4.6 Managing hazardous substances

Introduction

These rules manage the use, storage and disposal of hazardous substances that can present a specific hazard to human or ecological health and property in accordance with s. 9 (3) of the RMA. The sites where such activities take place are defined as hazardous facilities. The rules should be read in conjunction with, and are complementary to, the industrial and trade activities (ITA) rules, the Hazardous Substances and New Organisms Act 1996, and the regulations made under that Act.

1. Activity table

The following table specifies the activity status for hazardous facilities in the region.

sensitive zone

Activity			In all zones
Hazardous facilities that inv	olve radioactive materials sp	ecified as an exempt	Р
activity in the Radiation Regulations 1982			
Hazardous facilities that inv	olve petrol associated with re	etail sale of fuel in	RD
underground storage - not r	nore than 100,000l		
Hazardous facilities that inv	olve diesel associated with r	etail sale of fuel in	RD
underground storage - not r			
Hazardous facilities that involve LPG associated with retail sale of fuel in a single			RD
vessel - not more than 6t			
	olve radioactive materials, LI	PG, diesels and petroleum	D
not meeting the relevant co			
Use, storage and disposal of hazardous substance sub-classes 1.4, 1.5, 1.6, 6.1D,			P
6.1E, 9.1D and 9.2D			
Hazardous facilities in Light and Heavy Industry zones involving the following hazardous substance			
Class	Sub-class (combined quantities)	P	RD
1. Explosive	Sub-class 1.1	<0.05t	up to <0.1t (all storage)
	Sub-class 1.2	<0.5t	up to <1t (all storage)
	Sub-class 1.3	<1.5t	up to <3t (all storage)
	Sub-class 1.2 and 1.3	<0.05t	up to <0.1t
	when stored with sub-class 1.1		
2. Flammable gas/aerosol	Sub-class 2.1 (all)	<1t (2000m3)	up to < 2t (2,000 up to <4,000m3)
	Sub-class 2.1 within 50m of a more sensitive zone	<0.2t (400m3)	0.2 up to <0.5t (400 up to <1,000m3)
3. Non-hazardous	All other non-hazardous	< 5t (10,000 m3)	up to <10t (10,000
		(· s, s s s · · · · s)	up to <20,000 m3)
	LPG	<3t	up to <6t
	LPG within 50m of a more sensitive zone	<1t	up to <2t
4. Flammable liquids	Sub-class 3.1A and 3.1B	<6t	up to <12t
	Sub-class 3.1A and 3.1B within 50m of a more	<2t	up to <4t

	Sub-class 3.1C	<20t	up to <40t	
	Sub-class 3.1D	<60t	up to <120t	
	Sub-class 3.2 (all)	<3t	<6t	
5. Flammable solids	Sub-class 4.1 (all)	<3t	up to <6t	
	Sub-class 4.2 (all)	<1	up to <2t	
	Sub-class 4.3 (all)	<1t	up to <2t	
6. Oxidising capacity	Sub-class 5.1.1 (all)	<3t	up to <6t	
	Sub-class 5.1.2 Gases	< 1,000m ³	up to <2,000m ³	
	Sub-class 5.2 (all)	<1t	up to <2t	
7. Toxic	Sub-class 6.1 Gases	<300m3	up to <600m3	
	Sub-class 6.1A	<0.5t	up to <1	
	Sub-class 6.1A within 50m of a more sensitive zone	<0.2t	up to <0.4t	
	Subclass 6.1B	<6t	up to <12t	
	Sub-class 6.1B within 50m of a more sensitive zone	<2t	up to <4t	
	Sub-class 6.1C and 6.3-6.9	< 20 tonnes	up to <40 tonnes	
	Sub-class 6.1C and 6.3-6.9 within 50m of a more sensitive zone	< 6t	up to <12t	
8. Corrosive	Sub-class 8.1, 8.2A and 8.3	<6t	up to <12t	
	Sub-class 8.2B and 8.2C	<20t	up to <40t	
9. Eco Toxic	Sub-class 9.1A, 9.2A, 9.3A and 9.4A	<0.5 tonnes	up to <1tonne	
	Sub-class 9.1A, 9.2A, 9.3A and 9.4A within 30m of a watercourse	<0.1t	up to <0.3t	
	Sub-class 9.1B, 9.2B, 9.3B and 9.4B	<10t	up to <20t	
	Sub-class 9.1B, 9.2B, 9.3B and 9.4B within 30m of a watercourse	<3t	up to <6t	
	Sub-class 9.1C, 9.2C, 9.3C and 9.4C	<30t	up to <60t	
	Sub-class 9.1C, 9.2C, 9.3C and 9.4C within 30m of a watercourse	<10t	up to <20t	
	High BOD5 (>10,000 mg/l)	<40t	up to <80t	
	Within 30m of a watercourse	< 20t	up to <40t	
	Hazardous facilities in other business and all rural zones involving the following hazardous			
substances Class	Subclass (combined	P	RD	

1. Explosive	Sub-class 1.1	<0.02tonnes	up to <0.04 tonne (all storage)
	Sub-class 1.2	<0.2t	up to <0.4(all storage)
	Sub-class 1.3	<0.5t	up to < 1t (all storage)
	Sub-class 1.2 and 1.3 when stored with subclass 1.1	<0.02t	up to <0.04
2. Flammable gas/aerosol	Sub-class 2.1 (all)	<0.5t (1000m3)	up to < 1t (up to <2,000m3)
	Sub-class 2.1 within 50m of a more sensitive zone	<0.1t (200m3)	up to <0.2t (200 up to <400m3)
3. Non-hazardous	All other non-hazardous	< 2t (4,000 m3)	up to <10 (10,000 up to <20,000 m3)
	LPG	<1.5t	up to <3t
	LPG within 50m of a more sensitive zone	<0.5t	up to <1t
4. Flammable liquids	Sub-class 3.1A and 3.1B	<2t	up to <4t
	Sub-class 3.1A and 3.1B within 50m of a more sensitive zone	<0.6t	up to <1.2t
	Sub-class 3.1C	<6t	up to <12t
	Sub-class 3.1D	<20t	up to <40t
	Sub-class 3.2 (all)	<1	<2t
5. Flammable solids	Sub-class 4.1 (all)	<1t	up to <2t
	Sub-class 4.2 (all)	<0.4t	up to <1t
	Sub-class 4.3 (all)	<0.4t	up to <1t
6. Oxidising capacity	Sub-class 5.1.1 (all)	<1.5t	up to <3t
	Sub-class 5.1.2 Gases	< 4000m ³	up to <1,000m ³
	Sub-class 5.2 (all)	<0.5t	up to <1t
7. Toxic	Sub-class 6.1 Gases	<100m³	up to <200m ³
	Sub-class 6.1A	<0.1t	up to <0.4t
	Sub-class 6.1A within 50m of a more sensitive zone	<0.1t	up to <0.2t
	Sub-class 6.1B	<2 tonnes	up to <4tonnes
	Sub-class 6.1B within 50m of a more sensitive zone	<1 tonnes	up to <2tonnes
	Sub-class 6.1C and 6.3-6.9	< 6 tonnes	up to <12tonnes
	Sub-class 6.1C and 6.3-6.9 within 50m of a more sensitive zone	< 2t	up to <4t
8. Corrosive	Sub-class 8.1, 8.2A and 8.3	<2t	up to <4t
	Sub-class 8.2B and 8.2C	<10t	up to <20t

9. Eco toxic	Sub-class 9.1A, 9.2A, 9.3A and 9.4A	<0.5t	up to <1t
	Sub-class 9.1A, 9.2A,	<0.1t	up to <0.3t
	9.3A and 9.4A within		
	30mof a watercourse Sub-class 9.1B, 9.2B,	<10t	up to <20t
	9.3B and 9.4B	101	up to \ 20t
	Sub-class 9.1B, 9.2B,	<3t	up to <6t
	9.3B and 9.4B within		'
	30mof a watercourse		
	Sub-class 9.1C, 9.2C,	<30t	up to <60t
	9.3C and 9.4C		
	Sub-class 9.1C, 9.2C,	<10t	up to <20t
	9.3C and 9.4C within 30m		
	of a watercourse	1404	4. 4004
	High BOD ⁵ (>10,000 mg/l)	<40t	up to <80t
	Within 30 metres of a	< 20t	up to <40t
	watercourse		
Hazardous facilities in a	II residential and other zon	es involving the following	g hazardous substances
Class	Subclass (combined quantities)	Р	RD
Flammable gas/aerosol	Sub-class 2.1 (all)	<0.2t (40m³)	up to < 1t (up to <2,000m ³)
2. Non-hazardous	All other non-hazardous	< 0.1t (200m³)	up to <10t (10,000 up to <20,000 m³)
	LPG	<1t	up to <3t
3. Flammable liquids	Sub-class 3.1A and 3.1B	<0.1t	up to <4t
	Sub-class 3.1C	<0.3t	up to <12t
	Sub-class 3.1D	<1tonnes	up to <40tonnes
	Sub-class 3.2 (all)	<0.05t	<2t
4. Flammable solids	Sub-class 4.1 (all)	<0.05t	up to <2 t
	Sub-class 4.2 (all)	<0.02t	up to <1t
	Sub-class 4.3 (all)	<0.02t	up to <1t
5. Oxidising capacity	Sub-class 5.1.1 (all)	<0.05t	up to <3t
	Sub-class 5.1.2 Gases	<40m3	up to <1,000m ³
	Sub-class 5.2 (all)	<0.02t	up to <1t
6. Toxic	Sub-class 6.1B	<0.05 tonnes	up to <4tonnes
	Sub-class 6.1C and 6.3-6.9	< 0.3 tonnes	up to <12tonnes
8. Corrosive	Sub-class 8.1, 8.2A and 8.3	<2 tonnes	up to <4tonnes
	Sub-class 8.2B and 8.2C	<0.3 tonnes	up to <20tonnes
9. Eco toxic	Sub-class 9.1A, 9.2A, 9.3A and 9.4A	<0.5 tonnes	up to <1tonne

9	Sub-class 9.1A, 9.2A, 9.3A and 9.4A within 30m of a watercourse	<0.1 tonnes	up to <0.3tonnes
	Sub-class 9.1B, 9.2B, 9.3B and 9.4B	<10 tonnes	up to <20tonnes
9	Sub-class 9.1B, 9.2B, 9.3B and 9.4B within 30m of a watercourse	<3 tonnes	up to <6tonnes
	Sub-class 9.1C, 9.2C, 9.3C and 9.4C	<30 tonnes	up to <60tonnes
9	Sub-class 9.1C, 9.2C, 9.3C and 9.4C within 30m of a watercourse	<10 tonnes	up to <20tonnes
ŀ	High BOD5 (>10,000 mg/l)	<40 tonnes	up to <80tonnes
	Within 30m of a watercourse	< 20 tonnes	up to <40tonnes

For the above tables:

- 1. Quantities are given in t (tonnes) or I (litres) except all permanent or compressed gases which are measured in m3 (cubic metres) at standard temperature and pressure (20°C and 101.3 kPa).
- 2. The tables specify the combined quantities of hazardous substances for each hazard classification. That is 0.5 tonnes of Class 5.1 + 0.25 tonnes of another Class 5.1 = 0.75 tonnes of Class 5.1 This 0.75 tonnes is the amount to use to assess which category of consent is required.
- 3. For the purposes of the table, 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.
- 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), 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).
- 5. For hazardous facilities in the Light and Heavy Industry zones, a 'more sensitive zone' includes all other zones. For hazardous facilities in Business zones (other than Light and Heavy Industry) and Rural zones, a 'more sensitive zone' includes all other zones except the Light and Heavy Industry zones. Where distances are specified in the table they refer to the distance between the location of a hazardous substance and any part of a 'more sensitive zone'.

2. Controls

2.1 Permitted activities

2.1.1 Hazardous facilities site design

- 1. Certification from a suitably qualified engineer must be provided on demand from the council that demonstrates that the site design, construction and proposed operation (including emergency spill procedures) of any part of a hazardous facility involved in the manufacture, mixing, packaging, storage, loading, transfer, usage or handling of hazardous substances will prevent:
 - a. adverse effects off-site on people, ecosystems, physical structures and/or other parts of the environment
 - b. the contamination of air, land or water, including groundwater, potable water supplies and surface water, in the event of a spill or other type of release of hazardous substances.

2.1.2 Hazardous facilities site layout

Certification from a suitably qualified engineer must be provided on demand from the council that
demonstrates that the hazardous facility is designed so that on-site facilities are far enough from the
property boundary to avoid adverse effects on neighbouring facilities, land uses and sensitive receiving
environments.

2.1.3 Storage of hazardous substances

- Certification from a suitably qualified engineer must be provided on demand from the council that demonstrates that, within hazardous facilities, hazardous substances must be stored to prevent:
 - a. an unintentional release of the hazardous substance
 - b. any solid, liquid, gas or vapour accumulating off-site.

2.1.4 Site drainage systems

Certification from a suitably qualified engineer must be provided on demand from the council that
demonstrates that site drainage systems for hazardous facilities are designed, constructed and will be
operated to prevent the entry or discharge of hazardous substances into the stormwater or sewerage
systems unless authorised by the relevant network utility operator. Compliance can be achieved using
precautionary methods, including clearly identified stormwater grates and access holes, roofing, sloped
pavements, interceptor drains, containment and diversion valves, oil-water separators, sumps and
similar systems.

2.1.5 Hazardous facilities spill containment system

- Certification from a suitably qualified engineer must be provided on demand from the council that demonstrates that any part of the hazardous facility site where a hazardous substance spill may occur is be serviced by a suitable spill containment system that is:
 - a. constructed from impervious materials resistant to all hazardous substances on-site
 - b. for liquid hazardous substances:
 - able to contain the maximum volume of the largest tank present plus an allowance for stormwater or fire water
 - for drums or other smaller containers, able to contain half of the maximum volume of substances stored, plus an allowance for stormwater or fire water
 - iii. able to prevent any spill or other unintentional release of hazardous substances, and any stormwater and/or fire water that has become contaminated, from entering the stormwater drainage system, unless authorised by the relevant network utility
 - iv. able to prevent any spill or other unintentional release of hazardous substances, and any stormwater and/or fire water that has become contaminated, from discharging into air, land or water, including groundwater and potable water supplies, unless authorised by a resource consent or another rule in this Unitary Plan.

2.1.6 Hazardous facilities wash down areas

- 1. Certification from a suitably qualified engineer must be provided on demand from the council that demonstrates that any part of the hazardous facility site where contaminated or potentially contaminated vehicles, equipment or containers that are washed will be designed, constructed and managed to prevent any contaminated washwater:
 - entering or discharging into the stormwater and/or wastewater network unless authorised by the relevant network utility operator; or
 - discharging into air, land or water, including groundwater and potable water supplies, unless authorised by a resource consent or another rule in this Unitary Plan.

2. Suitable means of compliance may include roofing of wash down areas, sloped pavements, interceptor drains, containment and diversion valves, oil-water separators, sumps and similar systems.

2.1.7 Hazardous facilities waste management

- 1. All storage and management activities for hazardous wastes, or wastes containing hazardous substances, must comply with all relevant controls specified above for hazardous facilities.
- 2. Any hazardous facility generating waste containing hazardous substances must dispose of these wastes to lawfully operated facilities or be serviced by a Council approved waste disposal contractor.

3. Assessment - Restricted discretionary activities

3.1 Matters of discretion

The council will restrict the exercise of its discretion to the following matters:

- 1. Proposed operation and site layout.
- 2. Separation distances from the receiving environment and other land uses.
- 3. The number of people potentially at risk from the proposed facility.
- 4. Consideration of potential health and environmental hazards and exposure pathways arising from the proposed facility.
- 5. Avoidance or minimising potential cumulative hazards including in conjunction with other nearby hazardous facilities.
- Proposed emergency management planning.
- 7. Transport routes and procedures for the transport of hazardous substances on and off-site.
- 8. Waste management.
- 9. Compliance with relevant codes of practice and standards for specific materials/substances.
- 10. Measures to avoid potential adverse effects that may result from natural hazards.
- 11. The social and economic benefits of hazardous facilities

3.2 Assessment criteria

- The council will the will consider the relevant assessment criteria below for restricted discretionary activities including whether the proposal will give effect to Auckland-wide - Managing hazardous substances - Objective 1 and Policies 1 and 2:
 - a. how the location of a hazardous facility:
 - i. avoids adverse effects on the environment, human health and amenity values, particularly on sensitive activities
 - ii. avoids the risk posed by the occurrence of natural hazards or that alternatively the potential adverse effects resulting from a natural hazard event have been avoided or mitigated
 - iii. is consistent with the policies supporting the zone in which the activity is to occur.
 - b. how the design, construction and management of a hazardous facility avoids or mitigates adverse effects, including risks, to people, property and the environment, including:
 - i. site drainage, spill containment systems, site layout and waste processes
 - ii. minimising any adverse effects associated with the transport of a hazardous substance on road infrastructure or on other land use activities along a transport route.
 - c. how the individual and cumulative effects of a hazardous facility have been identified, assessed and managed so they do not pose significant residual risks to people, property and the

environment

- d. what measures have been proposed to manage the transport of hazardous substances associated with the hazardous facility to minimise adverse effects on road infrastructure and potentially affected land use activities along the transport route
- e. whether the risk assessment submitted with the proposal adequately address:
 - i. emergency management planning and response
 - ii. an assessment of the sensitivity of the receiving environment to any potential risks
 - iii. a hazard identification and risk management response
 - iv. a quantitative risk assessment for all large hazardous facilities
 - v. whether there is a practicable alternative method of risk management that would present less risk
 - vi. whether the proposal will avoid or adequately mitigate cumulative adverse effects with respect to other hazardous facilities in the area
 - vii. the extent to which social and economic benefits of hazardous facilities are recognised and provided for.