



HAZARDOUS SUBSTANCES - RULES

HS3.1 Rule Statement

The following rules shall apply to activities that involve the use, storage and transportation of hazardous substances and/or the management of hazardous facilities. Consideration shall be given to the relevant rules and conditions for the zone in which the activity is to be located. Regard shall be had to all Objectives and Policies which may be relevant to any proposed activity subject to the provisions of this Rule. This includes, but shall not be limited to the Hazardous Substances - Policy section and the applicable zone policy section.

The *National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health* is also applicable to the Hazardous Substances Chapter. The National Environmental Standard (NES) applies to any piece of land on which an activity or industry described in the Hazardous Activities and Industries List (HAIL) is undertaken, or has been undertaken or is more likely than not to have been undertaken (the HAIL list is available on the Ministry for the Environment's website: www.mfe.govt.nz)

The NES applies to the following activities being undertaken on HAIL land:

- (a) Subdivision.
- (b) Land use change.
- (c) Earthworks.
- (d) Soil sampling.
- (e) Removing fuel storage systems.

The rules of the NES over-ride those of the District Plan in relation to managing the effects of contaminants in soil on human health. However, the District Plan rules still apply where they are controlling other effects, including the effects of contaminants on eco-systems.

Copies of the NES are available at Council Service Centres, and on the Ministry for the Environment's webpage: www.mfe.govt.nz/. (Please note the above is only a summary of the NES).

HS3.2 Rules

HS3.2.1 Permitted Activities

The following activities are Permitted Activities provided they comply with the General Conditions outlined in section HS3.3.

- (a) Any hazardous facility which complies with the thresholds identified in Appendix 3.
- (b) Any use or storage of radioactive materials with an activity below that specified as an exempt activity in the Radiation Protection Regulations 1982.
- (c) The management, storage and disposal of agrichemicals where the activity complies with all relevant provisions of NZS8409:2004 Management of Agrichemicals.
- (d) The management, storage and disposal of fertiliser in the Rural Zone where compliance can be demonstrated with:
 - (i) All relevant Group Standards constituted under the Hazardous Substances and New Organisms Act; and
 - (ii) Relevant performance standards in the New Zealand Fertiliser Manufacturers Research Association's 2007 Code of Practice for Nutrient Management.



- (e) Any Hazardous Activity or Hazardous Facility for which there is a current Test Certificate issued under the Hazardous Substances and New Organisms Act 1986 or any Act passed in substitution thereof.

HS3.2.2 Controlled Activities

The following activities are Controlled Activities provided they comply with the General Conditions outlined in section HS3.3 and Specific Conditions outlined in section HS3.4.

Such activities shall be considered without the need to obtain written approval from affected parties and without the need for notification. Applications will be assessed and conditions imposed only in respect of the Matters of Control specified below and the Assessment Criteria specified in section HS3.5.

- (a) The storage of fuel, up to 100,000 litres of petrol and up to 50,000 litres of diesel in underground storage tanks associated with the retail sale of fuel, provided it can be demonstrated that compliance with occupational health and safety and HSNO requirements is achieved.
- (b) The retail sale of LPG, with a storage of up to six tonnes (single vessel storage) of LPG, provided it can be demonstrated that compliance with occupational health and safety and HSNO requirements is achieved.

Council has reserved control over the following matters:

- (a) The proposed operation and site layout.
- (b) The sensitivity of the surrounding natural, human and physical environment.
- (c) Separation distances and the type of environment/number of people potentially at risk from the proposed facility.
- (d) Potential hazards and exposure pathways arising from the proposed facility.
- (e) Potential cumulative hazards presented in conjunction with neighbouring facilities.
- (f) Proposed fire safety and fire water management.
- (g) Proposed spill contingency and emergency planning.
- (h) Proposed monitoring and maintenance schedules.
- (i) Proposed waste management.
- (j) Proposed hazardous substance transport arrangements.
- (k) Compliance with relevant Codes of Practice.
- (l) Compliance with relevant standards.
- (m) Interaction with natural hazards, as applicable.

HS3.2.3 Discretionary Activities

The following activities are Discretionary Activities.

Applications will be assessed against but not limited to, the relevant Assessment Criteria outlined in section HS3.5.

- (a) Any hazardous facility involving hazardous substance in aggregate quantities above those specified in Appendix 3 that is not otherwise allowed for as a permitted activity.
Relevant Objectives and Policies – HS2.2.2(a) and (b) and HS2.2.3(a), (b) and (c)
- (b) Any use or storage of radioactive materials with an activity in excess of that specified as an exempt activity in the Radiation Protection Regulations 1982.
Relevant Objectives and Policies – HS2.2.2(a) and (b) and HS2.2.3(a), (b) and (c)
- (c) Any activity that is provided for as a Permitted Activity by Rule HS3.2.1 or Controlled Activity by Rule HS3.2.2 but fails to meet one or more of the General Conditions outlined in section HS3.3 or the Specific Conditions outlined in section HS3.4.
Relevant Objectives and Policies – HS2.2.2(a) and (b) and HS2.2.3(a), (b) and (c)



HS3.3 General Conditions

Compliance with the following General Conditions is required for all Permitted Activities as outlined in Rule HS3.2.1 and all Controlled Activities outlined in Rule HS 3.2.2 above.

HS3.3.1 Hazardous Facilities Site Design

- (a) Any part of a hazardous facility which is involved in the manufacture, mixing, packaging, storage, loading, transfer, usage or handling of hazardous substances shall be designed, constructed and operated in a manner that prevents:
 - (i) The occurrence of any off-site adverse effects from the activities on people, ecosystems, physical structures and/or other parts of the environment unless permitted by a resource consent
 - (ii) Contamination of air, land and/or water (including groundwater and potable water supplies and surface waters) in the event of a spill or other type of release of hazardous substances.
- (b) Details for site design, construction and operation (including emergency spill procedures) may need to be certified by a suitably qualified engineer, to achieve the above.

HS3.3.2 Hazardous Facilities Site Layout

The hazardous facility must be designed in a manner to ensure that separation between on-site facilities and the property boundary is sufficient for the adequate protection of neighbouring facilities, land uses and sensitive environments.

- (a) Details for site design, type and volume of hazardous substances, nature of operation and safe separation distances may need to be certified by a suitably qualified engineer, to achieve the above.

HS3.3.3 Storage of Hazardous Substances

The storage of any hazardous substances must be carried out in a manner that prevents:

- (a) The unintentional release of the hazardous substance
- (b) The accumulation of any liquid or solid spills or fugitive vapours and gases in enclosed off-site areas, resulting in potentially adverse effects on people, ecosystems or built structures.

HS3.3.4 Site Drainage Systems

Site drainage systems must be designed, constructed and operated in a manner that prevents the entry or discharge of hazardous substances into the storm water and/or sewerage systems unless permitted by a network utility operator.

Further, compliance can be achieved using precautionary methods, including clearly identified access holes, roofing, sloped pavements, interceptor drains, containment and diversion valves, oil-water separators, sumps and similar systems.

HS3.3.5 Hazardous Facilities Spill Containment System

- (a) Any parts of the hazardous facility site where a hazardous substance spill may occur must be serviced by a suitable spill containment system that is:
 - (i) Constructed from impervious materials resistant to the hazardous substances used, stored, manufactured, mixed, packaged, loaded, unloaded or otherwise handled on the site; and for liquid hazardous substances:



- (1) Able to contain the maximum volume of the largest tank present plus an allowance for storm water or fire water for drums or other smaller containers, able to contain half of the maximum volume of substances stored, plus an allowance for storm water or fire water
- (2) Able to prevent any spill or other unintentional release of hazardous substances, and any storm water and/or fire water that has become contaminated, from entering the storm water drainage system, unless permitted by a network utility operator.
- (ii) Able to prevent any spill or other unintentional release of hazardous substances, and any storm water and/or fire water that has become contaminated from discharging into or onto land and/or water (including drainage systems, groundwater and potable water supplies) unless permitted by a resource consent.
- (b) Details of the spill containment system may need to be certified by a suitably qualified engineer, to achieve the above. Suitable means of compliance include graded floors and surfaces, bunding, roofing, sumps, fire water catchments, overflow protection and alarms, and similar systems.

HS3.3.6 Hazardous Facilities Washdown Areas

- (a) Any part of the hazardous facility site where vehicles, equipment or containers that are, or may have become, contaminated with hazardous substances are washed must be designed, constructed and managed to prevent any contaminated wash water from:
 - (i) Entry or discharge into the storm water drainage or the sewerage system unless permitted by a network utility operator
 - (ii) Discharge into or onto land/or water (including groundwater and potable water supplies) unless permitted by resource consent.
- (b) Details of design, construction and management of washdown areas are to be certified by a suitably qualified engineer, to achieve the above. Suitable means of compliance include roofing, sloped pavements, interceptor drains, containment and diversion valves, oil-water separators, sumps and similar systems.

HS3.3.7 Hazardous Facilities Storage Tanks

Tanks for the storage of petroleum products must be designed, constructed and managed to prevent leakage and spills and resulting adverse effects on people, ecosystems and property. Storage tanks shall be:

- (a) Constructed from impervious materials resistant to the hazardous substances to be stored
- (b) Equipped with secondary containment facilities in areas of environmental sensitivity
- (c) Serviced by a leak detection or monitoring system which is capable of detecting a failure or breach in the structural integrity in the primary containment vessel.

HS3.3.8 Hazardous Facilities Waste Management

Any hazardous facility generating waste containing hazardous substances shall dispose of these wastes to authorised facilities or be serviced by an acceptable waste disposal contractor formally approved by Ruapehu District Council.

Details for design, construction and operation of any relevant aspect of structures, systems or procedures for the management of hazardous substances may need to be certified by a suitably qualified engineer, to achieve the above. This applies primarily for significant facilities which would be permitted activities based on substance quantity alone. Details of storage, management and disposal of hazardous wastes may (at Councils discretion) need to be certified by a suitably qualified engineer, to achieve the above.



HS3.3.9 Hazardous Substances and New Organisms Act (HSNO)

- (a) The Test Certificate issued under the Hazardous Substances and New Organisms Act 1986 or any Act passed in substitution shall be provided to Council no later than 10 working days prior to the commencement of the activity.

HS3.4 Specific Conditions

The following Specific Conditions shall apply to the Controlled Activities specified in rule HS3.2.2 (a) and (b) above.

HS3.4.1 Service Stations

- (a) Applications for service station activities are to be accompanied by an Assessment of Environmental Effects (AEE) according to the Fourth Schedule of the RMA. The AEE must be appropriate to the nature and scale of the proposed activity and its associated potential or actual environmental effects, and must include the following matters:
 - (i) A description of the nature and scale of the proposed activity and associated operations
 - (ii) An inventory of hazardous substances proposed to be used, stored, transported and disposed of on the site
 - (iii) The bio-physical characteristics of the site and surrounding area and relevant infrastructure on and off site (e.g. drainage, roads)
 - (iv) The location of the activity in relation to sensitive land use activities (e.g. child care facilities, schools, rest homes, hospitals), sensitive environments (e.g. natural waters, ecosystems) and infrastructures (neighbouring roads, buildings etc.)
 - (v) Description of the environment actually or potentially affected by the proposal, including pathways and receptors.
 - (vi) Preliminary hazard and risk analysis
 - (vii) Management of wastes containing hazardous substances
 - (viii) The transport of hazardous substances, where this forms a significant part of the operations
 - (ix) Emergency management equipment and planning.

HS3.5 Assessment Criteria

HS3.5.1 Discretionary Activities

Discretionary Activities will be assessed against, but not limited to, the assessment criteria below. Reference to relevant assessment criteria in other sections of the District Plan may be required also.

- (a) The extent to which proposal complies with the General Standards for permitted and controlled activities within Rule HS3.3.
- (b) The extent to which the proposed site design, construction and operation of hazardous facilities are appropriate to prevent the accidental release, or loss of control, of hazardous substances, and whether adequate emergency management equipment and plans are provided.
- (c) The extent to which the proposed site design, construction and operation of hazardous facilities are appropriate to prevent and mitigate any adverse effects resulting from activities on the site involving hazardous substances on people, property and environmentally sensitive areas.
- (d) Whether off-site transport of hazardous substances has been adequately addressed.



- (e) Whether a waste management plan has been submitted to address significant quantities of wastes containing hazardous substances, including procedures for disposal practices and use of waste contractors.
- (f) The presence or otherwise of natural hazards, including but not limited to, lahars and seismic activity, especially around Tongariro National Park, and flood risks, which could adversely influence the inherent risks from a hazardous facility to the environment.
- (g) Whether alternatives have been considered adequately.
- (h) Whether the risks presented by the hazardous facility to humans, the environment and property have been assessed fully and systematically, and whether they are able to be avoided or reduced to acceptable levels.
- (i) As applicable, the extent to which a contaminated site has been decontaminated or rehabilitated to meet appropriate acceptance criteria for the future use of the land.
- (j) Whether an Assessment of Effects has been submitted with the application which includes an adequate description of the following (depending on the scale of the activity):
 - (i) The proposed site and layout, with a description of the nature and scale of the proposed facility and associated operations.
 - (ii) Quantities of hazardous substances proposed to be used, stored, transported or disposed of on the site.
 - (iii) Site drainage and off-site infrastructure, including the biophysical characteristics of the site and surrounding area (e.g. drainage, roads).
 - (iv) Transport of hazardous substances on and off the site and the selection of the least risk routes.
 - (v) The sensitivity of the surrounding human, natural and physical environment and proposed measures to protect them.
 - (vi) Potential cumulative effects with neighbouring facilities.
 - (vii) Management of wastes containing hazardous substances.
 - (viii) Proposed emergency management equipment and plans.
 - (ix) Proposed monitoring and maintenance schedules.
- (k) Whether a Risk Assessment has been submitted with the application which includes an adequate description of the following (depending on the scale of the activity):
 - (i) Potential site hazards, likely accident scenarios, exposure pathways, receiving environments and potential environmental effects.
 - (ii) Separation distances from neighbouring activities and people potentially at risk from the hazardous facility, including consideration of the proximity to sensitive land use activities (e.g. childcare, schools, rest homes, hospitals).
 - (iii) The detailed hazard analysis and risk assessment of installations, operations and processes involving hazardous substances.
 - (iv) A quantitative risk assessment (QRA) which addresses the following:
 - (1) Identification of potential hazards, failure modes and exposure pathways assessment of the probability and potential consequences of an accident leading to a release of a hazardous substance or loss of control, including, as applicable, cumulative and/or synergistic effects
 - (2) Acceptability of the assessed risks, including cumulative risks
 - (3) Residual risks after applying proposed risk control and mitigation measures.
 - (v) An evaluation of alternatives (sites/locations, substances, quantities, processes/equipment, site management, etc.) to determine whether there are any alternatives to the proposal particularly where it is possible that the activity may result in significant environmental effects.
 - (vi) Proposed risk control and mitigation measures, with emphasis on sensitive land use activities and environments, including, as applicable:
 - (1) Equipment, systems and engineered safety measures such as containment devices, fire safety apparatus and spill contingency/clean-up equipment



- (2) Emergency management plans, monitoring and maintenance schedules as well as training programmes.

Advice Note:

In conditioning consents, the Council will take into consideration the National Environmental Standard for Sources of Human Drinking Water, specifically Regulations 11 and 12 in relation to sites which have the potential to effect public drinking water supplies.