

## 23 RULES: Hazardous Substances

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### 23.1 CONDITIONS FOR PERMITTED ACTIVITIES

**Note:** The following provisions will need to be reviewed, and may need to be amended, following the enactment of regulations under the Hazardous Substances and New Organisms Bill.

All activities involving the storage, use, disposal, or transportation of hazardous substances shall comply with the following conditions (in addition to the rules and conditions applying to each particular zone):

#### 23.1.1 Site Design

Any part of the site where any liquid or solid hazardous substance is stored or used shall be effectively sealed with materials which are resistant to the substance(s).

Any part of the site where any liquid or solid hazardous substance is stored or used shall be sealed and bunded so that the equivalent of the maximum of the largest container within the bunded area can be contained and excluded from the stormwater system and from any natural water course in the event of a spill occurring.

In areas where drums of hazardous substances are stored, the bunded area shall be able to contain half of the maximum amount of hazardous substance stored.

Any bunds shall be constructed from materials which are resistant to the substance that the bund is designed to contain.

All stormwater grates shall be clearly marked on the site.

Storage of petroleum products in underground tanks shall comply with the Code of Practice for "Design, Installation, and Operation of Underground Petroleum Systems" (Department of Labour, Occupational Safety and Health, 1992).

Any part of the site where any solid or liquid hazardous substance is used, manufactured, mixed, or re-packaged shall be covered by a roof.

All vehicle access ways and driveways that serve a site where any hazardous substance is loaded or unloaded from vehicles shall have cut-off drains which do not drain directly into any community stormwater system or natural water way.

Any part of a site where vehicles, equipment, or containers that have or may have contained or become contaminated by any hazardous substance shall be sealed, bunded and drained so that surfacewater run-off from any washing area is discharged to an on-site foulwater system or is stored and collected in such a way that no hazardous substance drains directly into any community stormwater system or natural water way.

#### 23.1.2 Waste Management

All sites where hazardous waste or waste containing hazardous substances is generated shall provide for appropriate disposal of that waste from the site. A record shall be kept, at all times, of the quantities of hazardous wastes stored on site and taken away for disposal.

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### 23.1.3 Fire Safety

Activities involving the use, storage or handling of flammable or explosive hazardous substance will need to comply with the relevant regulations concerning the provision of fire safety equipment.

### 23.1.4 Emergency Response Provision

All sites where hazardous substances are used or stored shall make provision for emergency and evacuation procedures which should be adopted in the event of an accident or emergency involving hazardous substances. Such emergency response provision shall be appropriate to the scale of the operation, the substances involved, and the nature of the surrounding environment.

### 23.1.5 Identification Signs

All sites where any hazardous substance is used or stored shall have warning and information signs identifying the presence of the substance(s) and the hazard.

## 23.2 Threshold Hazard Factors

### 23.2.1 Definition of Threshold Hazard Factor

"Threshold Hazard Factor" includes the risk and magnitude of fire, explosion, or adverse effects for human or environmental health or the combination of these adverse effects; and is estimated having regard to:

- the intrinsic properties of any hazardous substance (e.g. its flammability, explosiveness, or toxicity);
- the proposed methods of storage and handling any hazardous substance on any individual site;
- the volume or form in which any hazardous substance is proposed to be stored or used on any site; and
- the nature of the environment immediately surrounding the site and its sensitivity to hazardous substances.

### 23.2.2 Parameters of Low Threshold Hazard Factor

"Low Threshold Hazard Factor" describes a situation where the overall risk of hazard is estimated to be low. This would include situations where:

- the hazardous substance(s) have only low to medium hazard levels (based on the classification system adopted in "U.N. Recommendations on the Transport of Dangerous Goods: 8th Edition";
- the quantities involved are small or incidental;
- the substances are not stored or handled under conditions which enhance their hazardous properties; and

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- the substance(s) are not stored or used in proximity to sensitive neighbouring activities - particularly potable water sources or areas of significant natural value or high density of resident people.

### 23.2.3 Parameters of Medium Threshold Hazard Factor

"Medium Threshold Hazard Factor" describes a situation where there is an intermediate level of risk to public health and the environment. This includes situations where:

- the hazardous substance(s) may have hazard levels up to the high category; but
- the quantities involved are relatively small commercial or industrial scale quantities (less than 1,000 litres of flammable liquids or 500 litres of corrosive liquids held in secure storage).

If substances of high hazard level are stored or used in proximity to neighbouring activities, particularly water bodies or aquifers, the quantities that would qualify as having "medium" hazard would be significantly less.

### 23.2.4 Parameters of High Threshold Hazard Factor

"High Threshold Hazard Factor" describes a situation where there is a high level of risk to public health and the environment. This would include situations where:

- the hazardous substance(s) may have extreme hazard levels; or
- the quantities involved are large industrial scale amounts; or
- large quantities of hazardous substances are in use in a manner that increases the hazardous properties of the substance(s); or
- the substances are located adjacent to a potable water source or area of environmental sensitivity or high density of resident people.

Examples of the three Threshold Hazard Factors are given in Table 23.1. (Page 23-4).

Where appropriate, Council may use the Hazardous Facilities Screening Procedure to verify hazard levels. Notwithstanding the definitions set out in Clauses 23.2.1, 23.2.2, 23.2.3, and 23.2.4, or the verification process referred to in the preceding sentence, the activities set out in the following table shall, for the purposes of the administration of this plan, be deemed to fall within the definitions attributed to each within the table.

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**Table 23.1 Examples of Threshold Hazard Factors**

Low Threshold Hazard Factor	Medium Threshold Hazard Factor	High Threshold Hazard Factor
<p>Domestic quantities and uses of hazardous substances, garden pesticides and herbicides and other substances.</p> <p>Retail outlets selling domestic-scale quantities of hazardous substances including supermarkets, hardware stores, pharmacies, garden centres.</p> <p>Service stations which store, for sale, no more than 100,000 litres of petrol or 50,000 litres of diesel (both in underground storage tanks of maximum capacity 50,000 litres each); and which comply with the "Code of Practice for the Design, Installation, and Operation of Underground Petroleum Systems" (Dept of Labour); and provided all relevant requirements of the Dangerous Goods legislation are complied with.</p> <p>Retail sale of L.P.G. having maximum storage capacity 6 tonnes, provided the "Australian Standard (A.S. 1596: 1989) for L.P. Gas Storage and Handling - Siting of L.P. Gas Automotive Retail Outlets" is adhered to; and that all relevant requirements of the Dangerous Goods legislation are adhered to.</p> <p>The storage and use of hazardous substances in association with temporary military training activities.</p>	<p>Commercial scale spray painting operations.</p> <p>Dry cleaners.</p> <p>Engineering workshops.</p> <p>Motor vehicle repair workshops and garages.</p> <p>Printers</p> <p>Farm-scale use of agricultural chemicals and fuels and fertilisers used in primary production activities.</p> <p>The storage and retail sale of agricultural chemicals and fuels direct to primary production users (including stock and station agents premises).</p> <p>Any activity in a Residential or Rural Settlement zone which is subject to the requirements of the Dangerous Goods, Toxic Substances and Explosives Acts and Regulations.</p>	<p>Galvanising plants.</p> <p>Electroplating and metal treatment activities.</p> <p>Chemical warehouses (including bulk storage areas for agrochemicals and fertilisers).</p> <p>Explosives magazines.</p> <p>Chemical manufacturing processes (including industries manufacturing or processing agrochemicals, fertilisers, or paints).</p> <p>Tanneries.</p> <p>Timber treatment plants.</p> <p>Freezing works and rendering plants.</p> <p>Wastewater treatment plants.</p> <p>Milk treatment plants.</p> <p>Fumigation processes or activities.</p> <p>Drum re-conditioners.</p> <p>Asphalt/bitumen manufacture or storage.</p> <p>Bulk fuel or L.P.G. storage.</p> <p>Metal smelting and refining (including battery refining or recycling).</p> <p>Fibreglass manufacture.</p> <p>Polymer foam manufacture.</p>