Attachment 2

Recommended amendments (clean version) to Chapter 10 as at 29 May 2020 in response to Panel Directions of 22 April 2020

Chapter 10: Hazardous Substances and Contaminated Land

Proposed Waikato District Plan Stage I (Notified version)



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Chapter 10: Hazardous Substances and Contaminated Land

10.1 Hazardous Substances

10.1.1 Introduction

Hazardous substances are used in a wide range of activities within the Waikato District. These activities can include industrial operations (for example chemical warehousing, manufacturing plants or bulk storage facilities), workshops, agricultural and horticultural activities, and some occupations that are carried out from home. The sites where such activities take place are defined as a hazardous facility.

While the use, storage and disposal of hazardous substances allows people to provide for their social and economic wellbeing, such activities also create potential risks and adverse effects on human health and the wider environment. An event may be an accidental release, spill, unintended chemical reaction, fire or explosion.

The management of hazardous substances is addressed in part by the Hazardous Substances and New Organisms Act 1996 (HSNO) and the Health and Safety at Work Act 2015 (HSW) and relevant regulations, which are managed and enforced by Worksafe NZ.

The Resource Management Act (RMA) has the role of controlling the land use activities through District Plan provisions. Given that Council no longer has an explicit statutory function to manage hazardous substances under section 31 of the RMA, the district plan provisions must avoid duplication of other legislation and regulations. Therefore the role of the RMA is to ensure that any gaps that exist between other statutory requirements are covered, where this is the most appropriate way to achieve sustainable management.

The provisions of this chapter are therefore designed to manage the adverse effects of the use, storage, or disposal of hazardous substances, where those effects are not appropriately controlled by existing legislation and regulations. For instance, this chapter manages the adverse effects in relation to sensitive landuse activities (i.e. residential activities, schools, places of assembly) and sensitive environments (i.e. wetlands, waterways, areas of cultural significance), areas of identified natural hazards and cumulative effects where multiple hazardous facilities are located within proximity to each other. Management is therefore confined to manage risks arising from hazardous facilities, for example the proximity of hazardous substances to sensitive land uses, or substances with explosive or flammable properties to the National Grid transmission lines, and reverse sensitivity issues.

The rules in the district plan use an Activity Status Table (AST) to determine above which quantities of hazardous substances potentially pose a greater risk to the public's safety with respect to the various zones across the Waikato District. Any hazardous facility that is using, storing or disposing of hazardous substances above the quantity thresholds included in the AST are considered to be a significant or major hazardous facility, which requires resource consent from Council to assess the proposal in further detail and consider any likely adverse effects. Depending on the scale and nature of the proposed hazardous facility a risk assessment may be required to determine how significant the risks are to the public and environment. In some cases a quantitative risk assessment may be required for major hazardous facilities to identify more specifically the inherent and residual risks of the proposal.

10.1.2 Objective 10.1.1

(a) Manage risks associated with the storage, use, transport or disposal of hazardous substances to ensure that the effects on people, property and the environment are acceptable, while recognising the benefits of facilities that safely store, use or dispose of hazardous substances.

10.1.3 Policy 10.1.2

10.1.2 Policy – Hazardous facilities

(a) Design, locate and operate hazardous facilities to minimise the off-site risks to the environment by ensuring appropriate separation distances between sensitive land use activities, infrastructure and sensitive environments, or other effective means.

10.1.4 Policy 10.1.3

10.1.3 Policy – Assessment of risks of hazardous substances

(a) Facilities for the use, storage or disposal of hazardous substances shall identify and assess potential adverse effects (including cumulative risks and potential effects of identified natural hazards) to prevent unacceptable levels of risk to human health, safety, property and the natural environment.

10.1.5 Policy 10.1.4

10.1.4 Policy – Reverse sensitivity effects

(a) Ensure as far as practicable reverse sensitivity effects are avoided between sensitive land use activities and lawfully-established hazardous facilities.

10.2 Contaminated Land

I0.2.I Introduction

Land can become contaminated when hazardous substances are not used, stored or disposed of appropriately. Contaminated land is generally associated with past activities, such as traditional primary industries, which have left a legacy of land contamination in the Waikato District.

Activities where land contamination has been identified need to be managed to prevent the risk to human health and safety and the environment.

This plan does not identify specific sites of known contamination; rather it identifies potentially contaminating activities and industries by reference to the Ministry for the Environment's Hazardous Activities and Industries List (HAIL).

Any landuse or subdivision applications proposing to disturb soil or change the use of the land may be subject to the Resource Management (Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health) Regulations 2011, which may require a detailed site investigation to determine if a site is contaminated or not.

Information about a site's contamination (if any), will be kept on the property file and will be available through the Land Information Memorandum (LIM) and Project Information Memorandum (PIM) process.

The status of some activities will be determined by the requirements of the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health Regulations 2011. Reference should be made to the Ministry of Environment website for a copy of these regulations, a user's guide, and documents incorporated by reference in these regulations.

10.2.2 Objective 10.2.1 – Contaminated land

(a) The subdivision, use and development of contaminated land is managed to protect human health and safety and the environment from unacceptable risk.

10.2.3 Policy 10.2.2 – Managing the use of contaminated land

- (a) Contaminated land is managed (which may include remediation) to ensure that contaminants are at a level acceptable for the proposed land use.
- (b) Disposal of contaminated soil must be carried out in a manner that avoids further adverse effects on human health or on the environment.
- (c) Use or development of contaminated land must not damage or destroy any contaminant containment works, unless comparable or better containment is provided, or monitoring demonstrates that the containment is no longer required.
- (d) Ensure that contaminated land management approaches associated with the use, subdivision and development of actually or potentially contaminated land includes where appropriate:
 - (i) undertaking a site investigation of any land identified as actually or potentially contaminated, prior to any new subdivision or change of use of land, that could result in an increase in any adverse effects from the contamination of a piece of land;
 - (ii) remedial action plans;
 - (iii) site validation reports,
 - (iv) site management plans as appropriate for identifying, monitoring and managing contaminated land.
 - (v) Preliminary site investigations.

(e) Any preliminary or detailed site investigation reports, remedial action plans, site validation reports and ongoing site management plans are prepared in accordance with the Ministry for the Environment's Contaminated Land Management Guidelines #1 and #5, and are provided to both Waikato District Council and the Waikato Regional Council for their records.

10.3 Rules for Hazardous Substances

Rule 10.3.1 - Hazardous Substances in All Zones

PI	 (a) A hazardous facility, where the aggregate quantity of any hazardous substance of an hazard classification on a site is less than the quantity specified for the applicable zone in Table 5.1 Appendix 5 (Hazardous Substances). 				
	(b) The use, storage and disposal of hazardous substance sub-classes 1.4, 1.5, 1.6, 6.1D, 6.1E, 6.3, 6.4, 6.5, 9.1D, 9.2D, and 9.3 as identified in Appendix 5.				
P2	(a) The storage or use of radioactive material is:				
	(i) an approved equipment for medical and diagnostic purposes; or				
	(ii) specified as an exempt activity or article in the Radiation Safety Act and Regulations 2016.				
P3	(a) The storage of fuel for retail sale, including self-automated dispensing facilities in the Rural, Industrial, Heavy Industrial, Hampton Downs Motorsport and Recreation or Te Kowhai Airpark Zones (PRECINTS A AND B), where:				
	(i) The maximum quantity thresholds are met:				
	A. 100,000 litres of petrol or aviation fuel in underground storage tanks;				
	B. 50,000 litres of diesel in underground storage tanks; and				
	C. 6 tonnes of LPG (single vessel storage); (ii) The site does not adjoin a Posidential Village on Country Living Zone on Pangitabi				
	(ii) The site does not adjoin a Residential, Village or Country Living Zone or Rangitahi Peninsula.				
CI	The storage of fuel for retail sale:				
	(a) In the Rural, Industrial, Heavy Industrial, Hampton Downs Motorsport and Recreation or				
	Te Kowhai Airpark Zones (PRECINTS A and B) that does not comply with P3.				
	(b) In the Business, Business Town Centre, Tamahere Business, Residential, Village, Country Living, Rangitahi Peninsula, Reserve Zones or Agricultural Research Centre, where:				
	(i) The maximum quantity thresholds are met:				
	A. 100,000 litres of petrol or aviation fuel in underground storage tanks;				
	B. 50,000 litres of diesel in underground storage tanks; and C. 6 tonnes of LPG (single vessel storage);				
	C. 6 tollines of LFG (single vessel storage),				
	(c) Council's control is reserved over the following matters:				
	(i) The proposed location of the fuel tank or LPG storage vessel in relation to:				
	A. the sensitivity of the surrounding natural, human and physical environment; potential hazards and exposure to the health and safety of the public pathways arising from the proposed facility, including cumulative risks with other facilities;				
	 B. interaction with natural hazards (flooding, instability), as applicable and proposed emergency management planning (spills, fire and other relevant hazards); 				
	(ii) The management of off-site effects having regard to the emergency response plan				
	requirements of Part 5 of the Health and Safety at Work (Hazardous Substances)				
	Regulations 2017, including:				
	 A. The risk to public health and safety; B. Potential impacts on sonsitive landuse activities; 				
	 B. Potential impacts on sensitive landuse activities; C. Potential impacts on sensitive environments (i.e. wetlands, waterways, 				
	culturally significant sites);				
	D. The procedures for monitoring and reporting of incidents.				
RDI	A hazardous facility that does not comply with Rule 10.3.1 P1, P2, P3 or C1.				
	(a) Council reserves its discretion over the following matters:				
	(i) The location of the hazardous facility, taking into account separation distances				

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		from boundaries to sensitive land use activities and the proximity to sensitive environments (i.e. wetlands, waterways or culturally significant areas);		
	(ii)	Detailed site design and proposed management of the hazardous facility which demonstrates that any offsite effects on sensitive environments and the risk to public safety is minimised as far as reasonably practical;		
	(iii)	A risk assessment of the hazardous facility taking into account cumulative risk with other hazardous facilities in the vicinity, as relevant;		
	(iv)	The effects associated with the transport of a hazardous substance on road infrastructure or on sensitive land uses along transport routes, if this is a significant aspect of the proposed hazardous facility;		
	 (v) Management of risks posed by the occurrence of natural hazard hazardous facility; 			
	(vi)	Any social, cultural or economic benefits of the proposed hazardous facility;		
	(vii)	The provision of a risk assessment corresponding to the scale and nature of the facility proposed and the hazardous substances involved. The risk assessment may include the following:		
		A. the sensitivity of the receiving environment to any risks;		
		B. risk identification (inherent risk) and assessment, and risk management response (residual risk);		
		C. practicable alternative methods of management that would present less risk;		
		D. considers how the proposal minimises or mitigates cumulative adverse effects with respect to other hazardous facilities in the area, where relevant;		
		E. proposed emergency management equipment and plans and the adequacy of overall emergency response capability.		
		Note: a risk assessment should correspond to the scale and significance of the activity and its risks. A quantitative risk assessment may be required for major hazardous facilities where the risk contributors may be significant or complex. A risk assessment should be undertaken by a suitably qualified and experienced professional.		
NCI		rdous facility that involves the storage and handling of hazardous substances or flammable intrinsic properties within 12m of the centre line of a National ision Line.		
		e also relates to rule 14.4.4 NC8 in Chapter 14 (Infrastructure).		
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10.4 Definitions

The following changes are recommended to be made to Chapter 13 of the District Plan:

Contaminated Has the same meaning as in section 2 of the RMA.			
land			
	means land that has a hazardous substance in or on it that—		
	a. has significant adverse effects on the environment; or		
	b. is reasonably likely to have significant adverse effects on the environment.		

Hazardous Substance	Has the same meaning as in section 2 of the RMA:
Substance	Includes, but is not limited to, any substance defined in section 2 of the
	Hazardous Substances and New Organisms Act 1996 as a hazardous substance.
	The Hazardous Substances and New Organisms Act 1996 defines hazardous
	substances as meaning, unless expressly provided otherwise by regulations or an
	EPA notice, any substance—
	a. with 1 or more of the following intrinsic properties:
	i. explosiveness:
	ii. flammability:
	iii. a capacity to oxidise:
	iv. corrosiveness:
	v. toxicity (including chronic toxicity):
	vi. ecotoxicity, with or without bioaccumulation; or
	b. which on contact with air or water (other than air or water where the
	temperature or pressure has been artificially increased or decreased) generates
	a substance with any I or more of the properties specified in paragraph (a).
Radioactive	Means any material that spontaneously emits ionising radiation, including any
material	naturally occurring radioactive material or any nuclear material.
Hazardous	Means activities involving hazardous substances and the premises, including
Facility	buildings and storage areas, at which these substances are used, stored or
	disposed of. Storage includes vehicles for their transport located at a facility for
	more than short periods of time and excludes:
	• fuel stored in mobile plants, motor vheicles, boats and small engines;
	 the incidential use and storage of hazardous substances in domestic scale quantities;
	 activities involving sub-classes 1.4, 1.5, 1.6, 6.1D, 6.1E, 6.3, 6.4, 6.5, 9.1D,
	9.2D and 9.3.
Cumulative	Means in the context of hazardous substances, the risk posed by a hazardous
Risk	facility added to or multiplied, or otherwise accumulated by risk from other
	hazardous facilities in the vicinity where risks of one facility can influence the risk
	of the other.

Storage	Means in the context of hazardous substances or hazardous waste, the containment of a hazardous substance or hazardous waste, either above ground				
or underground, in enclosed packages, containers or tanks. It inclu					
	used to transport any hazardous substance that are stationary within a				
	hazardous facility for more than short periods of time.				
Use	Means in the context of a hazardous substance, the manufacturing, processing or				
	handling of a hazardous substance for a particular activity without necessarily				
	changing the physical state or chemical structure of the hazardous substance				
involved. This includes mixing, blending and packaging operations, or					
a hazardous substance as a cooling or heating medium. It does not					
	filling or drawing of a hazardous substance from bulk storage tanks unless the				
	processing is permanently connected to the bulk storage, and does not include				
	loading out and dispensing of petroleum products.				

10.5 Appendix 5: Hazardous Substances

HSNO Class and	Zone	Zone	Zone	
Sub-Class (aggregate quantities)	 17. Business 18. Business Town Centre 19. Business Tamahere 20. Industrial 21. Heavy Industrial 26. Hampton Downs Motor Sport and Recreation 27. Te Kowhai Airpark 22. Specific Area - Agricultural Research Centre Campus 	22. Rural 25. Reserve	 16. Residential 23. Country Living 24. Village 28. Rangitahi Peninsula 	
Explosive Class I Maximum quantity (measured in tonnes or m ³) Sub-class I.1 0.05 0.02 0				
Sub-class 1.2	0.5	0.2	0	
Sub-class 1.3	1.5	0.5	0	
Sub-class 1.2 and 1.3 when stored with sub-class 1.1	0.05	0.02	0	
Flammable gas/aerosol Class 2 Maximum quantity (measured in tonnes or m ³)				
Sub-class 2.1 (all)	I (2,000m³)	0.5 (1,000m³)	0.2 (40m³)	
Sub-class 2.1 within 50m of a more sensitive zone	0.2 (400m³)	0. I (200m³)	n/a	

Table 5.1 Activity Status Table - Permitted Activity Thresholds

3

LPG

1.5

0.1

LPG within 50m of a more sensitive zone	I	0.5	n/a	
Non-hazardous gases	Maxim	Maximum quantity (measured in tonnes or m ³)		
All non-hazardous gases, compressed or liquefied	5 (10,000m³)	2 (4,000m³)	0.1 (200m³)	
Flammable liquids Class	s 3 Maxim	Maximum quantity (measured in tonnes or m ³)		
Sub-class 3.1A and 3.1B	6	2	0.1	
Sub-class 3.1A and 3.1B within 50m of a more sensitive zone	2	0.6	n/a	
Sub-class 3.1C	20	6	0.3	
Sub-class 3.1D	60	20	1	
Sub-class 3.2 (all)	3	1	0.05	
Flammable solids Class	s 4 Maximu	Maximum quantity (measured in tonnes or m ³)		
Sub-class 5.1.1 (all)	3	1.5	0.05	
Sub-class 4.2 (all)	I	0.4	0.02	
Sub-class 4.3 (all)	I	0.4	0.02	
Oxidising capacity Clas	s 5 Maxim	um quantity (measure	ed in tonnes or m ³)	
Sub-class 5.1.1 (all)	3	1.5	0.05	
Sub-class 5.1.2 Gases	1,000m³	400m³	40m³	
Sub-class 5.2 (all)	I	0.5	0.02	

Toxic Class 6 Maximum quantity (measured in tonnes or m ³)			
Sub-class 6.1 Gases	300m³	100m ³	0
Sub-class 6.1 A	0.5	0.2	0
Sub-class 6.1A within 50m of a more sensitive zone	0.2	0.1	n/a
Subclass 6.1B	6	2	0.05
Sub-class 6.1B within 50m of a more sensitive zone	2	I	n/a
Sub-class 6.1C and 6.6-6.9	20	6	0.3
Sub-class 6.1C and 6.6-6.9 within 50m of a more sensitive zone	6	2	n/a
Corrosive Class 8	Maximum quantity (measured in tonnes or m ³)		
Sub-class 8.1, 8.2A and 8.3	6	2	0.05
Sub-class 8.2B and 8.2C	20	10	0.3
Eco-toxic Class 9	Maximum quantity (measured in tonnes or m ³)		
Sub-class 9.1A, 9.2A and 9.4A	0.5	0.5	0.5
Sub-class 9.1A, 9.2A and 9.4A within 30m of a watercourse	0.1	0.1	0.1
Sub-class 9.1 B, 9.2B and 9.4B	10	10	10
Sub-class 9.1B, 9.2B, and 9.4B within 30m of a watercourse	3	3	3

Sub-class 9.1C, 9.2C, and 9.4C	30	30	30
Sub-class 9.1C, 9.2C and 9.4C within 30m of a watercourse	10	10	10
High Biological Oxygen Demand (BOD ₅)(>10,000 mg/l)	100	40	20
High Biological Oxygen Demand (BOD ₅)(>10,000 mg/l) within 30m of a watercourse	40	20	20

Note I:

For the purpose of the table above, a hazardous substance shall have the class and sub-class given by the Environmental Protection Authority when approving the importation and manufacture of that substance under the Hazardous Substances and New Organisms Act 1996. Use, storage and disposal of hazardous substance sub-classes 1.4, 1.5, 1.6, 6.1D, 6.1E, 6.3, 6.4, 6.5, 9.1D, 9.2D, and 9.3 are exempt from this table.

Note 2:

Quantities are given in t (tonnes), except all permanent or compressed gases, which are measured in m^3 (cubic metres) at standard temperature and pressure (20°C and 101.3 kPa).

Note 3:

The tables specify the total quantities of hazardous substances for each hazard classification (aggregates). That is 0.5 tonnes of one Class 5.1 substance + 0.25 tonnes of another Class 5.1 substance = 0.75 tonnes of Class 5.1 This 0.75 tonnes is the amount to use to assess whether consent is required.

Note 4:

Many substances have more than one hazardous property. The activity status must be determined for each hazard classification and the most onerous activity status shall apply. For example, petrol is classified as a highly flammable liquid (3.1A), toxic (6.1E - not included in this table), mildly irritating to skin (6.3B - not included in this table), a suspected human carcinogen (6.7B) and eco-toxic to the aquatic environment (9.1B). The flammability determines the activity status in this case.

Note 5:

'n/a' means: not applicable; 'all' means all categories in each hazard sub-class.