that activity, are provided in Part 1, How the Plan Works.

For natural hazard rules relating to subdivision refer to SUB – Subdivision.

Links to the rule categories can be found below:

Fault Lines		
NH-R1	**Additions to existing buildings or replacement buildings in the Fault Avoidance Area Overlay**	*[4.5(92 7.5(82) 8.5(2)(21) 9.5(117) 10.5(89)]*
Applicable Spatial Layers Fault Avoidance Area Overlay in: Residential Zones Industrial Zones Business and Innovation 1 Zone All Rural Zones Reserve 1 Zone	**1. Activity Status:** Permitted **Performance Standards:** a. Replacement buildings within the fault avoidance area shall be within the existing building footprint.	**2. Activity Status:** Restricted Discretionary **Where:** Compliance is not achieved with the performance standards for NH-R1(1). **Matters of Discretion:** a. Adverse effects from natural hazards or the worsening of any hazard identified on the planning maps are managed. b. In order to assess the risk arising from locating a habitable building within a fault avoidance area, a natural hazard assessment report from a suitably qualified geotechnical engineer shall be provided for new buildings located within the fault avoidance area with this identifying the potential location of the fault line, its recurrence interval and any subsequent building design and location requirements or restrictions on use.

NH-R2	Low importance buildings in the Fault Avoidance Area Overlay	*[4.5(93) 7.5(83) 8.5(2)(22) 9.5(118) 10.5(90)]*
Applicable Spatial Layers Fault Avoidance Area Overlay in: Residential Zones Industrial Zones Business and Innovation 2 Zone All Rural Zones Reserve 1 Zone	**1. Activity Status:** Permitted	
NH-R3	**New buildings in the Fault Avoidance Area Overlay**	*[4.5(93) 7.5(84) 8.5(2)(23) 9.5(119) 10.5(91)]*
Applicable Spatial Layers Fault Avoidance Area Overlay (2010) in: Residential Zones Industrial Zones Business and Innovation 23 Zone All Rural Zones Reserve 1 Zone	**1. Activity Status:** Restricted Discretionary **Matters of Discretion:** a. Adverse effects from natural hazards or the worsening of any hazard identified on the planning maps are managed; and b. In order to assess the risk arising from locating a habitable building within a fault avoidance area, a natural hazard assessment report from a suitably qualified geotechnical engineer shall be provided for new buildings located within the fault avoidance area with this identifying the potential location of the fault line, its recurrence interval and any subsequent building design and location requirements or restrictions on use.	
Flooding		
NH-R4	**New buildings and additions to existing buildings in areas susceptible to flooding**	
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted **Where:** a. This activity is: i. building within the Electricity Generation Core Site; or ii. a building of low importance; or iii. an addition of less than 20m^2 to an existing building. Advice note: Additions under 20m^2, although they are permitted by these rules, are subject to the requirements of the Building Act and Building Code. This includes design requirements	

<table>
<tr><td></td><td colspan="2">to prevent water entering a building and restrictions on when building consent can be issued in areas subject to inundation.</td></tr>
<tr><td>Applicable Spatial Layers
All Zones</td><td>2. Activity Status: Permitted
Where:
a. The activity is not permitted by NH-R4(1); and
b. Taking into account climate change based on RCP8.5 to the year 2130 (or the most recent national or regional guidance), the modelled 1%AEP flood depth from rivers, overland flow or lake inundation is no greater than 300mm above ground level at the building site.
Performance Standards:
a. The building or addition has a minimum floor level above the anticipated flood level (as relevant to the site) for the events described above and allowing for freeboard that addresses imprecision in the flood level design estimate, construction tolerances and natural phenomena (such as waves, debris, aggradations, channel transition and bend effects) not explicitly included in flood level calculations.</td><td>3. Activity Status: Restricted Discretionary
Where:
Compliance is not achieved with the performance standards for rule NH-R4(2).
Matters of Discretion:
a. Building in areas susceptible to flooding NH-MD1.</td></tr>
<tr><td>Applicable Spatial Layers
All Zones</td><td colspan="2">4. Activity Status: Restricted Discretionary
Where:
a. The activity is not permitted by rule NH-R4(1); and
b. Taking into account climate change based on RCP8.5 to the year 2130 (or the most recent national or regional guidance), the modelled 1%AEP flood depth from rivers, overland flow or lake inundation is greater than 300mm above ground level at the building site.
Matters of Discretion
a. Building in areas susceptible to flooding NH-MD1.
Advice Note:
Any buildings and construction activities within Flood Protection and Drainage Applicable areas require Flood Protection and Drainage Bylaw authority from Bay of Plenty Regional Council to ensure flood protection and drainage infrastructure assets are not damaged or compromised. Regional Council’s interactive map shows which properties the Bylaws cover.</td></tr>
</table>

Geothermal		
NH-R6	**Buildings erected within 5 metres of the edge of a Geothermal Surface Feature or bore**	*[4.6(13)] [5.6(1)(16)] [6.6(18)] [7.6(16)] [8.6(1)(12)] [8.6(2)(12)] [8.6(3)(13)] [9.6(20)] [10.6(16)]*
Applicable Spatial Layers All Zones	**1. Activity Status:** Permitted **Where:** The building is associated with geothermal electricity generation.	
Applicable Spatial Layers All Zones	**2. Activity Status:** Restricted Discretionary **Where:** The building is not associated with geothermal electricity generation. **Matters of Discretion:** a. Adverse effects from natural hazards or the worsening of any hazard identified on the planning maps are managed; and b. Reserves, Community Assets and Water Zones: i. The extent to which the activity would affect ecological values of the area or the quality of the water; ii. The extent to which the activity would maintain or enhance indigenous biodiversity vegetation and natural character; and iii. The extent to which the activity adversely affects natural character, cultural amenity and landscape values.	
NH-R8	**New Buildings and Additions to Building in the Rotorua Geothermal Systems Overlay**	
Applicable Spatial Layers Rotorua Geothermal Systems Overlay: All Zones	**1. Activity Status:** Permitted **Performance Standards:** a. A report by a suitably qualified and experienced person shall be submitted at the time of application for building consent, which identifies the extent of geothermal hazards on the site, including: i. Geothermal surface features; ii. Geothermal gas; iii. Heated ground; iv. Corrosive ground, v. Ground collapse; and	**2. Activity Status:** Restricted Discretionary **Where:** Compliance is not achieved with the performance standards for NH-R8(1) **Matters of Discretion:** a. Measures to manage the risks to people and property on and off site from geothermal hazards.

	vi. Bores and other geothermal infrastructure. b. A report or reports by a suitably qualified and experienced person shall also be submitted at the time of application for building consent detailing how measures to mitigate geothermal risks to people and property on the site and surrounding sites have been incorporated into the design of the development, such as: i. Building design; ii. Site layout and design, for example locations of venting structures, yards and outdoor living space; separation between buildings; surface treatment; fencing materials; and maintenance of access to bores; iii. Limits on impervious surface site coverage; and iv. Stormwater management Exception: This rule does not apply to alterations that do not increase the building footprint by more than $20m^2$.	

Advice Note:

Geothermal risks must still be considered for building work that is exempt from either the requirements to obtain building consent or the above rules.

Requirements of the Rotorua Geothermal Bylaw include:

a. Developers and the owner or occupier of every building are to take all reasonably practical steps to incorporate acceptable barriers to the ingress or egress of hydrogen sulphide, into or from, new or upgraded building developments; and

b. Access to bores is maintained (to allow access by a drilling rig in the case of emergency)

Matters of Discretion

NH-MD1 Building in areas susceptible to flooding

1. Where new buildings or building additions do not meet the minimum floor levels for permitted activities: management of the risks to people and property on site from flooding;

2. Where new buildings or additions are proposed in areas where the anticipated flood depths during the 1%AEP event with an allowance for climate change are greater than 300mm, whether an acceptable level of risk from flooding can be achieved, including:
    a. Measures (including building design) to achieve an acceptable level of risk to people, property and the environment on site from flooding;
    b. Provision of safe evacuation routes from the property during a flood event;
    c. The extent to which the development will increase risks (including residual risks) from flooding to people and property on other sites or to infrastructure or the environment and measures to avoid this; and
    d. Effects on the carrying capacity and storage capacity of any river corridor or major overland flowpath.
3. Where overland flowpaths affect the site:
    a. the extent to which the development, including potential siteworks such as fences and walls, provides for the conveyance of water;
    b. whether the development will change the entry and/or exit points of the overland flowpaths on the site and the impact of any such change on other sites or infrastructure;
    c. management of any potential erosion caused by any overland flowpaths; and
    d. provision for access and maintenance to the overland flowpaths.

ANTICIPATED ENVIRONMENTAL RESULTS

The efficiency and effectiveness of the policy framework of this part will be the focus of on-going monitoring and review. Effectiveness or achievement of the objectives will be assessed through performance indicators. The performance indicators will be developed to measure the following outcomes that the policy framework was put in place to achieve:

NH-AER1	Enhanced public safety in relation to natural hazards through the design and management of land use activities and subdivision to an acceptable level.