



# Health and Safety at Work (Hazardous Substances) Regulations 2017

Patsy Reddy, Governor-General

## Order in Council

At Wellington this 26th day of June 2017

Present:

Her Excellency the Governor-General in Council

These regulations are made under sections 211, 212, 213, and 218 of the Health and Safety at Work Act 2015—

- (a) on the advice and with the consent of the Executive Council; and
- (b) on the recommendation of the Minister for Workplace Relations and Safety made after complying with sections 213(3) and 217 of that Act.

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## Regulations

### 1 Title

These regulations are the Health and Safety at Work (Hazardous Substances) Regulations 2017.

### 2 Commencement

- (1) This regulation and regulations 1, 3, 4, 6 to 12, 15.1, and 15.52 come into force on 1 September 2017.
- (2) Regulations 4.3, 13.26, and 13.27 come into force on 1 June 2018.
- (3) Regulation 13.28 comes into force on 1 December 2018.
- (4) Regulations 1.4 and 13.34 to 13.37 come into force on 1 June 2019.
- (5) Regulation 13.38 comes into force on 1 December 2019.
- (6) The rest of these regulations come into force on 1 December 2017.

### 3 Interpretation

- (1) In these regulations, unless the context otherwise requires,—

**above ground stationary tank** means a stationary tank that is—

- (a) fixed to or resting on the ground; or
- (b) fixed or attached to a structure that is fixed to or resting on the ground

**Act** means the Health and Safety at Work Act 2015

**aggregate water capacity** means the aggregate or cumulative total volume of 1 or more containers, calculated as the equivalent volume of water at 20°C and at 101.3 kPa

**alcohol** has the same meaning as in section 5(1) of the Sale and Supply of Alcohol Act 2012

**area of high intensity land use**, in relation to an area beyond the boundary of a place where a hazardous substance location is situated, includes an area of regular habitation, any other hazardous substance location, and a high density traffic route

**area of low intensity land use**, in relation to an area beyond the boundary of a place where a hazardous substance location is situated,—

- (a) includes—
  - (i) an area where any person may be legally present occasionally; and
  - (ii) a public park or reserve; and
  - (iii) a public traffic route of low or medium traffic density; but
- (b) does not include an area of regular habitation

**area of regular habitation** includes any dwelling, hospital, school, airport, commercial premises, office, or other area where people regularly congregate

**AS 3780—2008 (2nd Edition) (R2009)** means the Australian standard on The Storage and Handling of Corrosive Substances (2008 2nd edition reissued incorporating Amendment No. 1 2009)

**Armed Forces** has the same meaning as in section 2(1) of the Defence Act 1990

**certified handler** means a person who holds a compliance certificate that certifies that the person meets the competency requirements for certified handlers specified in regulation 4.3

**Chief of Defence Force** means the Chief of Defence Force appointed under section 8 of the Defence Act 1990

**compliance certificate** means a certificate (including a conditional compliance certificate) issued by a compliance certifier under subpart 2 of Part 6

**compliance certifier** means a person who is authorised to issue compliance certificates under regulation 6.8

**compound—**

- (a) has the same meaning as in section 2(1) of the HSNO Act; but
- (b) in relation to the storage of a hazardous substance, means a basin, pit, excavation, hollow, or enclosure that is resistant to fire and—
  - (i) is constructed of concrete, brick, clay, earth, or similar incombustible material; and
  - (ii) is of such a nature and construction that it will effectively retain a hazardous substance that is a liquid if the hazardous substance leaks or flows out of its container

**consumer product** means a hazardous substance that is packed or repacked primarily for use by a household consumer or for use in an office and—

- (a) if packed or repacked primarily for use by a household consumer, is packed in a way and in a quantity in which it is intended to be used by the household consumer;
- (b) if packed or repacked primarily for use in an office, is packed in a way and in a quantity in which it is intended to be used for office use

**contain**, in relation to a hazardous substance or a gas under pressure in a container, includes to retain any quantity of the substance as a flammable vapour or gas after the container has been emptied

**container—**

- (a) means any receptacle, whether movable or fixed, in which hazardous substances or gases under pressure may be encased, covered, enclosed, contained, or packaged; and
- (b) includes—

- (i) a receptacle that forms an integral part of a vehicle (other than part of a vehicle's fuel system, electrical system, control system, or emergency system); and
- (ii) a stationary tank or a process container; and
- (iii) a package; and
- (iv) a supporting structure for a receptacle

**controlled substance licence** means a licence issued by WorkSafe under Part 7

**controlled zone** means an area abutting a hazardous substance location that is regulated so that,—

- (a) within the zone, the adverse effects of a hazardous substance are reduced or prevented; and
- (b) beyond the zone, members of the public are provided with reasonable protection from those adverse effects

**Customs** has the same meaning as in section 2(1) of the Customs and Excise Act 1996

**cylinder**—

- (a) means a gas container (whether refillable or non-refillable) that is used or intended to be used for storing and transporting gases under pressure; and
- (b) includes a cryogenic container and a fire extinguisher; but
- (c) does not include an aerosol dispenser

**dairy maintenance compound**, in relation to a place where dairy material or product is processed, means a product used for maintaining, repairing, servicing, cleaning, or sanitising equipment, surfaces, or air that may be a source or cause of contamination of the dairy material or product or of any associated thing

**Defence Force** has the same meaning as in section 2(1) of the Defence Act 1990

**desensitising agent** has the same meaning as in the Hazardous Substances (Classification) Notice 2017

**designated transfer zone**—

- (a) means a place established under regulation 9.44 for use for the transfer of a class 1 substance from one type of transport to another; but
- (b) does not include—
  - (i) roll-on roll-off operations in which a vehicle or trailer with its load drives or is driven onto or into another means of transport for the duration of a journey; or
  - (ii) a hazardous substance location; or



- (iii) a designated use zone

**designated use zone—**

- (a) means a place established under regulation 9.28 for use for the detonation or deflagration of explosives; but
- (b) does not include a hazardous substance location, a designated transfer zone, or a discharge area

**disposal** has the same meaning as in section 2(1) of the HSNO Act

**dissolved gas** means a gas that, when packaged under pressure, is dissolved in a liquid phase solvent

**distribution system** has the same meaning as in section 2(1) of the Gas Act 1992

**E10** means a blend of 10 per cent ethanol and 90 per cent petrol

**E85** means a blend of 85 per cent ethanol and 15 per cent petrol

**EN 417: 2012** means the European standard on Non-refillable metallic cartridges for liquefied petroleum gases, with or without a valve, for use with portable appliances—Construction, inspection, testing and marking

**environmental medium**, in relation to class 6 substances, means—

- (a) air, water, and soil; or
- (b) a surface onto which a class 6 substance may be deposited

**explosive** has the same meaning as in section 2(1) of the HSNO Act

**fire extinguisher** means a gas container intended to hold an extinguishant that can be discharged onto a fire by, or by being, a gas under pressure

**fire-resistance rating**, in relation to a building, a room, or any part or feature of a building or room, means the extent to which the building, room, or feature, is able to maintain its stability, insulation, and integrity (or the stability, insulation, and integrity of the building of which it is a part), and is able to offer protection against heat radiation for the time specified by the relevant rating in minutes, where **stability**, **insulation**, and **integrity** have the same meanings as in clause A2 of Schedule 1 of the Building Regulations 1992

**firework** has the same meaning as in section 2(1) of the HSNO Act, as modified by replacing the reference to hazardous substances with explosive properties with a reference to class 1 hazardous substances

**fuel gas—**

- (a) means any fuel that is supplied through pipes or in containers and is a gas at 15°C and at 101.3 kPa absolute pressure; and
- (b) includes—
- (i) biogas, coal gas, natural gas, oil gas, producer gas, refinery gas, reformed natural gas, and liquefied petroleum gas; and

- (ii) any gaseous substance that the Governor-General declares by Order in Council to be a gas for the purposes of the Gas Act 1992; and
- (iii) any gas that is of a composition that complies with regulations made under the Gas Act 1992 for use as a fuel

**fumigant** means a class 6.1A, 6.1B, or 6.1C hazardous substance that is—

- (a) created for the purpose of fumigation; or
- (b) used for fumigation

**fumigation** means the use of a fumigant in its gaseous state for the purpose of destroying rodents, pests, other plant or animal organisms, or fungi

**gas** has the same meaning as in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017

**gas appliance** has the same meaning as in section 2(1) of the Gas Act 1992

**gas container**—

- (a) means a container in which a gas under pressure is held, or intended to be held, with fittings or equipment designed to retain the gas in its compressed form; and
- (b) includes a cylinder, aerosol dispenser, fire extinguisher, cryogenic container, or tank (including a stationary tank); but
- (c) does not include—
  - (i) a pressure vessel that is a pipeline under the Health and Safety in Employment (Pipelines) Regulations 1999; or
  - (ii) an air receiver used in connection with the starting of an internal combustion engine; or
  - (iii) a receiver that forms part of a compression plant; or
  - (iv) a container that forms an integral part of a refrigerating unit; or
  - (v) a pressurised container that forms an integral part of the motive or control system of a vehicle, a ship, or an aircraft (including the emergency system for a vehicle, ship, or aircraft); or
  - (vi) an aerosol container with a water capacity of less than 50 ml or for which the absolute pressure developed at 20°C is less than 170 kPa; or
  - (vii) a cartridge with a water capacity of less than 170 ml; or
  - (viii) a non-refillable container with a water capacity of less than 100 ml; or
  - (ix) a cylinder with a water capacity of less than 120 ml, if the contents are a liquefied gas with flammable properties; or

- (x) a cylinder with a water capacity of less than 500 ml, if the contents are not a liquefied gas with flammable properties; or
- (xi) a cylinder with a water capacity of more than 500 L, except that this subparagraph does not apply in relation to subpart 8 of Part 15 or table 1 in Schedule 20; or
- (xii) carbonated beverages or their containers

**gas installation** has the same meaning as in section 2(1) of the Gas Act 1992

**gas under pressure** means—

- (a) a compressed gas; or
- (b) a liquefied gas; or
- (c) a refrigerated liquefied gas; or
- (d) a dissolved gas

**handle**, in relation to a hazardous substance, does not include—

- (a) transport of the substance; or
- (b) loading the substance, or unloading it from, a vehicle or other mode of transport

**hazard classification** means one of the classes referred to in the Hazardous Substances (Classification) Notice 2017

**hazardous area**, except in regulation 10.7, means an area in which an explosive gas atmosphere is or may be expected to be present in such quantities as to require special precautions for the construction, installation, and use of equipment

**hazardous substance** has the meaning given in regulation 4

**hazardous substance location**,—

- (a) in relation to a class 1 substance,—
  - (i) means an area where a quantity of the substance that is in excess of the relevant quantity specified in table 5 in Schedule 8 is manufactured, or is located for more than 2 hours:
  - (ii) does not include a designated use zone, a discharge area, a designated transfer zone, a location authorised by WorkSafe under regulation 9.10(1)(e), or a means of transport within a transfer zone for the purpose of transfer:
  - (iii) does not include a vehicle, a ship, or an aircraft while it remains under the direct control of its driver, master, or pilot and under the jurisdiction of the Land Transport Rules, the Maritime Rules, or the Civil Aviation Rules (as the case may be):
- (b) in relation to a class 2, 3, 4, 5, 6, or 8 substance,—

- (i) means an area where a quantity of the substance exceeds the relevant quantity specified in table 4 in Schedule 9, table 1 or 2 in Schedule 10, table 1 in Schedule 11, or regulation 13.38 is located for more than—
  - (A) 24 hours, in the case of a substance that is not subject to the tracking provisions of Part 19:
  - (B) 2 hours, in the case of a substance subject to the tracking provisions of Part 19:
- (ii) does not include a vehicle, a ship, or an aircraft while it remains under the direct control of its driver, master, or pilot and under the jurisdiction of the Land Transport Rules, the Maritime Rules, or the Civil Aviation Rules (as the case may be):
- (iii) does not include a transit depot

**Hazardous Substances (Classification) Notice 2017** means the Hazardous Substances (Classification) Notice 2017 issued by the Environmental Protection Authority under Part 6 of the HSNO Act

**Hazardous Substances (Disposal) Notice 2017** means the Hazardous Substances (Disposal) Notice 2017 issued by the Environmental Protection Authority under Part 6 of the HSNO Act

**Hazardous Substances (Minimum Degrees of Hazard) Notice 2017** means the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017 issued by the Environmental Protection Authority under Part 6 of the HSNO Act

**Hazardous Substances (Packaging) Notice 2017** means the Hazardous Substances (Packaging) Notice 2017 issued by the Environmental Protection Authority under Part 6 of the HSNO Act

**hazardous waste** means waste that is—

- (a) generated by a manufacturing or other industrial process; and
- (b) reasonably likely to be or contain a substance that meets 1 or more of the classification criteria for substances with explosive, flammable, oxidising, toxic, or corrosive properties under the Hazardous Substances (Classification) Notice 2017

**high density**, in relation to a public traffic route, means more than medium density

**HSNO Act** means the Hazardous Substances and New Organisms Act 1996

**ignition source**—

- (a) means any agency or agent (including any item, product, part of a facility structure, or piece of equipment) capable of igniting a flammable gas, vapour, or other form of combustible substance; and
- (b) includes a fire, flame, or spark, or anything capable of producing a fire, flame, or spark

**laboratory** has the same meaning as in section 2(1) of the HSNO Act

**life cycle** has the same meaning as in section 2(1) of the HSNO Act

**liquefied gas** means a gas that is partially liquid at temperatures above  $-50^{\circ}\text{C}$  when packaged under pressure

**liquid** has the same meaning as in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017

**low density**, in relation to a public traffic route, means not more than an average per 24 hours of—

- (a) 1 000 vehicles on a road; or
- (b) 50 rail wagons on a railway; or
- (c) 400 people on a waterway; or
- (d) 200 people along a public right of way

**LPG** means liquefied petroleum gas

**medium density**, in relation to a public traffic route, means more than low density but not more than an average per 24 hours of—

- (a) 5 000 vehicles on a road; or
- (b) 250 rail wagons on a railway; or
- (c) 1 800 people on a waterway; or
- (d) 900 people along a public right of way

**member of the New Zealand Police** means a Police employee within the meaning of the Policing Act 2008 who is—

- (a) a constable within the meaning of that Act; or
- (b) authorised under section 24(1)(b) of that Act to perform a policing role under the Arms Act 1983; or
- (c) authorised by the Arms Act 1983 to exercise powers under the Arms Act 1983

**modified SADT** means the SADT obtained by performing a modified version of the tests for determining the SADT so that, instead of the prescribed test quantity, the intended larger quantity of the substance is used

**NFPA 86: 2015** means the Standard for ovens and furnaces

**organism** has the same meaning as in section 2(1) of the Hazardous Substances and New Organisms Act 1996

**packaging** has the same meaning as in the Hazardous Substances (Packaging) Notice 2017

**passenger service vehicle** has the same meaning as in section 2(1) of the Land Transport Act 1998

**permanent gas** means a gas with a critical temperature not exceeding  $-50^{\circ}\text{C}$ , where **critical temperature** is the temperature of the gas in its critical state above which it cannot be liquefied by pressure alone

**pipework**—

- (a) means piping that—
  - (i) is connected to a tank (including a stationary tank) or a process container; and
  - (ii) is used to transfer a hazardous substance into or out of the tank or process container; and
- (b) includes a process pipeline or a transfer line

**Police** or **New Zealand Police** has the same meaning as Police in section 4 of the Policing Act 2008

**policing** has the same meaning as in section 4 of the Policing Act 2008

**pooling substance** means a hazardous substance that—

- (a) is a liquid; or
- (b) is likely to liquefy in a fire

**ppm** means parts per million

**prescribed exposure standard** means a workplace exposure standard or biological exposure index that has the purpose of protecting persons in the workplace from harm to health and is prescribed in—

- (a) regulations;
- (b) a safe work instrument (including a safe work instrument that replaces a workplace exposure standard or biological index in an instrument referred to in paragraph (a), (c), (d), or (e));
- (c) a control under section 77 or 77A, or an exposure limit under section 77B, of the HSNO Act;
- (d) a group standard issued under section 96B of the HSNO Act;
- (e) a notice of transfer issued under section 160A of the HSNO Act, as in force immediately before 2 July 2006 (when that section of that Act expired), and that was in force immediately before that date

**process container** means a stationary container, whether standing alone or forming part of a stationary container system, that contains or is intended to contain a hazardous substance in the course of manufacture or use of the substance (for example, a mixing container, reaction vessel, distillation column, drier, or dip tank)

**protected place**—

- (a) includes—

- (i) a dwelling, residential building, place of worship, public building, school or college, hospital, child care facility, or theatre, or any building or open area in which persons are accustomed to assemble in large numbers, whether within or outside the property boundary of a place where a hazardous substance location is situated:
- (ii) any factory, workshop, office, store, warehouse, shop, or building where persons are regularly employed, whether within or outside the property boundary of a place where a hazardous substance location is situated:
- (iii) a ship lying at permanent berthing facilities:
- (iv) a public railway; but
- (b) does not include a small office or other small building associated with a place where storage, handling, use, manufacture, or disposal of a class 2, 3, 4, 5, 6, or 8 substance is a major function

**public place—**

- (a) means a place (other than private property or a protected place) that is open to, and frequented by, the public; and
- (b) includes a public road

**readily accessible**, in relation to a duty to provide a document, means that the document is capable of being accessed without difficulty in hard copy, electronic, or other form

**refrigerated liquefied gas** means a gas that when packaged is partially liquid because of its low temperature

**SADT** or **self-accelerating decomposition temperature** has the same meaning as in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017

**safe work instrument** means an instrument approved by the Minister for Workplace Relations and Safety under section 227 of the Act

**safety ammunition—**

- (a) means ammunition consisting of a cartridge case fitted with a centre or rim fire primer and containing both a propelling charge and a solid projectile, designed to be fired in weapons of a calibre not larger than 19.1 mm; and
- (b) includes shotgun cartridges of any calibre

**secondary containment system**, in relation to a workplace, means a system or systems—

- (a) in which pooling substances held in the workplace will be contained if they escape from the container or containers in which they are being held; and
- (b) from which they can, subject to unavoidable wastage, be recovered

**sodium fluoroacetate—**

- (a) means sodium fluoroacetate (Chemical Abstracts Service (CAS) registry number 62-74-8); but
- (b) does not include any formulated substances containing sodium fluoroacetate

**solid** has the same meaning as in the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017

**stationary container system—**

- (a) means a stationary tank or process container; and
- (b) includes its associated equipment, pipework, and fittings (up to and including all transfer points)

**stationary tank—**

- (a) means a tank, whether standing alone or forming part of a stationary container system, that is—
  - (i) used or intended to be used for the storage or supply of—
    - (A) 1 or more hazardous substances, in all Parts of these regulations other than Part 15:
    - (B) 1 or more hazardous substances, or 1 or more gases under pressure, in Part 15:
  - (ii) normally located at a specific place; and
- (b) includes—
  - (i) all parts and materials (for example, coatings) that contribute to maintaining the structural and functional integrity of the tank; and
  - (ii) any means of closing the tank (for example, a lid or fitted cover); and
  - (iii) any component of the tank intended to protect the contents of the tank from harm (for example, lightning protection); and
  - (iv) any other component that is an integral part of the tank (for example, a liquid level indicator, heating coil, or internal valve); but
- (c) does not include—
  - (i) packaging to which the Hazardous Substances (Packaging) Notice 2017 applies; or
  - (ii) packaging to which chapters 6.5 (Requirements for the construction and testing of Intermediate Bulk Containers) and 6.7 (Requirements for the design, construction, inspection and testing of Portable Tanks and Multiple Element Gas Containers) of the UN Model Regulations apply; or
  - (iii) a cylinder to which Part 15 applies



**substance** has the same meaning as in section 2(1) of HSNO Act

**SwRI 93-01** means the SwRI standard on Test Procedures 93-01: Testing requirements for protected aboveground flammable liquid/fuel storage tanks

**SwRI 95-03** means the SwRI standard on Testing requirements for multi-hazard protected aboveground flammable liquid/fuel storage tanks

**tank,—**

- (a) in relation to a stationary tank, means a container used or intended to be used for the storage or supply of—
  - (i) 1 or more hazardous substances, in all Parts of these regulations other than Part 15:
  - (ii) 1 or more hazardous substances, or 1 or more gases under pressure, in Part 15:
- (b) in relation to a tank wagon, means an enclosed receptacle permanently fixed to the chassis of the wagon, and includes—
  - (i) any compartments and all components, fittings, and materials (including coatings) necessary for the tank to perform its containment function; and
  - (ii) all parts affecting the structural integrity of the tank and the means of closing the tank

**tank wagon** means a vehicle (whether motorised or not) that is constructed for the primary purpose of the bulk transport by road or rail of 1 or more hazardous substances in the form of liquid or gas, and includes (without limitation)—

- (a) a tank truck or refuelling unit, that—
  - (i) has its own means of propulsion; and
  - (ii) contains a tank; and
- (b) a tank semi-trailer, tank trailer, or rail wagon that contains a tank

**teat-sanitising product** means a product applied to a milking animal to reduce bacterial populations on teat skin, and includes udder creams

**tolerable exposure limit** or **TEL** means a concentration of a substance in an environmental medium as set in accordance with section 77B of the HSNO Act

**total pooling potential**, in relation to a workplace or a place within a workplace, means the aggregate quantity of all pooling substances present at the workplace or place

**toxic** has the same meaning as in section 2(1) of the HSNO Act

**transfer line** means piping that—

- (a) is used or intended to be used to transfer a hazardous substance between a stationary tank and—
  - (i) another stationary tank; or

- (ii) a vehicle, a ship, or an aircraft; and
- (b) includes a wharf line and a bunker line

**transfer point**, in relation to a stationary container system, means the point at which pipework connected to the stationary container system terminates at—

- (a) a dispensing device used to fill packaging or the fuel system, electrical system, or control system of a vehicle, a ship, or an aircraft; or
- (b) a fitting that is periodically connected to a transfer line to or from a ship or bulk transport container such as a tank wagon, ship, or aircraft

**transit depot** means a permanent place (except a means of transport or any place where hazardous substances are held for sale or supply) used as a transport depot that is intended to hold hazardous substances in containers that remain unopened during the time that they are present at the depot for periods—

- (a) that are more than—
  - (i) 24 hours, for a substance that is not subject to the tracking provisions in Part 19;
  - (ii) 2 hours, for a substance subject to the tracking provisions in Part 19; but
- (b) that in no case exceeds 3 days

**transportable container** means a container that—

- (a) is not fixed to a chassis; and
- (b) can be unloaded at a destination or transferred to another transport mode; and
- (c) is referred to in chapter 6.5 or 6.7 of the UN Model Regulations

**UN Manual of tests and criteria** means the 5th revised edition of the Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, published by the United Nations, 2009

**UN Model Regulations** means 19th revised edition of the Recommendations on the Transport of Dangerous Goods, Model Regulations, published by the United Nations, 2015

**vapour** means a gaseous form of a hazardous substance released from its liquid or solid state

**vehicle** means a motorised land transport vehicle, but also includes a tank wagon

**veterinary medicine** has the same meaning as in section 2(1) of the Agricultural Compounds and Veterinary Medicines Act 1997

**vulnerable facility** means any of the following facilities:

- (a) buildings of 4 storeys or more, of curtain wall construction with panels more than 1 500 mm square:

- (b) buildings of 4 storeys or more with more than 50% of the wall area glazed;
  - (c) a hospital care institution, residential disability care institution, or rest home (as defined in section 58(4) of the Health and Disability Services (Safety) Act 2001), early childhood education and care centre (as defined in section 310 of the Education Act 1989), or school (as established under section 146 of the Education Act 1989);
  - (d) public buildings or structures of historic value;
  - (e) major transport and traffic terminals such as railway stations and airports handling more than 1 800 people in 24 hours;
  - (f) major public utilities whose service could be disrupted by a blast of 5 kPa;
  - (g) any similar facilities.
- (2) A reference in these regulations to a substance that is **likely to be present** at a workplace, in a container, or in any other place or thing is a reference to the maximum capacity of the workplace, container, or other place or thing to contain the substance.
- (3) A reference in these regulations to a **site plan** is a reference to a plan of the relevant place that is accurate and drawn to scale to the extent necessary to enable the plan to meet its purpose in the provision that refers to it (in particular, by enabling a person inspecting the plan to identify actual distances and other relevant dimensions) and need not necessarily be prepared by a person with qualifications in the preparation of plans.
- (4) Other terms or expressions used and not defined in these regulations but defined in the Act have, in these regulations, the same meaning as in the Act.

Compare: SR 2001/116 r 3

#### 4 Meaning of hazardous substance

- (1) In these regulations, unless the context otherwise requires, **hazardous substance**—
- (a) has the same meaning as in section 2(1) of the HSNO Act, as that meaning is modified by subclause (2); but
  - (b) does not include food, but includes a food additive; and
  - (c) does not include medicine, but includes new medicine that is treated as hazardous under the HSNO Act; and
  - (d) does not include a psychoactive substance that is treated as not hazardous under the HSNO Act.
- (2) The meaning of hazardous substance is modified for the purposes of these regulations by omitting paragraph (a)(vi) (ecotoxicity) of the definition of hazardous substance in section 2(1) of the HSNO Act.

- (3) Subclause (1)(a) applies despite the definition of hazardous substance in section 16 of the Act.
- (4) In this regulation,—
- adopted joint food standard** has the same meaning as in section 397 of the Food Act 2014
- food**—
- (a) has the same meaning as in section 9 of the Food Act 2014; but
- (b) does not include a food additive
- food additive** means a substance that—
- (a) is identified in an adopted joint food standard as a substance intended to be mixed with or added to any food or drink; and
- (b) has not been so mixed or added
- medicine**—
- (a) has the same meaning as in section 3 of the Medicines Act 1981; but
- (b) does not include gas that—
- (i) is contained in a container of a capacity greater than 100 mL at a pressure greater than 170 kPa; and
- (ii) has not been administered to any person for a therapeutic purpose; and
- (c) does not include new medicine that is treated as hazardous under the HSNO Act
- new medicine** has the same meaning as in section 3 of the Medicines Act 1981
- psychoactive substance** has the same meaning as in section 9 of the Psychoactive Substances Act 2013
- therapeutic purpose** has the same meaning as in section 4 of the Medicines Act 1981.

*Transitional, savings, and related provisions*

**5 Transitional, savings, and related provisions**

The transitional, savings, and related provisions set out in Schedule 1 have effect according to their terms.

*References to hazard classifications, standards, distances, and quantities*

**6 References to class, hazard classifications, etc**

Where these regulations refer to a hazardous substance or to hazardous substances by reference to any 1 or more numerals and letters, then, unless the context otherwise requires, the combination of numerals and letters constitutes the hazard classification of the substance as follows:

- (a) the first (or only) numeral refers to the class of the substance, indicating the intrinsic hazardous properties of the substance as described in clause 4(1)(a) of the Hazardous Substances (Classification) Notice 2017; and
- (b) the second and any subsequent numerals (if any) refer to the subclass of the substance within that class, indicating the type of hazard of the substance as described in clause 4(1)(b) of that notice; and
- (c) the letter (if any) refers to the category of the substance indicating,—
  - (i) for class 2, 3, 4, 5, and 8 substances, the degree of hazard of the substance as described in clause 4(1)(c) of that notice;
  - (ii) for class 1 and 6 substances, the classification described in clause 4(6) and (7) of that notice.

Compare: SR 2001/116 r 4

## 7 References to standards

- (1) In these regulations, in relation to a standard,—
  - AS** means the Australian Standard or Standards Australia
  - ASME** means the American Society of Mechanical Engineers
  - AS/NZS** means the joint Australian and New Zealand Standard
  - ASTM** means the American Society for Testing and Materials International
  - BS** means the British Standard
  - EN** means the European Standard
  - IEC** means the International Electrotechnical Commission
  - ISO** means the International Organization for Standardization
  - NFPA** means the National Fire Protection Association, Massachusetts, USA
  - NZS** means the New Zealand Standard or Standards New Zealand
  - NZS/BS** means the joint New Zealand and British Standard
  - standard** has the same meaning as in section 4(1) of the Standards and Accreditation Act 2015
  - SwRI** means the Southwest Research Institute, San Antonio, Texas, USA.
- (2) In these regulations, a reference to a **UL standard** is a reference to a standard published by UL LLC, a United States limited liability company.

## 8 References to distances

Any distances referred to in these regulations are, unless the context otherwise requires, to be read so that the shortest horizontal distance between the relevant points is not less than the distance stated.

Compare: SR 2001/116 r 5

**9 Separation distances not to extend beyond boundary unless agreed**

A separation distance required by these regulations must not, unless the context otherwise requires, be calculated beyond the boundary of the property at which the relevant hazardous substance is present unless the owner, lessee, sub-lessee, occupier, or person in possession of any property beyond that boundary (the **adjacent property**) agrees in writing that the separation distance may be calculated to include the adjacent property.

**10 References to quantities**

- (1) In determining whether the requirement for a hazardous substance location or a compliance certificate is activated, the threshold quantity is exceeded if the quantity-ratio sum is greater than 1 when determined in accordance with the following formula:

$$\text{quantity-ratio sum} = \Sigma [qp_i/qa_i]$$

where—

$\Sigma$  is the symbol for summation of the calculated ratios for all the hazard classifications present

$qp_i$  is the quantity of substance with a particular hazard classification present

$qa_i$  is the quantity of substance of that hazard classification that activates the relevant requirement.

- (2) The quantity-ratio sum for class 1 to 5 substances must—
- sum only substances of the same subclass (for example, class 3.1A, 3.1B, and 3.1C substances); and
  - include only those classes that trigger the requirement.
- (3) The threshold quantity-ratio sum for class 6 and 8 substances must include both classes unless the substances are incompatible as specified in Schedule 15 and are stored separately.
- (4) Unless otherwise specified, the quantity of an organic peroxide must be determined by mass.
- (5) Where a quantity of gas is specified—
- as cubic metres (m<sup>3</sup>), this volume is determined by taking the contents and conditions of the gas held in a container and then calculating the volume that the gas would occupy at 15°C and 101.3 kPa absolute pressure;
  - in kilograms (kg), this refers to the net weight of the gas in liquefied form as held in its container.
- (6) Where a quantity refers to a class 1 substance, that quantity must be a net explosive quantity (**NEQ**), where NEQ is the gross weight less the weight of any construction materials of the article in kilograms (kg).

Compare: SR 2001/116 r 6

*Relationship of regulations with safe work instruments***11 Safe work instruments that impose or modify requirements**

- (1) An obligation imposed by a referring provision on a PCBU or other person to comply or ensure compliance with a relevant safe work instrument is to be treated as an obligation to comply or ensure compliance, in accordance with the instrument, with—
  - (a) the modified requirements in the referring provision; or
  - (b) the instrument in place of the requirements in the referring provision.
- (2) A PCBU or other person who contravenes an obligation of a kind described in subclause (1) contravenes the referring provision.
- (3) This regulation does not apply to a safe work instrument approved for the purposes of regulation 11.39, 13.46, 16.46, or 17.105.
- (4) In this regulation,—

**modified requirements** means the requirements of the referring provision as modified by the safe work instrument, including by—

- (a) varying a requirement; or
- (b) replacing a requirement; or
- (c) providing an alternative method of complying with a requirement; or
- (d) deleting a requirement; or
- (e) adding a new requirement

**referring provision** means a provision of these regulations that refers to a safe work instrument

**relevant**, in relation to a safe work instrument,—

- (a) means the instrument relates to the same matter as the referring provision; and
- (b) includes a relevant part of a safe work instrument that relates to a range of matters.

**12 Safe work instruments that prescribe exposure standards**

- (1) A safe work instrument may be approved that prescribes an exposure standard for the purposes of paragraph (b) of the definition of prescribed exposure standard in regulation 3(1).
- (2) In addition, a safe work instrument approved for the purposes of any other provision of these regulations that refers to safe work instruments has effect for the purposes of paragraph (b) of the definition of prescribed exposure standard in regulation 3(1).

## Part 1

### Application

#### *Application to Armed Forces*

#### 1.1 Application to Defence Force

- (1) These regulations—
  - (a) do not apply to a hazardous substance, or to a gas under pressure, under the control of the Defence Force in the circumstances set out in—
    - (i) section 7(3) of the Act; or
    - (ii) regulation 1.2(1):
  - (b) apply to a hazardous substance, or to a gas under pressure, controlled by the Defence Force only to the extent and in the manner set out in regulation 1.2(4) and (5).
- (2) In regulations 1.2 and 1.3,—

**Civil Staff** has the same meaning as in section 2(1) of the Defence Act 1990

**Hazardous Substances Order** means a Defence Force Order issued and promulgated in place of these regulations under section 27 of the Defence Act 1990 regulating, in accordance with regulation 1.2(2), the management of hazardous substances in connection with any functions and operations of the Defence Force

**officer** has the same meaning as in section 2(1) of the Defence Act 1990.

#### 1.2 Management of hazardous substances controlled by Defence Force

- (1) This regulation applies if the Chief of Defence Force or any other officer or person authorised by the Chief of Defence Force has—
  - (a) issued and promulgated a Hazardous Substances Order; and
  - (b) provided a copy of the order to WorkSafe.
- (2) The Chief of Defence Force must ensure that the work health and safety requirements in the Hazardous Substances Order are, to the extent that is reasonably practicable, consistent with the requirements of these regulations.
- (3) The Chief of Defence Force must ensure that the management of hazardous substances in connection with the functions and operation of the Defence Force, both by members of the Armed Forces and by the Civil Staff and other persons who are not members of the Armed Forces, is carried out in accordance with the Hazardous Substances Order.
- (4) For the purpose of the management of hazardous substances in connection with the functions and operation of the Defence Force by the Civil Staff and other persons who are not members of the Armed Forces,—



- (a) the Defence Force (in its capacity as a PCBU) and those persons must comply with the Hazardous Substances Order as if its requirements were requirements of these regulations; and
  - (b) a requirement in the order may be enforced in relation to any person referred to in paragraph (a) in the same way as a requirement in these regulations, subject to subclause (5).
- (5) For the purposes of subclause (4)(b),—
  - (a) a failure by the Defence Force (in its capacity as a PCBU) to comply with the Hazardous Substances Order is an offence against these regulations punishable on conviction by a fine not exceeding \$50,000;
  - (b) a failure by a member of the Civil Staff or another person who is not a member of the Armed Forces to comply with the Hazardous Substances Order is an offence against these regulations punishable on conviction by a fine not exceeding \$2,000;
  - (c) to avoid doubt, no prosecution may be brought under paragraph (a) or (b) against a member of the Armed Forces.

### 1.3 Further obligations of Chief of Defence Force

The Chief of Defence Force or any other officer or person authorised by the Chief of Defence Force must—

- (a) give a copy of the Hazardous Substances Order (and any amendment to the order) to WorkSafe; and
- (b) in consultation with WorkSafe, periodically review the requirements for the management of hazardous substances in the Hazardous Substances Order; and
- (c) report the results of that review to the Minister and the Minister of Defence.

#### *Application to hazardous waste*

### 1.4 Hazardous waste

These regulations apply to the use, handling, and storage of hazardous waste.

#### *Exemption of certain hazardous substances*

### 1.5 Hazardous substances used for motive power or control of vehicle, ship, or aircraft

These regulations do not apply to a hazardous substance that is—

- (a) used as the motive power for, or to control, a vehicle, a ship, or an aircraft, (including the emergency system for a vehicle, ship, or aircraft); and

- (b) contained in the fuel system, electrical system, control system, or emergency system of the vehicle, ship, or aircraft.

Compare: SR 2001/117 r 4; SR 2001/120 r 7; SR 2001/123 r 4; SR 2001/124 r 4

### **1.6 Transport by land, sea, or air**

- (1) These regulations apply to hazardous substances transported by land, sea, or air only as provided in subclauses (2) and (3).
- (2) The following provisions of these regulations (in addition to the requirements of the Land Transport Rule: Dangerous Goods 2005) apply to hazardous substances transported by land:
  - (a) regulation 1.10:
  - (b) regulations 8.3 and 8.4:
  - (c) regulations 9.3 to 9.7:
  - (d) regulations 9.48 to 9.51:
  - (e) regulations 13.9, 13.11, 13.12, and 13.14 to 13.16:
  - (f) regulations 14.3 to 14.6 and 14.11:
  - (g) Part 16.
- (3) The following provisions of these regulations (in addition to Part 24A of the Maritime Rules (carriage of cargoes—dangerous goods) and Part 92 of the Civil Aviation Rules (carriage of dangerous goods)) apply to hazardous substances transported by sea or air:
  - (a) regulation 1.10:
  - (b) regulations 9.3 to 9.7:
  - (c) regulations 13.9, 13.11, and 13.12:
  - (d) regulations 14.3 to 14.6.

### **1.7 Offshore petroleum installations**

- (1) These regulations do not apply to any hazardous substance present on an offshore installation within the meaning of the Health and Safety at Work (Petroleum Exploration and Extraction) Regulations 2016.
- (2) This regulation overrides all other provisions of these regulations.

### **1.8 Fuel gas**

- (1) These regulations do not apply to any fuel gas that is supplied through a distribution system, or is used in a gas installation or gas appliance, within the meaning of the Gas Act 1992.
- (2) These regulations do not apply to any fuel gas conveyed through a pipeline within the meaning of the Health and Safety in Employment (Pipelines) Regulations 1999.

Compare: SR 2001/120 r 7; SR 2001/123 r 4A; SR 2001/124 r 5

## 1.9 Ethanol dilutions

These regulations do not apply to a substance that is an ethanol-water dilution intended for drinking—

- (a) when the substance is stored in containers of a capacity greater than 5 L;  
or
- (b) when the ethanol content of the substance is not more than 15% by volume.

## 1.10 Transhipment of class 1 substances through New Zealand

- (1) A PCBU with management or control of a ship or aircraft must not transport or store on the ship or aircraft a class 1 substance that is being transhipped through New Zealand unless the PCBU has obtained a permit from WorkSafe for that purpose.
- (2) A PCBU with management or control of the unloading, handling, storage (other than on a ship or aircraft), transportation by land, or reloading of a class 1 substance that is being transhipped through New Zealand must not carry out that work or direct or allow it to be carried out unless the PCBU—
  - (a) has obtained a permit from WorkSafe for that purpose; or
  - (b) operates under a permit obtained by another PCBU to whom this subclause applies.
- (3) Subclause (2) does not apply to a PCBU who complies with all applicable requirements of these regulations.
- (4) A PCBU who holds a permit issued under subclause (2), or who operates under another permit, is not required to comply with the provisions of these regulations that relate to the matters to which the permit applies.
- (5) In giving a permit under subclause (1) or (2), WorkSafe may impose any conditions it considers appropriate, including—
  - (a) conditions relating to the matters covered by the permit:
  - (b) conditions that require compliance with applicable provisions of these regulations, with or without modification:
  - (c) conditions that apply to the permit holder or any other PCBU who operates under the permit.
- (6) An application for a permit must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (7) In this regulation,—  
**modification**, in relation to a provision of these regulations, means—
  - (a) the variation, replacement, or deletion of a requirement in the provision;  
or

- (b) the provision of an alternative means of complying with a requirement in the provision

**tranship**, in relation to a class 1 substance, means to import the substance into New Zealand solely for the purpose of export within 20 working days to another destination outside New Zealand.

### **1.11 Laboratories**

- (1) These regulations apply to laboratories, subject to subclause (2).
- (2) Parts 2 to 17 and 19 do not apply to a laboratory referred to in regulation 18.2, except as provided in Part 18.

### **1.12 Gas under pressure**

- (1) Provisions of these regulations that apply to gas under pressure apply whether or not the gas is a hazardous substance.
- (2) These regulations do not apply to a gas under pressure that is—
  - (a) used as the motive power for, or to control, a vehicle, a ship, or an aircraft, (including the emergency system for a vehicle, ship, or aircraft); and
  - (b) contained in the fuel system, electrical system, control system, or emergency system of the vehicle, ship, or aircraft.
- (3) A term that is defined in these regulations in relation to a hazardous substance, and that is used in these regulations in relation to a gas under pressure, has its defined meaning in relation to a gas under pressure.

## **Part 2**

## **Labelling, signage, safety data sheets, and packaging**

### *Labelling*

#### **2.1 Workplace labelling of hazardous substance containers**

- (1) A PCBU with management or control of a workplace must ensure that a container at the workplace that contains a hazardous substance is, while it contains the hazardous substance, labelled in accordance with subclause (2) if—
  - (a) the hazardous substance is—
    - (i) manufactured at the workplace; or
    - (ii) transferred or decanted from its original container at the workplace into a portable container with a capacity of 40 L or less; and
  - (b) the hazardous substance will not be supplied to a person outside the workplace.
- (2) A hazardous substance is labelled correctly under subclause (1) if it is packed in a container that has a label in English that includes—

- (a) the product name or chemical name; and
  - (b) a hazard pictogram and hazard statement consistent with the correct classification of the substance.
- (3) The PCBU must ensure that a container that is labelled for a hazardous substance in accordance with subclause (2) is relabelled if the original label ceases to be legible.
- (4) The PCBU must ensure that a container at that workplace that is labelled for a hazardous substance is used only for the use, handling, or storage of that hazardous substance.
- (5) This regulation does not apply if—
  - (a) the hazardous substance is used so soon after being put in the container that it is impracticable to label the container in accordance with this regulation; and
  - (b) the container is thoroughly cleaned immediately after the hazardous substance is used so that no residue remains that may present a hazard.
- (6) This regulation does not apply in relation to anhydrous ammonia that is contained in plant in which anhydrous ammonia is used as a refrigerant.
- (7) A person who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

## **2.2 Labelling of other containers containing hazardous substances**

- (1) A PCBU with management or control of a workplace must, so far as is reasonably practicable, ensure that a container that contains a hazardous substance to which regulation 2.1 does not apply, retains the manufacturer or importer label and that the label is maintained in a legible condition.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

## **2.3 Labelling of containers for hazardous waste located in workplace**

- (1) A PCBU with management or control of a workplace where hazardous waste is located must ensure that it is correctly labelled in accordance with this regulation.
- (2) The hazardous waste is correctly labelled if it is packed in a container that has a label in English that includes—

- (a) identification of the waste that reflects the nature of the waste as closely as possible (for example, chlorinated solvent waste, flammable waste, chromium VI waste); and
  - (b) the name, address, and business telephone number of the producer of the waste (if known); and
  - (c) a hazard pictogram and hazard statement consistent with the classification of the waste (if known) based on the known or likely constituents of the waste.
- (3) A person who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

**2.4 Alternative labelling for stationary tanks, process containers, and transportable containers**

- (1) A PCBU with management or control of a workplace must ensure that there is, on or near a stationary tank or a process container with a hazardous substance inside it, a label that includes—
  - (a) the product name or chemical name; and
  - (b) a hazard pictogram and hazard statement consistent with the correct classification of the substance; and
  - (c) if the substance is an explosive substance, a flammable substance, an oxidising substance, or an organic peroxide, a description of (as the case requires)—
    - (i) the steps to be taken to prevent an unintended explosion; or
    - (ii) the steps to be taken to prevent an unintended ignition; or
    - (iii) the steps to be taken to prevent an unintended combustion, acceleration of a fire, or thermal decomposition.
- (2) A PCBU with management or control of a workplace must ensure that there is at all times available to people near a tank wagon or a transportable container with a hazardous substance inside it, information that complies with those of the following requirements that apply in the circumstances:
  - (a) Land Transport Rule: Dangerous Goods 2005;
  - (b) Part 24A of the Maritime Rules (carriage of cargoes—dangerous goods);
  - (c) Part 92 of the Civil Aviation Rules (carriage of dangerous goods).
- (3) A person who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

*Signage***2.5 Duty of PCBU to display signage: general duty**

- (1) This regulation applies to a workplace where—
  - (a) quantities of a hazardous substance with a hazard classification specified in the first column of the table in Schedule 3 and in a form specified in the second column of that table, that exceed the quantity specified for that classification in the third column of that table are present; or
  - (b) more than 50 kg of LPG, propane, butane, or isobutane is present within a building; or
  - (c) any quantity of LPG, propane, butane, isobutane, or other flammable refrigerant is present in an integral part of a refrigeration system that is contained in a machinery room as defined in AS/NZS 5149.1: 2016, AS/NZS 5149.2: 2016, AS/NZS 5149.3: 2016, and AS/NZS 5149.4: 2016—Refrigerating systems and heat pumps—Safety and environmental requirements; or
  - (d) more than 250 kg of LPG, propane, butane, or isobutane is present in a place other than a building.
- (2) The PCBU with management or control of the workplace must ensure that—
  - (a) the signage required by regulation 2.6 is displayed; and
  - (b) the content, presentation, and positioning of the signage comply with that regulation; and
  - (c) the signage meets the following requirements for comprehensibility, clarity, and durability:
    - (i) the signage is in English;
    - (ii) the signage is readily understandable;
    - (iii) abbreviations and acronyms are not used unless they are in common English usage and the term described by the abbreviation or acronym is used at least once on the signage;
    - (iv) all required information is clearly visible and legible at a distance of not less than 10 m under varying conditions (for example, rain or poor light);
    - (v) the signage is made of materials that are durable, are resistant to sunlight, and require minimal maintenance.
- (3) Subclause (1)(a) does not apply to anhydrous ammonia that is contained in plant in which anhydrous ammonia is used as a refrigerant.
- (4) Subclause (2)(c)(iv) does not apply to signage at a service station where E10, E85, petrol, or diesel is stored for the refuelling of vehicles of the general public if the signs are clearly visible and legible at the point of refuelling.

- (5) A person who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/123 r 42 and SR 2001/124 r 51

## **2.6 Signage requirements for general duty**

- (1) For the purposes of regulation 2.5, if a hazardous substance is located in a building at a workplace, but is not confined to a particular room or compartment within the building, the PCBU with management or control of the workplace must ensure that there is positioned at every vehicular and pedestrian entrance to the building and the land on which the building is located signage—
  - (a) stating that hazardous substances are present; and
  - (b) stating the general type of hazard of each of them; and
  - (c) describing the immediate response action to be taken in an emergency.
- (2) Despite subclause (1), if the hazardous substance is a class 1 substance, the PCBU must ensure that signage that complies with paragraphs (a) to (c) of that subclause is positioned—
  - (a) at every vehicular and pedestrian entrance to the building; and
  - (b) at every approach to the building that is within the boundary of the land where the building is located and that emergency services organisations may use.
- (3) If hazardous substances are located in a particular room or compartment within the building, the PCBU with management or control of the workplace must ensure that signage that complies with subclause (5) is positioned at each entrance to the room or compartment.
- (4) If hazardous substances are located in an outdoor area, the PCBU with management or control of the workplace must ensure that signage that complies with subclause (5) is positioned immediately next to that area.
- (5) The signage required by subclauses (3) and (4) must—
  - (a) contain—
    - (i) the word EXPLOSIVES in relation to class 1 substances; or
    - (ii) the word HAZCHEM in relation to class 2, 3, 4, 5, 6, or 8 substances; and
  - (b) state the hazardous properties and describe the general type of hazard relating to each category of hazardous substance present through the use of—
    - (i) hazard pictograms consistent with the correct classification of the hazardous substances present; or



- (ii) hazard statements consistent with the correct classification of the hazardous substances present; and
  - (c) describe,—
    - (i) if the substances include explosive substances, the precautions necessary to prevent unintended explosion of an explosive substance; and
    - (ii) if the substances include flammable substances, the precautions necessary to prevent unintended ignition of a substance; and
    - (iii) if the substances include oxidising substances or organic peroxides, the precautions necessary to prevent unintended combustion of, acceleration of a fire from, or thermal decomposition of, an oxidising substance or organic peroxide; and
  - (d) describe the immediate response action to be taken in an emergency.
- (6) Subclause (4) does not apply if the hazardous substance is class 6.1A, 6.1B, or 6.1C vertebrate toxic agents or agrichemicals at a temporary storage site.

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**Example**

The following are examples of temporary storage sites:

- (a) a temporary field bait handling site;
  - (b) an aircraft loading site.
- 

Compare: SR 2001/124 r 52

**2.7 Signage requirements for transit depots**

- (1) A PCBU with management or control of a transit depot at which containers that contain hazardous substances are located must ensure that—
  - (a) there is positioned at the primary points of vehicular and pedestrian entry to the land on which the transit depot is located signage that—
    - (i) contains the word HAZCHEM; and
    - (ii) identifies the site as a transit depot; and
    - (iii) warns people that hazardous substances may be present on the site; and
  - (b) that signage complies with regulation 2.5(2)(c).
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

## **2.8 Additional signage requirements for fireworks and safety ammunition**

- (1) This regulation applies in relation to fireworks or safety ammunition that is located in a building at a workplace, but is not confined to a particular room or compartment within the building.
- (2) A PCBU with management or control of the workplace or building must, in addition to complying with regulation 2.5, ensure that there is positioned at the primary points of vehicular and pedestrian entry to the building, and at the primary points of vehicular and pedestrian entry to the land on which the building is located, signage—
  - (a) stating that fireworks or safety ammunition (as the case may be) is present; and
  - (b) stating its general type of hazard; and
  - (c) describing its general type of classification; and
  - (d) describing the immediate response action to be taken in an emergency.
- (3) Despite subclause (2), the PCBU is not required to comply with regulation 2.6(1) and (2).
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

## **2.9 Signage at workplace where milking animals are milked**

- (1) A PCBU with management or control of a workplace where a hazardous substance that is a teat-sanitising product or a dairy maintenance compound is located in a building in which milking animals are milked must ensure that—
  - (a) signage is positioned at the primary vehicular or pedestrian entrance to the building—
    - (i) stating that hazardous substances are present; and
    - (ii) stating the general type of hazard of each of them; and
    - (iii) describing the immediate response action to be taken in an emergency; and
  - (b) that signage complies with regulation 2.5(2)(c).
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

## **2.10 Duty of PCBU to maintain signage**

- (1) A PCBU who is required to display signage must—

- (a) alter the signage as soon as practicable if a change in the type, class, or quantity of hazardous substances present at the workplace requires different information to be displayed; and
  - (b) ensure that the signage is—
    - (i) kept clean; and
    - (ii) maintained in good repair; and
    - (iii) not covered or obscured.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

### *Safety data sheets*

#### **2.11 Duty of PCBU to obtain and provide access to safety data sheets**

- (1) A PCBU with management or control of a workplace must obtain the current safety data sheet for a hazardous substance from the manufacturer, importer, or supplier of the hazardous substance in the following circumstances:
  - (a) when the hazardous substance is first supplied for use at the workplace;
  - (b) when the hazardous substance is first supplied to the workplace after the safety data sheet is amended.
- (2) The hazardous substance must be treated as first supplied to a workplace if the supply is the first supply of the substance to the workplace for a period of 5 years.
- (3) The PCBU must ensure that the current safety data sheet for the hazardous substance or a condensed version of the key information from the safety data sheet (for example, a product safety card) is readily accessible—
  - (a) to a worker who is in his or her work areas at the workplace; and
  - (b) to any emergency service worker, or anyone else, who is likely to be exposed to the hazardous substance at the workplace.
- (4) In the case of workers who travel between workplaces because their work is carried out in more than 1 geographical location, the safety data sheet may be kept at the PCBU's principal place of business if those workers (wherever they are) can immediately obtain the key information from the safety data sheet (or a condensed version) in an emergency.
- (5) Subclauses (1) to (4) do not apply to a hazardous substance that—
  - (a) is in transit; or
  - (b) in the case of a substance in a workplace of a retailer,—
    - (i) is a consumer product; and

- (ii) is in that workplace only for the purpose of supply to other premises; and
    - (iii) is not intended to be opened on the retailer's premises; or
  - (c) is a consumer product in a workplace and is used at the workplace only in quantities, and in a way, that is consistent with household use; or
  - (d) is anhydrous ammonia that is contained in plant in which anhydrous ammonia is used as a refrigerant, except in the case of quantities of anhydrous ammonia in excess of 100 kg.
- (6) In the circumstances referred to in subclause (5), the PCBU must ensure that sufficient information about the safe use, handling, and storage of the hazardous substance is readily accessible to a worker who is in his or her work area at the workplace.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

### *Packaging*

#### **2.12 Duty of PCBU relating to packaging of decanted or transferred substances**

- (1) This regulation applies if a hazardous substance is decanted or transferred from a container in the workplace for use within that workplace.
- (2) A PCBU with management or control of the workplace must ensure that the hazardous substance is packaged in a container that—
  - (a) is in sound condition; and
  - (b) will safely contain the hazardous substance—
    - (i) within the range of temperatures at which the container is to be used; and
    - (ii) while the substance is likely to be packaged; and
  - (c) is made of material that is compatible with, and will not be adversely affected by, the hazardous substance; and
  - (d) does not usually contain food or beverages and cannot be mistakenly identified as containing food or beverages.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

**2.13 Packaging of other containers containing hazardous substances**

- (1) A PCBU with management or control of a workplace must, so far as is reasonably practicable, ensure that a hazardous substance to which regulation 2.12 does not apply is packaged in a container that is in sound condition.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

**2.14 Duty of PCBU in relation to certain portable containers**

- (1) This regulation applies if petrol, aviation gasoline, or racing gasoline is decanted or transferred from a container at a workplace into a portable container that has a capacity of 25 L or less.
- (2) A PCBU with management or control of the workplace must ensure that the portable container complies with the requirements of—
  - (a) AS/NZS 2906:2001—Fuel containers—Portable—Plastics and metal; or
  - (b) ASTM F852:08—Standard specification for portable gasoline containers for consumer use; or
  - (c) a standard referred to in a safe work instrument.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

**Part 3****General duties relating to risk management****3.1 Duty of PCBU to keep hazardous substances inventory**

- (1) A PCBU with management or control of a workplace must ensure that—
  - (a) an inventory of hazardous substances used, handled, manufactured, or stored at the workplace is prepared and kept at the workplace; and
  - (b) the inventory is maintained to ensure the information in the inventory is up to date.
- (2) The inventory must include—
  - (a) the product or chemical name and UN number (if available) of each hazardous substance at the workplace; and
  - (b) the maximum quantity of each hazardous substance likely to be at the workplace; and
  - (c) the location of those hazardous substances; and

- (d) any specific storage and segregation requirements relating to those hazardous substances; and
  - (e) for each hazardous substance listed in the inventory, the current safety data sheet or a condensed version of the key information from the safety data sheet; and
  - (f) any hazardous waste.
- (3) The inventory must include, in relation to hazardous waste,—
- (a) an identifier that describes the nature of the waste as closely as possible; and
  - (b) the maximum quantity of the waste likely to be at the workplace; and
  - (c) the location of the waste at the workplace; and
  - (d) any specific storage or segregation requirements for the waste.

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**Example**

For paragraph (a), an identifier might be chlorinated solvent waste, flammable waste, or chromium VI waste.

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- (4) The PCBU must ensure that the inventory is readily accessible to any emergency service worker attending the workplace, including—
- (a) during an emergency; and
  - (b) after the workplace has been evacuated.
- (5) This regulation does not apply—
- (a) to a transit depot or designated transfer zone at which the PCBU with management or control is able, at any time on the request of an emergency service worker, to supply the product or chemical name and quantities of each hazardous substance at the depot or in the transfer zone; or
  - (b) to a hazardous substance that is a consumer product and is used at the workplace only in quantities that are consistent with household use.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

Compare: Model Work Health and Safety Regulations r 346 (Aust)

### **3.2 Managing risks associated with hazardous substances**

- (1) A PCBU must manage risks to health and safety associated with using, handling, manufacturing, or storing a hazardous substance or a group of hazardous substances with the same hazardous properties at a workplace.
- (2) In managing risks, the PCBU must have regard to the following:

- (a) the quantity of the hazardous substances used, handled, manufactured, or stored;
  - (b) the health and physico-chemical hazards associated with the hazardous substance;
  - (c) any potential chemical or physical reaction between the hazardous substance and another substance, including a substance that may be generated by the reaction;
  - (d) any ignition sources (for example, flames, heat, or sparks) that might ignite the hazardous substance;
  - (e) any structure, plant, or system of work that is used in the use, handling, manufacture, or storage of the hazardous substance;
  - (f) the nature of the work to be carried out by workers with the hazardous substance, including—
    - (i) the workers' risks of exposure to the substance; and
    - (ii) the likely degree of exposure;
  - (g) any prescribed exposure standard for the hazardous substance;
  - (h) any restricted entry interval for the substance, if one has been set.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: Model Work Health and Safety Regulations r 351 (Aust)

### 3.3 Duty of PCBU to review control measures

- (1) In addition to the circumstances specified in regulation 8 of the Health and Safety (General Risk and Workplace Management) Regulations 2016, a PCBU with management or control of a workplace must ensure that a control measure implemented under this Part in relation to a hazardous substance at the workplace is reviewed and, if necessary, revised in the following circumstances:
- (a) after a significant change to—
    - (i) the safety data sheet for that hazardous substance; or
    - (ii) the information about that hazardous substance in the PCBU's inventory of hazardous substances;
  - (b) after any notifiable event in the workplace involving a relevant hazardous substance;
  - (c) at least once every 5 years.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: Model Work Health and Safety Regulations r 352 (Aust)

## **Part 4**

### **Certified handlers and supervision and training of workers**

#### *Certified handlers*

#### **4.1 Certification required for certain work**

- (1) For the purposes of section 206 of the Act, work that these regulations require to be carried out by a certified handler may be carried out only by a person who holds a compliance certificate as a certified handler.
- (2) A compliance certifier may issue or renew a compliance certificate as a certified handler in accordance with regulations 4.2 and 4.3.

#### **4.2 Issue of compliance certificates for certified handlers**

- (1) A compliance certificate as a certified handler must be issued on the condition, as specified in the certificate, that it applies only in respect of particular phases of the life cycles of—
  - (a) a hazardous substance, or combination of hazardous substances; or
  - (b) hazardous substances with 1 or more hazard classifications.
- (2) A compliance certificate as a certified handler must state the name, residential address, and work contact information (for example, a street address, email address, or telephone number) of the certified handler.
- (3) A compliance certificate as a certified handler remains valid for a period of 5 years from the date of issue.
- (4) Before issuing a compliance certificate as a certified handler, a compliance certifier must be satisfied that the handler meets the competency requirements for certified handlers specified in regulation 4.3.
- (5) Before renewing an existing compliance certificate as a certified handler, the compliance certifier must be satisfied that the handler continues to meet the competency requirements for certified handlers specified in regulation 4.3.

Compare: SR 2001/122 r 4

#### **4.3 Competency requirements for certified handlers**

- (1) Before being certified as a certified handler at a workplace, a person must know and be able to describe the following matters:
  - (a) the hazard classifications, properties, and adverse effects of those hazardous substances for which he or she is to be a certified handler;
  - (b) the requirements that are imposed by these regulations in relation to those hazardous substances;



- (c) the requirements that are imposed under the HSNO Act in relation to those hazardous substances;
  - (d) any proposed conditions of the person's compliance certificate as a certified handler;
  - (e) the precautions required to prevent injury or illness to any person at the workplace caused by any of those substances;
  - (f) the procedures to adopt in an emergency involving those substances;
  - (g) any variations of requirements, alternative means of compliance with requirements, or additional requirements specified in a relevant safe work instrument.
- (2) The person must also—
- (a) know, and demonstrate a working knowledge of, the procedures and plant (including personal protective equipment) necessary to manage those hazardous substances at the workplace for which the person is to be a certified handler; and
  - (b) have received information, training, and instruction in accordance with regulation 4.5.
- (3) A written record is sufficient evidence on which a compliance certifier may decide whether to issue or renew a compliance certificate as a certified handler to that person if that record—
- (a) is signed by the provider of a course of instruction or a work supervisor; and
  - (b) describes the method used to assess a person's knowledge and practical skills and the results of that assessment.

Compare: SR 2001/122 r 5

#### **4.4 Workers who do not require certificate**

Regulation 4.1 does not apply to the following persons when performing their official duties:

- (a) an inspector or any other person who may exercise the powers of an inspector under the Act;
- (b) an enforcement officer appointed under the HSNO Act;
- (c) a member of the Civil Staff employed by the New Zealand Defence Force under the Defence Act 1990 whose duties include the collection, storage, or disposal of explosives;
- (d) an ACVM officer appointed under the Agricultural Compounds and Veterinary Medicines Act 1997;
- (e) a person appointed as a Customs officer for the purposes of the Customs and Excise Act 1996 by the chief executive within the meaning of that Act;

- (f) an authorised person within the meaning of section 6 of the Fire and Emergency New Zealand Act 2017:
- (g) a member of the New Zealand Police:
- (h) an aviation security officer employed in the Aviation Security Service under the Civil Aviation Act 1990.

*Supervision and training of workers*

**4.5 Duty of PCBU to provide information, training, and instruction**

- (1) In addition to complying with regulation 9 of the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, a PCBU must ensure that every worker who uses, handles, manufactures, or stores a hazardous substance (including hazardous waste) is, before the worker is allowed to carry out or supervise work involving those substances, provided with—
  - (a) the information referred to in subclause (2); and
  - (b) the training and instruction referred to in subclause (3).
- (2) The information is—
  - (a) any operations in the worker’s work area where hazardous substances are present; and
  - (b) the location and availability of known reference material on the hazards, safe handling, and storage of the hazardous substances found in the workplace, including (without limitation) safety data sheets.
- (3) The training and instruction must include—
  - (a) training and instruction in the following:
    - (i) the physico-chemical and health hazards associated with the hazardous substances the worker uses at work:
    - (ii) the procedures (if applicable) for the safe use, handling, manufacture, storage, and disposal of the hazardous substances:
    - (iii) practice in the safe use of plant (including personal protective equipment) necessary to manage the hazardous substances:
    - (iiia) the worker’s obligations under these regulations:
    - (iv) the actions that the worker should take in an emergency involving the hazardous substances; and
  - (b) an appropriate period of practical experience of the matters described in paragraph (a), under direct supervision in the workplace.
- (4) The information provided under subclause (2) and the training and instruction provided under subclause (3) may cover specific hazardous substances or groups of hazardous substances with the same hazardous properties.
- (5) A PCBU must—

- (a) keep a record of training and instruction provided under this regulation for each worker; and
  - (b) ensure the record is available for inspection by an inspector or compliance certifier.
- (6) A PCBU who can demonstrate, by documentation or certification, that a worker's previous experience or training (or both) has resulted in training equivalent to that described in subclause (3) is not required to provide training and instruction in accordance with subclause (3) unless the PCBU considers refresher training to be necessary.
- (7) Despite subclause (6), a worker with equivalent training who is new to the workplace must receive site-specific induction and have appropriate supervised experience at the new workplace.
- (8) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (9) A PCBU who contravenes subclause (5) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

#### **4.6 Duty of PCBU to provide supervision**

- (1) Without limiting regulation 9 of the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, a PCBU must provide a worker at the workplace with the supervision that is necessary to protect the worker from risks to his or her health and safety arising from the worker's work, if the worker—
  - (a) uses, handles, manufactures, or stores hazardous substances at the workplace; or
  - (b) operates, tests, maintains, repairs, or decommissions plant used in the use, handling, manufacture, or storage of hazardous substances at the workplace; or
  - (c) is likely to be exposed to hazardous substances at the workplace.
- (2) The PCBU must ensure that the supervision provided under subclause (1) is suitable and adequate having regard to—
  - (a) the nature of the risks associated with the hazardous substance; and
  - (b) the knowledge and experience of the worker.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;

- (b) for any other person, to a fine not exceeding \$30,000.

Compare: Model Work Health and Safety Regulations r 379 (Aust)

## **Part 5**

### **Emergency management**

#### *Exemption from Part 5*

##### **5.1 Exemption for certain refrigerants**

This Part does not apply to anhydrous ammonia that is contained in plant in which less than 100 kg of anhydrous ammonia is used as a refrigerant.

#### **Subpart 1—Fire extinguishers**

##### **5.2 Application of this subpart**

This subpart applies to a place, within a workplace, where hazardous substances of a hazard classification specified in the first column of the table in Schedule 4 and in a form specified in the second column of that table are at any time present or likely to be present in an aggregate quantity that is greater than the quantity specified in the third column of that table.

Compare: SR 2001/123 r 21

##### **5.3 Duty of PCBU to provide fire extinguishers**

- (1) A PCBU with management or control of a workplace must ensure that each place within the workplace to which this subpart applies has the number of fire extinguishers specified in the fourth column of the table in Schedule 4 for hazardous substances to which this subpart applies.
- (2) If substances of 2 or more hazard classifications are present or likely to be present in the place at the same time,—
  - (a) the numbers of fire extinguishers are not cumulative; but
  - (b) the highest of the numbers of fire extinguishers specified for substances of the various classifications must be present.
- (3) Despite subclause (1), in the case of LPG, propane, butane, or isobutane present or likely to be present in a quantity of 50 kg or more, the PCBU must ensure that—
  - (a) a fire extinguisher is present; or
  - (b) there is present a hydrant system incorporating a 20 mm diameter hose, fitted with a spray nozzle and of sufficient length to enable water to be directed to all sides of the system's tank or tanks.
- (4) This regulation does not apply to an unattended dispensing station where there is stored E10, E85, petrol, aviation gasoline, racing gasoline, kerosene, or diesel fuel for self-service refuelling.

- (5) References in Schedule 4 to volumes of gaseous hazardous substances must be read as references to volumes of those substances as they would be at—
  - (a) a pressure of 101.3 kPa; and
  - (b) a temperature of 20°C.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **5.4 Location of fire extinguishers**

- (1) A PCBU with management or control of a workplace must ensure that each fire extinguisher required under this subpart is located so that it is—
  - (a) clearly visible; and
  - (b) readily accessible in an emergency.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/123 r 22

#### **5.5 Capability of fire extinguishers**

- (1) A PCBU with management or control of a workplace must ensure that each fire extinguisher required under this subpart has a classification and rating of at least 30B in accordance with AS/NZS 1850:2009—Portable fire extinguishers—Classification, rating and performance testing.
- (2) A person who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

### **Subpart 2—Emergency response plans**

#### **5.6 Application of this subpart**

- (1) This subpart applies to a place within a workplace where hazardous substances of a hazard classification specified in the first column of the table in Schedule 5 and in a form specified in the second column of that table are at any time present or likely to be present in an aggregate quantity that is greater than the relevant quantity specified in the third column of that table.
- (2) Despite subclause (1), if petrol and related hazardous substances are present or likely to be present at the place, this subpart applies as follows:

- (a) for petrol, aviation gasoline, or racing gasoline, this subpart applies, subject to paragraphs (b) and (c), as if the quantity specified in the third column of the table in Schedule 5 for hazard classification 3.1A were 1 000 L;
  - (b) for petrol, aviation gasoline, racing gasoline, kerosene, or diesel fuel that is stored at a farm of not less than 4 ha in a way that ensures that any spillage will not endanger any building or flow into any stream, lake, or natural water, this subpart applies as if the quantity specified in the third column of the table in Schedule 5 for hazard classifications 3.1A and 9.1B were 2 000 L;
  - (c) for petrol, aviation gasoline, racing gasoline, kerosene, or diesel fuel that is stored or proposed to be stored for a continuous period of less than 14 days in a way that ensures that any spillage will not endanger any building or flow into any stream, lake, or natural water, this subpart applies as if the quantity specified in the third column of the table in Schedule 5 for hazard classifications 3.1A and 9.1B were 2 000 L if the substances are stored—
    - (i) in a tank wagon; or
    - (ii) in secure containers, where each container has a capacity of less than 250 L.
- (3) If the third column of the table in Schedule 5 specifies a weight and a volume as alternative quantities for hazardous substances in gaseous form,—
- (a) subclause (1) applies as soon as either quantity of the substances is present or likely to be present; and
  - (b) the references to a volume of gaseous hazardous substances must be read as references to volumes of those substances as they would be at—
    - (i) a pressure of 101.3 kPa; and
    - (ii) a temperature of 20°C.

Compare: SR 2001/123 r 25

### **5.7 Duty to prepare emergency response plan**

- (1) A PCBU with management or control of a workplace must ensure that an emergency response plan is prepared for the workplace.
- (2) The emergency response plan must describe and apply to all reasonably foreseeable emergencies that may arise from a breach or failure of the controls on any hazardous substance present or likely to be present at the workplace.
- (3) The emergency response plan must, for each reasonably foreseeable emergency,—
  - (a) describe the actions to be taken to—

- (i) warn people at the workplace, and in surrounding areas that may be adversely affected by the emergency, that the emergency has occurred; and
    - (ii) advise those people about the actions they should take to protect themselves; and
    - (iii) help or treat any person injured in the emergency; and
    - (iv) manage the emergency so that its adverse effects are, in the order set out below,—
      - (A) restricted to the area initially affected; and
      - (B) reduced in severity as soon as practicable; and
      - (C) eliminated, if reasonably possible; and
    - (v) re-establish the controls put in place by the PCBU in respect of the hazardous substances at the workplace, including the use of protective equipment or agents (for example, neutralisers or absorbents); and
  - (b) identify each person with responsibility for the actions described in paragraph (a) (or any part of any of those actions) and give information on—
    - (i) how to contact the person; and
    - (ii) any skills the person is required to have; and
    - (iii) any special training needed to deal with an emergency involving the substance; and
    - (iv) any actions the person is expected to take; and
  - (c) specify—
    - (i) how to obtain information about the hazardous properties of, and means of controlling, the substance or substances that may be involved; and
    - (ii) actions to be taken to contact any emergency service provider; and
    - (iii) the purpose and location of each item of equipment or facilities to be used to manage the emergency; and
    - (iv) how to decide which actions to take; and
    - (v) the sequence in which actions should be taken; and
  - (d) provide—
    - (i) an inventory of hazardous substances present at the workplace; and
    - (ii) a site plan that shows the physical position of all hazardous substance locations within the boundary of the workplace (if applicable).
- (4) The emergency response plan—

- (a) must specify the type and location of the fire extinguishers provided in accordance with regulation 5.3, and any extra fire-fighting equipment or facilities provided, if any of the reasonably foreseeable emergencies identified in the plan is a fire; and
  - (b) must provide for the retention of any liquid or liquefied oxidising substance or organic peroxide to prevent it from contacting any incompatible substance.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **5.8 Duty to implement emergency response plan**

A PCBU with management or control of a workplace must ensure that the emergency response plan prepared under regulation 5.7 is implemented in the event of an emergency described in the plan.

#### **5.9 Availability of equipment, facilities, and people**

- (1) A PCBU who is required to have an emergency response plan must ensure that all equipment and facilities described in the emergency response plan and all responsible people described in the emergency response plan who are on duty are—
  - (a) present at the location concerned; or
  - (b) available to reach the location of the substance within the times specified in the plan; or
  - (c) in the case of a trained person, available to provide the advice or information specified in the plan within a time specified in the plan.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/123 r 31

#### **5.10 Availability of emergency response plans**

- (1) A PCBU who is required to have an emergency response plan for a workplace must ensure that the plan is available to—
  - (a) every person identified under regulation 5.7(3)(b) as being responsible for implementing the plan or a specific part of it; and
  - (b) every emergency service provider identified in the plan.
- (2) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—



- (a) for an individual, to a fine not exceeding \$10,000;
- (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/123 r 32

### **5.11 Fire and Emergency New Zealand may review emergency response plan**

- (1) Fire and Emergency New Zealand may review an emergency response plan to—
  - (a) assess whether the role proposed for the service is—
    - (i) achievable; and
    - (ii) consistent with the operational policies of the service; and
  - (b) identify anything that may adversely affect service operations during an emergency.
- (2) While reviewing a plan, Fire and Emergency New Zealand may request the PCBU to provide further written information if it considers that the plan provides insufficient information to enable the service to determine—
  - (a) its role under the plan; or
  - (b) the level or type of resources it may need to deploy to give effect to the plan.
- (3) After conducting a review, Fire and Emergency New Zealand may make a written recommendation to the PCBU about an emergency response plan.
- (4) The PCBU must, so far as is reasonably practicable, amend the emergency response plan to give effect to a recommendation made under subclause (3).
- (5) A PCBU who contravenes subclause (4) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

### **5.12 Test and revision of emergency response plan**

- (1) A PCBU must ensure that its emergency response plan is tested at least every 12 months to demonstrate whether the plan is workable and effective.
- (2) If a person, procedure, or action specified in an emergency response plan is changed, the PCBU must ensure that the plan is tested within 3 months of the change to demonstrate whether—
  - (a) the new person can perform his or her functions under the plan; and
  - (b) the new procedure or action is workable and effective.
- (3) The PCBU must, so far as is reasonably practicable, amend the emergency response plan in response to the findings of a test to ensure that the plan is workable and effective.

- (4) A PCBU must make a record of tests carried out under this regulation and of the results of those tests.
- (5) A PCBU must keep the record of a test for at least 2 years after the date on which the record was made.
- (6) A PCBU who contravenes subclause (1), (2), or (3) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (7) A PCBU who contravenes subclause (4) or (5) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

Compare: SR 2001/123 r 33

### **5.13 Plan may be part of other management documentation**

An emergency response plan may be part of any other management documentation for an emergency that is—

- (a) required by the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016; or
- (b) required for a major hazard facility by regulation 31 of the Health and Safety at Work (Major Hazard Facilities) Regulations 2016; or
- (c) required for an installation by regulation 72 of the Health and Safety at Work (Petroleum Exploration and Extraction) Regulations 2016; or
- (d) required for a mining operation by subpart 4 of Part 5 of the Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016; or
- (e) required by any other regulations made under the Act or by any other enactment; or
- (f) undertaken by a PCBU for some other reason.

Compare: SR 2001/123 r 34

## **Part 6 Compliance certification**

### **6.1 Interpretation**

In this Part, unless the context otherwise requires,—

**auditor** means a person engaged by WorkSafe under regulation 6.38

**authorisation** means an authorisation to issue compliance certificates granted under regulation 6.8, and **authorised** has a corresponding meaning

**certificate holder** means a person who holds a compliance certificate issued by a compliance certifier

**performance standard** means a performance standard issued by WorkSafe under regulation 6.43

**relevant requirement** means a requirement imposed by these regulations or by a safe work instrument referred to in these regulations

**scope**, in relation to the authorisation of a compliance certifier, means the matters requiring compliance certification that may be certified under the authorisation.

### Subpart 1—Authorisation of compliance certifiers

#### 6.2 Compliance certifiers must be authorised

The functions of a compliance certifier may be performed only by an authorised compliance certifier acting within the scope of that certifier's authorisation.

#### 6.3 Who may apply for authorisation

A person may apply to WorkSafe under this subpart to be authorised as a compliance certifier.

#### 6.4 Applicant and compliance certifier that is not individual

- (1) A person that is not an individual may apply for authorisation as a compliance certifier only if—
  - (a) it is currently accredited to a recognised industry standard by International Accreditation New Zealand on behalf of the Accreditation Council; and
  - (b) it employs or engages 1 or more individuals to perform the functions of a compliance certifier, each of whom—
    - (i) meets the qualification criteria for individual applicants for authorisation; and
    - (ii) is a fit and proper person to be authorised.
- (2) An authorised compliance certifier that is not an individual must ensure that the functions of a compliance certifier are performed only by 1 or more individuals specified under regulation 6.8(6)(b) in a condition to which the certifier's authorisation is subject.

#### 6.5 Applications for authorisation

- (1) An application for authorisation under regulation 6.3 must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) identify the applicant, including by giving the applicant's business address and email address; and

- (c) state the scope of the authorisation applied for; and
  - (d) be accompanied by information relating to,—
    - (i) for an individual applicant, the matters set out in regulation 6.8(2); and
    - (ii) for any other applicant, the matters set out in regulation 6.8(3); and
  - (e) be accompanied by the fee (if any) prescribed in Schedule 2; and
  - (f) if required under a safe work instrument, be accompanied by evidence that the applicant is covered by a scheme of insurance that WorkSafe is satisfied will apply in respect of any civil liability of the applicant that might arise from the applicant being authorised to issue compliance certificates.
- (2) WorkSafe must notify the applicant—
    - (a) that WorkSafe has received the application; and
    - (b) of the applicant's right to appear and be heard under subclause (6).
  - (3) WorkSafe must consider an application for authorisation within 20 working days after receiving it.
  - (4) If WorkSafe is unable to decide an application within 20 working days, it must—
    - (a) notify the applicant in writing of that fact as soon as practicable; and
    - (b) give the applicant a proposed time frame for its consideration of, and decision on, the application.
  - (5) If the applicant chooses to appear and be heard under subclause (6), WorkSafe must give the applicant at least 10 working days' notice of the hearing date, unless WorkSafe and the applicant agree to a shorter period.
  - (6) The applicant may and, if WorkSafe so requires the applicant must, appear and be heard in relation to the application.

## **6.6 Qualifications for authorisation**

- (1) An individual applicant is qualified to be authorised if the applicant—
  - (a) is able to demonstrate knowledge of the following:
    - (i) the hazard classifications of any hazardous substances to which the application for authorisation relates;
    - (ii) the adverse effects that could be caused by each of those substances;
    - (iii) hazards and risks associated with gases under pressure (if relevant to the authorisation applied for);
    - (iv) the functions and duties of a compliance certifier under these regulations;

- (v) the purpose of the Act and relevant duties and liabilities under the Act (including the primary duty of care and offences for the breach of duties);
    - (vi) relevant requirements of these regulations and any safe work instruments referred to in these regulations;
    - (vii) any prescribed exposure standards relating to any hazardous substances for which the person is to issue compliance certificates;
    - (viii) any applicable performance standards; and
  - (b) has experience in the use of any testing equipment or procedures (including normal operations, calibration, and record keeping) required for the issue of compliance certificates; and
  - (c) has experience in the use of commonly used operating equipment and systems (including personal protective equipment) that is necessary to meet any requirement of these regulations for which a compliance certificate is to be issued; and
  - (d) has appropriate practical experience in carrying out 1 or more of the following activities for the management of hazardous substances in a workplace:
    - (i) handling hazardous substances;
    - (ii) testing or inspecting plant or equipment;
    - (iii) testing or inspecting the design of plant or equipment; and
  - (e) has appropriate practical experience in operating systems or plant or equipment for which a compliance certificate may be required; and
  - (f) has practical experience under the supervision of an authorised compliance certifier covering the types of plant or equipment or qualifications or situations for which a compliance certificate may be required.
- (2) For the purposes of subclause (1)(a), WorkSafe may regard a written record signed by a person who has trained or assessed the applicant's relevant knowledge (describing the training or the method of assessment and the results of that training or assessment) as sufficient evidence of that knowledge.
- (3) For the purposes of subclause (1)(b), (c), (d), (e), or (f), WorkSafe may regard a statutory declaration signed by the applicant's supervisor describing the applicant's relevant practical experience as sufficient evidence of that experience.

## **6.7 Criteria for fit and proper person**

- (1) In determining whether an individual is a fit and proper person to be authorised, WorkSafe must have regard, and give such weight that it considers appropriate, to the following matters:
- (a) the applicant's criminal history (if any) in New Zealand and elsewhere:

- (b) any pending criminal proceedings against the applicant in New Zealand or elsewhere:
  - (c) any protection order made against the applicant under the Domestic Violence Act 1995:
  - (d) any other court order made against the applicant in New Zealand or elsewhere that is or may be relevant to the application:
  - (e) any matters disclosed to WorkSafe by the Police in relation to the application, including any objection to the grant of authorisation:
  - (f) any other relevant matters.
- (2) In the case of proceedings referred to in subclause (1)(b), WorkSafe may defer consideration of the application until the proceedings have been determined.
- (3) If WorkSafe proposes to take into account any information that is, or may be, prejudicial to the applicant, it must give the applicant a reasonable opportunity to comment on it.
- (4) However, subclause (3) does not require WorkSafe to disclose any information that would be likely to endanger the safety of any person.
- (5) If WorkSafe withholds information from the applicant under subclause (4), it must inform the applicant of the right to seek a review of that decision by—
  - (a) an Ombudsman under the Official Information Act 1982; or
  - (b) the Privacy Commissioner under the Privacy Act 1993.

#### **6.8 Grant of authorisation**

- (1) WorkSafe must approve an application for authorisation if it is satisfied of the matters set out in this regulation.
- (2) If the applicant is an individual, WorkSafe must be satisfied that—
  - (a) the application complies with regulation 6.5; and
  - (b) the applicant is qualified under regulation 6.6; and
  - (c) the applicant is a fit and proper person under regulation 6.7; and
  - (d) the applicant is likely to ensure that the functions of a compliance certifier are performed in an objective manner that promotes safety.
- (3) For any other applicant, WorkSafe must be satisfied about the following:
  - (a) the application complies with regulation 6.5:
  - (b) every individual employed or engaged by the applicant to perform the functions of a compliance certifier meets the qualification requirements of regulation 6.6 for individual applicants:
  - (c) WorkSafe is satisfied with the results of an assessment, by International Accreditation New Zealand on behalf of the Accreditation Council, of the ability of each individual employed or engaged by the applicant to

- perform the functions of a compliance certifier to perform those functions as required by these regulations:
- (d) the applicant, each officer of the applicant, and every individual employed or engaged by the applicant to perform the functions of a compliance certifier is a fit and proper person to be authorised;
  - (e) the applicant is likely to ensure that the functions of a compliance certifier are performed in an objective manner that promotes safety;
  - (f) there is no reasonably foreseeable conflict of interest between the applicant's compliance certification work and any other work that it does or is likely to do, or the applicant has implemented documented procedures for transparently and appropriately managing any conflict of interest that may arise.
- (4) An authorisation may be subject to any conditions that WorkSafe considers appropriate.
- (5) If WorkSafe approves the application, it must notify the applicant in writing of—
- (a) the authorisation and its scope; and
  - (b) any conditions to which the authorisation is subject; and
  - (c) the term of the authorisation.
- (6) Conditions of authorisation may include—
- (a) a condition requiring the certifier to undergo training for a specified period during which he or she may perform the functions of a compliance certifier only under the supervision of a specified compliance certifier;
  - (b) in the case of a certifier that is not an individual,—
    - (i) a condition identifying 1 or more individuals employed or engaged by the certifier who are permitted, under the authorisation, to perform the functions of a compliance certifier; and
    - (ii) the matters requiring compliance certification in relation to which each of those individuals is to perform those functions.
- (7) A condition imposed under subclause (6)(a) ceases to have effect on the expiry of the period specified in the condition.
- (8) If WorkSafe refuses an application, or grants authorisation of a more limited scope than that applied for, it must notify the applicant in writing of—
- (a) the refusal; and
  - (b) the reasons for refusal; and
  - (c) the applicant's right of appeal to the District Court against the decision (*see* regulation 6.35).

## **6.9 Term of authorisation**

An authorisation under this subpart ends on the earlier of the following dates:

- (a) 5 years after the date on which it was granted:
- (b) the end date (if any) specified by WorkSafe in the authorisation.

### *Register of compliance certifiers*

## **6.10 WorkSafe must register authorisations**

If WorkSafe grants an authorisation under this subpart, it must enter the authorisation on the register of compliance certifiers in accordance with regulation 6.12.

## **6.11 Compliance certifier must notify WorkSafe of changes**

A compliance certifier must, as soon as practicable, notify WorkSafe in writing of—

- (a) any change of the certifier's business name, or business or email address; and
- (b) if the certifier is not an individual, any change in relation to any individual employed or engaged by the certifier who is permitted, under the authorisation, to perform the functions of a compliance certifier.

## **6.12 Register of compliance certifiers**

- (1) WorkSafe must keep and maintain a register of compliance certifiers.
- (2) If WorkSafe grants an authorisation, it must enter in the register the following information about each compliance certifier:
  - (a) the date on which the authorisation was granted:
  - (b) the name and business address and email address of the compliance certifier:
  - (c) the New Zealand Business Number (if any) for the compliance certifier:
  - (d) the scope of the authorisation:
  - (e) any conditions imposed on the authorisation:
  - (f) the date on which the authorisation ends:
  - (g) any variation of the scope or conditions of authorisation under regulation 6.13:
  - (h) any other matters relating to the authorisation that WorkSafe considers appropriate.
- (3) WorkSafe must also enter in the register the following information about a compliance certifier:
  - (a) details of any interim suspension of the certifier's authorisation under regulation 6.16 and any condition imposed under that regulation:



- (b) details of any suspension of the certifier's authorisation under regulation 6.20, including the grounds for the suspension and the period of suspension;
  - (c) details of any variation or cancellation of the certifier's authorisation under regulation 6.20, including the grounds for the variation or cancellation;
  - (d) details of any corresponding decisions made in relation to the certifier's approval as a test certifier under section 86 of the HSNO Act within 3 years before the commencement of these regulations.
- (4) WorkSafe must ensure that the register is published on an Internet site maintained by or on behalf of WorkSafe.

*Variation and renewal of authorisation*

**6.13 Compliance certifier may apply for variation of authorisation**

- (1) A compliance certifier may apply to WorkSafe to vary the scope of an authorisation or a condition of an authorisation.
- (2) An application for variation must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) describe the variation sought and state the reasons for the variation; and
  - (c) include information in support of the variation; and
  - (d) be accompanied by the fee (if any) prescribed in Schedule 2.
- (3) Regulations 6.5 to 6.8 apply, with any necessary modifications, to an application by a compliance certifier for—
  - (a) a variation of the scope of the authorisation; or
  - (b) in the case of a certifier that is not an individual, a variation of conditions imposed under regulation 6.8(6)(b) in relation to individuals employed or engaged by the certifier to perform the functions of a compliance certifier.
- (4) WorkSafe must notify the compliance certifier in writing of—
  - (a) its decision on the application for variation; and
  - (b) the reasons for the decision; and
  - (c) the applicant's right of appeal to the District Court against a refusal to grant the variation applied for (*see* regulation 6.35).

**6.14 Renewal of authorisation**

- (1) A compliance certifier may apply for renewal of authorisation.
- (2) An application for renewal of authorisation—
  - (a) must be made at least 20 working days before the date on which the authorisation ends:

- (b) may include an application for variation of the authorisation under regulation 6.13.
- (3) Regulations 6.5 to 6.9 apply to an application for renewal of authorisation—
  - (a) with any necessary modifications; and
  - (b) subject to this regulation.
- (4) WorkSafe may—
  - (a) refuse to renew an authorisation if satisfied, having regard to the compliance certifier's history of performing the functions of a compliance certifier, that the certifier has failed to a significant degree to comply with performance standards:
  - (b) renew authorisation of a more limited scope than the current authorisation if satisfied that limited renewal is appropriate in the circumstances.
- (5) If an application for renewal of authorisation has been received by WorkSafe but not determined before the date on which the current authorisation ends, the current authorisation continues in force until the application is determined.
- (6) The renewal of authorisation takes effect from the date on which the previous authorisation ends.
- (7) WorkSafe must notify the compliance certifier in writing of—
  - (a) its decision on the application for renewal; and
  - (b) the reasons for the decision; and
  - (c) the applicant's right of appeal to the District Court against the decision (*see* regulation 6.35).

#### *Disciplinary provisions*

### **6.15 WorkSafe may investigate complaints and concerns**

- (1) If WorkSafe receives a complaint, or has a reasonable concern, about the ability or conduct of a compliance certifier, WorkSafe may conduct an investigation of the matter.
- (2) WorkSafe may decide not to investigate a complaint if satisfied that the complaint—
  - (a) is frivolous, vexatious, or malicious; or
  - (b) is more appropriately addressed in the course of an audit under subpart 3; or
  - (c) if upheld on investigation, would not provide grounds for taking disciplinary action under regulation 6.20 (for example, because the matter is very minor).
- (3) WorkSafe must notify the complainant of a decision not to investigate a complaint.

**6.16 Suspension during investigation**

- (1) WorkSafe may, if it considers it necessary for safety, suspend all or part of the compliance certifier's authorisation while conducting an investigation under regulation 6.15.
- (2) If the certifier is not an individual, WorkSafe may instead impose a condition requiring the certifier to ensure that, during the investigation, 1 or more specified individuals employed or engaged by the certifier to perform the functions of a compliance certifier are not permitted to perform those functions.
- (3) The period of suspension (or of a condition imposed under subclause (2)) must be no longer than is reasonably necessary to enable WorkSafe to—
  - (a) investigate the complaint or concern; and
  - (b) decide what action to take in relation to the authorisation.
- (4) An authorisation that is suspended ceases to have effect for the period of the suspension.
- (5) WorkSafe must notify the compliance certifier in writing of—
  - (a) its decision to suspend authorisation; and
  - (b) the reasons for the decision.

**6.17 Time frame for completing investigation**

- (1) An investigation must be completed within 80 working days unless WorkSafe decides that it needs more time to complete the investigation.
- (2) If WorkSafe decides that it is unable to complete the investigation within 80 working days, it must notify the compliance certifier concerned and the complainant (if any) of the delay and the reasons for it.

**6.18 Investigation process**

- (1) On deciding to investigate a matter, WorkSafe must—
  - (a) give written notice to the compliance certifier of its intention to investigate and of the general nature of the complaint or concern; and
  - (b) give the certifier a reasonable opportunity to make submissions in relation to the matter; and
  - (c) consider—
    - (i) any submissions made by the certifier; and
    - (ii) any other information provided by the certifier.
- (2) WorkSafe may obtain and take into account any other information that it considers relevant.
- (3) However, if WorkSafe proposes to take into account any information that is or may be prejudicial to the compliance certifier, it must disclose that information to the certifier and give the certifier a reasonable opportunity to comment on the information.

- (4) WorkSafe is not required to disclose any information under subclause (3) that is likely to endanger the safety of any individual.
- (5) If WorkSafe withholds any evidence or information in reliance on subclause (4), it must inform the certifier of the fact of non-disclosure, and the following provisions apply:
  - (a) in the case of non-disclosure to an individual of information about the individual,—
    - (i) WorkSafe must inform the individual that he or she may, under the Privacy Act 1993, complain to the Privacy Commissioner about that non-disclosure; and
    - (ii) the provisions of that Act apply to that non-disclosure as if, following a request under that Act for the information withheld, the information had been withheld under section 27(1)(d) of that Act; and
  - (b) in any other case,—
    - (i) WorkSafe must inform the compliance certifier that the certifier may seek a review by an Ombudsman of that non-disclosure under the Official Information Act 1982; and
    - (ii) the provisions of that Act apply to that non-disclosure as if, following a request under that Act for the information withheld, the information had been withheld under section 6(d) of that Act.

#### **6.19 Compliance certifier to be informed of draft investigation report**

After investigating a matter, and before making a finding against a compliance certifier, WorkSafe must—

- (a) give a copy of the draft investigation report to the certifier; and
- (b) inform the certifier of the action WorkSafe proposes to take in relation to the certifier's authorisation; and
- (c) give the certifier a reasonable opportunity (a period of at least 10 working days) to make a submission in relation to the draft investigation report; and
- (d) consider any submission made by the certifier.

#### **6.20 WorkSafe may vary, suspend, or cancel authorisation following investigation**

- (1) WorkSafe may, at the conclusion of an investigation,—
  - (a) reinstate an authorisation that was suspended under regulation 6.16; or
  - (b) suspend or cancel the compliance certifier's authorisation; or
  - (c) vary the scope or any condition of the authorisation; or
  - (d) if the certifier is not an individual,—

- (i) suspend or cancel the identification under regulation 6.8(6)(b)(i) of an individual employed or engaged by the certifier to perform the functions of a compliance certifier; or
  - (ii) vary the matters in relation to which any of those individuals may perform those functions.
- (2) Without limiting subclause (1), WorkSafe may take action under that subclause in relation to an individual compliance certifier if—
  - (a) the certifier has, in performing the functions of a compliance certifier, failed to comply with—
    - (i) a provision of the Act, these regulations, or any relevant safe work instrument; or
    - (ii) a performance standard; or
    - (iii) a condition of the certifier's authorisation; or
  - (b) in applying for the grant or renewal of authorisation, the certifier—
    - (i) gave information that was false or misleading in a material particular; or
    - (ii) gave information that omitted a matter or thing without which the information was misleading; or
    - (iii) failed to give information that should have been given in the application; or
  - (c) the certifier is not qualified to be authorised; or
  - (d) the certifier is not a fit and proper person to be authorised; or
  - (e) the certifier has failed to perform the functions of a compliance certifier in an objective manner that promotes safety.
- (3) Without limiting subclause (1), WorkSafe may take action under that subclause in relation to a compliance certifier that is not an individual if—
  - (a) an individual employed or engaged by the certifier to perform the functions of a compliance certifier has, in performing the functions of a compliance certifier, failed to comply with—
    - (i) a provision of the Act, these regulations, or a relevant safe work instrument; or
    - (ii) a performance standard; or
    - (iii) a condition of the certifier's authorisation; or
  - (b) an individual employed or engaged by the certifier to perform the functions of a compliance certifier is not qualified to be authorised; or
  - (c) the certifier, an officer of the certifier, or an individual employed or engaged by the certifier to perform the functions of a compliance certifier is not a fit and proper person to be authorised; or

- (d) in applying for the grant or renewal of authorisation, the certifier—
  - (i) gave information that was false or misleading in a material particular; or
  - (ii) gave information that omitted a matter or thing without which the information was misleading; or
  - (iii) failed to give information that should have been given in the application; or
- (e) the certifier has failed to ensure that the functions of a compliance certifier are performed in an objective manner that promotes safety; or
- (f) the certifier has allowed the functions of a compliance certifier to be performed in circumstances where—
  - (i) there was a reasonably foreseeable conflict of interest between the certifier’s compliance certification work and any other work of the certifier; and
  - (ii) the certifier failed to implement documented procedures for transparently and appropriately managing that conflict of interest.
- (4) WorkSafe must notify the compliance certifier in writing of—
  - (a) its decision in relation to the certifier’s authorisation; and
  - (b) the reasons for the decision; and
  - (c) the certifier’s right of appeal to the District Court against the decision (*see* regulation 6.35).

*WorkSafe may employ or engage compliance certifiers*

## **6.21 WorkSafe may employ or engage compliance certifiers**

WorkSafe may, if it considers it appropriate, employ or engage a compliance certifier to carry out the functions of a compliance certifier.

### Subpart 2—Issue of compliance certificates

## **6.22 Duties of compliance certifier**

- (1) A compliance certifier may issue a compliance certificate only in relation to a matter that is within the scope of the certifier’s authorisation under subpart 1.
- (2) A compliance certifier must not issue a compliance certificate in relation to a hazardous substance or other matter if the certifier is or has been responsible for, or has a financial interest in, the design, planning, or construction of anything relating to the matter.
- (3) A compliance certifier who is authorised to issue compliance certificates in relation to the design, manufacture, construction, storage, or use of any plant, substance, or article (a **design or related matter**) must not conduct or be involved in the conduct of any business involving that design or related matter

while the certifier is considering an application for a compliance certificate in relation to that plant, substance, or article.

- (4) A compliance certifier who is authorised to issue compliance certificates to persons required to hold a compliance certificate as a certified handler must not issue a compliance certificate as a certified handler to a person whom the certifier has trained or supervised.
- (5) A compliance certifier must, within 15 working days after issuing a compliance certificate, enter information relating to the certificate in the register of compliance certificates.

### **6.23 Compliance certifier may issue compliance certificate**

- (1) A compliance certifier may issue a compliance certificate to a person who is required to obtain a compliance certificate in respect of any relevant requirement if the certifier is, on the basis of any inquiry, inspection, assessment, examination, or other consideration, satisfied that the requirement has been met.
- (2) If a compliance certifier considers that a relevant requirement has not been met, the certifier must—
  - (a) refuse to issue a compliance certificate; and
  - (b) notify the applicant in writing of the refusal and the reasons for the refusal; and
  - (c) notify WorkSafe of the refusal and the reasons for the refusal.
- (3) Despite subclause (2), the compliance certifier may issue a certificate if satisfied that any potential adverse effect from the relevant requirement not being met—
  - (a) has been satisfactorily avoided; or
  - (b) in the case of a hazardous substance location, can be satisfactorily avoided by issuing a conditional compliance certificate under regulation 6.24.

### **6.24 Conditional compliance certificate for hazardous substance locations**

- (1) A compliance certifier may issue a conditional compliance certificate in relation to any relevant requirement relating to hazardous substance locations if satisfied that a failure to meet the relevant requirement is minor.
- (2) A conditional compliance certificate must specify—
  - (a) the relevant requirement that has not been met; and
  - (b) the date (no more than 3 months after the issue of the certificate) by which the relevant requirement must be met.
- (3) A compliance certifier must, within 15 working days after issuing a conditional compliance certificate, enter information relating to the conditional certificate in the register of compliance certificates.

- (4) After the date specified in subclause (2)(b), a conditional compliance certificate—
  - (a) must be treated as a non-conditional compliance certificate, if the relevant requirement referred to in subclause (2)(a) is met by that date; but
  - (b) expires on that date, if the relevant requirement is not met.

#### **6.25 Commencement of compliance certificate**

A compliance certificate comes into force on the date specified in the certificate.

#### **6.26 Register of compliance certificates**

- (1) WorkSafe must keep and maintain a register of compliance certificates.
- (2) A compliance certifier who issues a compliance certificate must ensure that the following information is entered in the register for each compliance certificate:
  - (a) the dates on which the certificate is issued, comes into force, and expires:
  - (b) the prescribed requirements for which the certificate was issued:
  - (c) the name of the compliance certifier who issued the certificate:
  - (d) the date of any variation of the certificate:
  - (e) if the compliance certificate relates to a workplace,—
    - (i) the street address of the workplace:
    - (ii) the name, trading name, New Zealand Business Number (if any), and companies number (if any) of the PCBU with management or control of the workplace:
  - (f) if the compliance certificate relates to a person, the name, residential address, and work contact information (for example, a street address, email address, or phone number):
  - (g) for a conditional compliance certificate,—
    - (i) the hazardous substance location; and
    - (ii) the relevant requirements for that location that have not been met; and
    - (iii) the date by which the relevant requirements must be met.
- (3) WorkSafe—
  - (a) must update the register with information relating to the suspension or cancellation of a compliance certificate under regulation 6.30 or 6.33:
  - (b) may search the register in the performance of its functions.
- (4) The following persons may search the register for the following purposes:



- (a) an individual, or a person with the written consent of an individual, for the purpose of obtaining information about that individual under the Privacy Act 1993;
- (b) a compliance certifier, for a purpose relating to the performance of the certifier's functions;
- (c) an individual engaged by a compliance certifier that is not an individual to perform the functions of a compliance certifier, for a purpose relating to the performance of the certifier's functions;
- (d) an approved person, if the search—
  - (i) relates to the purpose of the register; or
  - (ii) is necessary to prevent or reduce a serious and imminent threat to the health or safety of any person; or
  - (iii) is necessary for the enforcement of the Act or these regulations or for the conduct of proceedings for an offence against the Act or these regulations; or
  - (iv) has been authorised by the Privacy Commissioner under section 54(1) of the Privacy Act 1993; or
  - (v) is necessary to plan for responses to any workplace emergency.
- (5) An approved person within the meaning of paragraph (b), (d), or (e) of the definition of that term in subclause (6) may, in writing, delegate to another person the approved person's power to search the register.
- (6) In subclause (4)(d), **approved person** means—
  - (a) an inspector appointed under section 163 of the Act;
  - (b) a person specified in section 97 of the HSNO Act;
  - (c) an enforcement officer within the meaning of section 98 or 99(3) of the HSNO Act;
  - (d) an authorised person (under section 23 of the Fire and Emergency New Zealand Act 2017) nominated by Fire and Emergency New Zealand;
  - (e) the chief executive of the department that is, with the authority of the Prime Minister, for the time being responsible for the administration of the Agricultural Compounds and Veterinary Medicines Act 1997.

#### 6.27 PCBU must give HSR details of relevant compliance certificates

- (1) A PCBU must, on request, give to a health and safety representative elected at the workplace managed or controlled by the PCBU the details of any compliance certificate that relates to the workplace.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;

- (b) for any other person, to a fine not exceeding \$10,000.

*Variation, suspension, or cancellation of compliance certificate*

**6.28 Compliance certifier may vary compliance certificate**

A compliance certifier who issues a compliance certificate may vary that certificate in order to correct any minor errors.

**6.29 WorkSafe may investigate complaints and concerns**

- (1) If WorkSafe receives a complaint, or has a reasonable concern, about the ability or conduct of a person who holds a compliance certificate or about any other matter relating to a certificate that could affect safety, WorkSafe may conduct an investigation of the matter.
- (2) WorkSafe may decide not to investigate a complaint if satisfied that the complaint—
  - (a) is frivolous, vexatious, or malicious; or
  - (b) if upheld on investigation, would not provide grounds for cancelling the compliance certificate under regulation 6.33 (for example, because the matter is very minor).
- (3) WorkSafe must notify the complainant of a decision not to investigate a complaint.

**6.30 Suspension of certificate during investigation**

- (1) WorkSafe may, if it considers it necessary for safety, suspend all or part of the certificate holder's certificate while conducting an investigation under regulation 6.29.
- (2) The period of suspension must be no longer than is reasonably necessary to enable WorkSafe to—
  - (a) investigate the complaint or concern; and
  - (b) decide whether, as a consequence of that investigation, the compliance certificate should be reinstated or cancelled.
- (3) A compliance certificate that is suspended ceases to have effect for the period of the suspension.
- (4) WorkSafe must notify the certificate holder in writing of—
  - (a) its decision to suspend the certificate; and
  - (b) the reasons for the decision.

**6.31 Investigation process**

- (1) On deciding to investigate a matter, WorkSafe must—
  - (a) give written notice to the certificate holder of its intention to investigate and of the general nature of the complaint or concern; and

- (b) give the certificate holder a reasonable opportunity to make submissions in relation to the matter; and
  - (c) consider—
    - (i) any submissions made by the certificate holder; and
    - (ii) any other information provided by the certificate holder.
- (2) WorkSafe may obtain and take into account any other information that it considers relevant.
- (3) However, if WorkSafe proposes to take into account any information that is or may be prejudicial to the certificate holder, it must disclose that information to the certificate holder and give the certificate holder a reasonable opportunity to comment on the information.
- (4) WorkSafe is not required to disclose any information under subclause (3) that is likely to endanger the safety of any individual.
- (5) If WorkSafe withholds any evidence or information in reliance on subclause (4), it must inform the certificate holder of the fact of non-disclosure, and the following provisions apply:
  - (a) in the case of non-disclosure to an individual of information about the individual,—
    - (i) WorkSafe must inform the individual that he or she may, under the Privacy Act 1993, complain to the Privacy Commissioner about that non-disclosure; and
    - (ii) the provisions of that Act apply to that non-disclosure as if, following a request under that Act for the information withheld, the information had been withheld under section 27(1)(d) of that Act; and
  - (b) in any other case,—
    - (i) WorkSafe must inform the certificate holder that the certificate holder may seek a review by an Ombudsman of that non-disclosure under the Official Information Act 1982; and
    - (ii) the provisions of that Act apply to that non-disclosure as if, following a request under that Act for the information withheld, the information had been withheld under section 6(d) of that Act.

### **6.32 Certificate holder to be informed of draft investigation report**

After investigating a matter, and before making a finding against the holder of a compliance certificate, WorkSafe must—

- (a) give a copy of the draft investigation report to the certificate holder; and
- (b) inform the certificate holder of the action WorkSafe proposes to take in relation to the certificate; and

- (c) give the certificate holder a reasonable opportunity (a period of at least 10 working days) to make a submission in relation to the draft investigation report; and
- (d) consider any submission made by the certificate holder.

**6.33 WorkSafe may cancel compliance certificate after investigation**

- (1) WorkSafe may, after investigation,—
  - (a) reinstate a compliance certificate that was suspended under regulation 6.30; or
  - (b) cancel a compliance certificate if it is satisfied that the certificate holder—
    - (i) obtained the certificate by fraud, misrepresentation, or concealment of facts; or
    - (ii) has been negligent, or is incompetent to act, as a certificate holder; or
    - (iii) has not met, or has not continued to meet, a relevant requirement for the issue of the certificate.
- (2) WorkSafe must give written notice to the certificate holder of—
  - (a) its decision to reinstate or cancel the compliance certificate; and
  - (b) the reasons for the cancellation (if applicable); and
  - (c) the certificate holder's right of appeal to the District Court against the decision (*see* regulation 6.35).
- (3) A cancellation takes effect on the date on which the compliance certificate is cancelled.

*Exemptions from compliance certificate requirements*

**6.34 Prescribed requirements for exemption from requirement to obtain compliance certificate**

- (1) A person who wishes to be exempted under section 220 of the Act from a provision of these regulations that requires a compliance certificate must apply for the exemption in accordance with this regulation.
- (2) An application must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) state the compliance certificate requirement from which the applicant wishes to be exempted; and
  - (c) contain, or be accompanied by, sufficient information to enable WorkSafe to decide whether to grant the exemption; and
  - (d) be accompanied by the fee (if any) prescribed in Schedule 2.

*Right to appeal***6.35 Right to appeal against certain decisions**

The following decisions are appealable decisions under subpart 5 of Part 4 of the Act:

- (a) a refusal to grant an authorisation of a compliance certifier, or a decision to grant limited scope of authorisation, under regulation 6.8;
- (b) a refusal to grant a variation of authorisation under regulation 6.13;
- (c) a refusal to renew an authorisation, or a decision to renew a limited scope of authorisation, under regulation 6.14;
- (d) a decision to vary, suspend, or cancel all or any part of an authorisation under regulation 6.20;
- (e) a decision to cancel a compliance certificate under regulation 6.33.

Compare: 1992 No 96 s 46; Model Work Health and Safety Act s 229 (Aust)

**Subpart 3—Audit of compliance certifiers and performance standards****6.36 Purpose of this subpart**

The purpose of this subpart is to provide for—

- (a) the auditing of the performance of compliance certifiers;
- (b) the development, publication, and review of performance standards for compliance certifiers.

**6.37 Requirement for compliance certifiers to be audited**

- (1) WorkSafe must, at least once every 4 years, audit each compliance certifier's compliance with—
  - (a) the Act, these regulations, and any applicable safe work instrument; and
  - (b) any applicable performance standards.
- (2) WorkSafe may conduct additional or more frequent audits in relation to a compliance certifier having regard to the history of the certifier's compliance with—
  - (a) the matters set out in subclause (1); or
  - (b) any legislation relating to hazardous substances that was in force before the commencement of the Act or these regulations.
- (3) WorkSafe is not required to audit the compliance of a certifier who is accredited with International Accreditation New Zealand and whose compliance has been audited by that organisation, if WorkSafe is satisfied with the report of that audit.

**6.38 WorkSafe may engage auditors**

WorkSafe may engage a person whom WorkSafe considers to be suitably qualified to conduct audits under this subpart.

**6.39 Audit report**

An auditor under this subpart must—

- (a) prepare a report on the results of the audit; and
- (b) give the report to WorkSafe and a copy of the report to the compliance certifier.

**6.40 Power of auditor to require production of documents**

- (1) An auditor may, for the purpose of conducting an audit, require a compliance certifier to produce for inspection, within a reasonable period specified by the auditor, information that is—
  - (a) required by the Act, regulations made under this Act, a safe work instrument, or a performance standard to be kept by the certifier; and
  - (b) in the possession or under the control of the compliance certifier.
- (2) The auditor may take copies of, or extracts from, any documented information obtained.
- (3) The auditor may disclose information obtained under this regulation only to WorkSafe.
- (4) A compliance certifier whose compliance is being audited must comply with any reasonable requests made by the auditor under this regulation.

Compare: 1993 No 95 s 100Q

**6.41 Cost of audit**

A compliance certifier who is audited under this subpart must pay the fee (if any) prescribed in Schedule 2.

*Performance standards*

**6.42 Duty of compliance certifiers to comply with performance standards**

A compliance certifier must comply with a performance standard issued by WorkSafe that relates to the certifier's functions as a compliance certifier.

**6.43 WorkSafe may issue, amend, or revoke performance standard**

- (1) WorkSafe may issue performance standards that set out the information and process requirements that a compliance certifier must comply with when performing the functions of a compliance certifier.
- (2) Without limiting subclause (1), a performance standard may include—
  - (a) requirements for inquiring into, inspecting, assessing, examining, or otherwise considering any matter; and

- (b) practice guides; and
  - (c) requirements relating to record keeping and documentation of processes; and
  - (d) measures by which the performance of compliance certifiers may be assessed.
- (3) WorkSafe may amend or revoke a performance standard.
- (4) A performance standard issued or amended under this regulation must not be inconsistent with the Act, these regulations, or a safe work instrument referred to in these regulations.

#### **6.44 Process to be adopted before performance standard is issued or amended**

- (1) Before issuing or amending a performance standard, WorkSafe must consult compliance certifiers and any other persons WorkSafe considers appropriate.
- (2) This regulation does not apply to an amendment that WorkSafe considers to be—
  - (a) minor; or
  - (b) solely for the purpose of correcting errors.

#### **6.45 Publication of performance standards**

WorkSafe must ensure that every performance standard issued or amended is published on an Internet site maintained by or on behalf of WorkSafe.

## **Part 7**

### **Controlled substance licences**

#### **7.1 Application for controlled substance licence**

- (1) An applicant for a controlled substance licence must—
  - (a) be an individual who is 17 years or over; and
  - (b) be a fit and proper person to possess the substance concerned; and
  - (c) either—
    - (i) hold a current compliance certificate as a certified handler for the substance concerned; or
    - (ii) if he or she wishes to transport the substance by road, hold a current dangerous goods endorsement on his or her driver licence under the Land Transport Rule: Dangerous Goods 2005; or
    - (iii) hold a current aerial vertebrate toxic agent rating issued under Part 61 of the Civil Aviation Rules; and
  - (d) require possession of the substance to carry out his or her work.
- (2) An application for a controlled substance licence must—

- (a) be in the form required by WorkSafe (if any); and
- (b) state the name or class of substance for which application is made; and
- (c) state the type of work the substance or class of substance will be used for and for which application is made; and
- (d) be accompanied by the fee (if any) prescribed in Schedule 2.
- (3) WorkSafe—
  - (a) must grant a controlled substance licence if it considers that the applicant satisfies the criteria in subclause (1); and
  - (b) may make the licence subject to any conditions.
- (4) If WorkSafe grants a controlled substance licence, it must—
  - (a) issue to the applicant a licence document; and
  - (b) notify the applicant in writing of—
    - (i) the substance or the class of substance to which the licence applies; and
    - (ii) the type of work the substance or class of substance may be used for; and
    - (iii) any conditions imposed on the licence by WorkSafe; and
    - (iv) the expiry date of the licence.
- (5) If WorkSafe grants a controlled substance licence subject to any conditions, it must notify the applicant in writing of the applicant's right of appeal to the District Court against the decision (*see* regulation 7.10).
- (6) If WorkSafe refuses to grant a controlled substance licence in whole or in part, it must notify the applicant in writing of—
  - (a) the refusal; and
  - (b) the reasons for refusal; and
  - (c) the applicant's right of appeal to the District Court against the decision (*see* regulation 7.10).

Compare: SR 2001/122 r 6A

## **7.2 Criteria for fit and proper person**

- (1) In determining whether an applicant is a fit and proper person to possess the substance concerned, WorkSafe must have regard, and give such weight as it considers appropriate, to the following matters:
  - (a) the applicant's criminal history (if any) in New Zealand and elsewhere:
  - (b) any pending criminal proceedings against the applicant in New Zealand or elsewhere:
  - (c) any protection order made against the applicant under the Domestic Violence Act 1995:



- (d) any other court order made against the applicant, in New Zealand or elsewhere, that is or may be relevant to the application:
  - (e) the applicant's history of serious behavioural problems, including any history of violence, drug abuse, or alcohol abuse:
  - (f) any information collected in the course of a Police investigation that relates to the applicant's conduct:
  - (g) any matters disclosed to WorkSafe by the Police in relation to the application, including any objection to the grant of a licence:
  - (h) any other matters that WorkSafe considers relevant.
- (2) In the case of proceedings referred to in subclause (1)(b), WorkSafe may defer consideration of the application until the proceedings have been determined.
- (3) WorkSafe is not limited to the matters specified in subclause (1) and may seek, receive, and take into account any other information or evidence that it considers relevant.
- (4) If WorkSafe proposes to take into account any information that is, or may be, prejudicial to the applicant, it must give the applicant a reasonable opportunity to comment on it.
- (5) However, subclause (4) does not require WorkSafe to disclose any information that would be likely to endanger the safety of any person.

Compare: SR 2001/122 r 6B

### **7.3 Expiry of controlled substance licence**

- (1) A licence granted under this Part expires on the earliest of the following dates:
- (a) the date specified in the licence document as the date of expiry:
  - (b) 5 years after the date on which the licence was granted:
  - (c) either—
    - (i) the date on which the licence holder's compliance certificate as a certified handler expires or is cancelled; or
    - (ii) if he or she wishes to transport the substance by road, the date on which the licence holder's dangerous goods endorsement on his or her driver licence expires or is revoked; or
    - (iii) the date on which the licence holder's aerial vertebrate toxic agent rating issued under Part 61 of the Civil Aviation Rules expires or is revoked:
  - (d) the date of the notification referred to in subclause (2):
  - (e) the date on which the licence is cancelled under regulation 7.8.

- (2) A person may surrender his or her controlled substance licence at any time by providing written notification to that effect, together with the licence document, to WorkSafe.

Compare: SR 2001/122 r 6C

#### **7.4 Suspension of compliance certificate under Part 6**

- (1) If a licence holder's compliance certificate (if applicable) is suspended during an investigation under regulation 6.30, the licence holder's controlled substance licence is automatically suspended for the same period of time.
- (2) If a licence is automatically suspended under subclause (1),—
  - (a) WorkSafe must notify the licence holder of the suspension; and
  - (b) the licence holder must immediately return the licence document to WorkSafe; and
  - (c) the licence ceases to have effect for the period of suspension.
- (3) On completion of WorkSafe's investigation under Part 6, WorkSafe must,—
  - (a) if the compliance certificate is reinstated under regulation 6.33, return the licence document to the licence holder; or
  - (b) if the compliance certificate is cancelled under regulation 6.33, withhold the expired licence document.
- (4) Regulations 7.5, 7.6, 7.7, and 7.8 do not apply to a controlled substance licence that is suspended if the licence holder's compliance certificate is suspended under Part 6.

#### **7.5 Suspension of controlled substance licence**

- (1) WorkSafe may, by written notice to a controlled substance licence holder, suspend a controlled substance licence if it reasonably suspects that—
  - (a) in an application for the grant of licence, or any statutory declaration made in respect of the application, the licence holder—
    - (i) gave information that was false or misleading in a material particular; or
    - (ii) gave information that omitted a matter or thing without which the information was misleading; or
    - (iii) failed to give information that should have been given in the application or declaration; or
  - (b) the licence holder has become the subject of a Police investigation; or
  - (c) the licence holder has been charged with an offence under any enactment, in New Zealand or elsewhere; or
  - (d) the licence holder is the subject of, or referred to in, advice given to WorkSafe by the chief executive of the New Zealand Security Intelligence Service under the Intelligence and Security Act 2017; or

- (e) the licence holder, because of his or her physical or mental condition (however caused)—
    - (i) is incapable of having proper control of the substance for which he or she holds the licence; or
    - (ii) may kill or cause bodily injury to any person; or
  - (f) the licence holder's actions indicate that the person may no longer be a fit and proper person to hold the licence.
- (2) On notice of the suspension of the licence,—
  - (a) the licence holder must immediately return the licence document to WorkSafe; and
  - (b) the licence ceases to have effect for the period of suspension.
- (3) The period of suspension must be no longer than is reasonably necessary to enable WorkSafe to—
  - (a) investigate the accuracy of the information; and
  - (b) consider whether, in light of that investigation, the licence holder continues to meet the requirements of regulation 7.2.

Compare: SR 2001/122 r 6D

## **7.6 Investigation process**

- (1) If WorkSafe receives a complaint, or has a reasonable concern, about the ability or conduct of a controlled substance licence holder, WorkSafe may conduct an investigation of the matter.
- (2) On deciding to carry out an investigation, WorkSafe must—
  - (a) give written notice to the licence holder of its intention to investigate and of the general nature of the concern; and
  - (b) give the licence holder a reasonable opportunity to make submissions in relation to the matter; and
  - (c) consider—
    - (i) any submissions made by the licence holder; and
    - (ii) any other information provided by the licence holder.
- (3) WorkSafe may obtain and take into account any other information that it considers relevant.
- (4) However, if WorkSafe proposes to take into account any information that is or may be prejudicial to the licence holder, it must disclose that information to the licence holder and give the licence holder a reasonable opportunity to comment on the information.
- (5) WorkSafe is not required to disclose any information under subclause (4) that is likely to endanger the safety of any individual.

- (6) If WorkSafe withholds any evidence or information in reliance on subclause (5), it must inform the licence holder of the fact of non-disclosure, and the following provisions apply:
  - (a) in the case of non-disclosure to an individual of information about the individual,—
    - (i) WorkSafe must inform the individual that he or she may, under the Privacy Act 1993, complain to the Privacy Commissioner about that non-disclosure; and
    - (ii) the provisions of that Act apply to that non-disclosure as if, following a request under that Act for the information withheld, the information had been withheld under section 27(1)(d) of that Act; and
  - (b) in any other case,—
    - (i) WorkSafe must inform the licence holder that the licence holder may seek a review by an Ombudsman of that non-disclosure under the Official Information Act 1982; and
    - (ii) the provisions of that Act apply to that non-disclosure as if, following a request under that Act for the information withheld, the information had been withheld under section 6(d) of that Act.
- (7) On completion of the investigation, WorkSafe must—
  - (a) reinstate the licence and return the licence document to the licence holder (if satisfied that the holder continues to meet the requirements of regulation 7.2); or
  - (b) cancel the licence under regulation 7.8.

**7.7 Licence holder to be informed of draft investigation report**

After investigating a matter, and before making a finding against the holder of a licence, WorkSafe must—

- (a) give a copy of the draft investigation report to the licence holder; and
- (b) inform the licence holder of the action WorkSafe proposes to take in relation to the licence; and
- (c) give the licence holder a reasonable opportunity (a period of at least 10 working days) to make a submission in relation to the draft investigation report; and
- (d) consider any submission made by the licence holder.

**7.8 Cancellation of controlled substance licence**

- (1) WorkSafe may, by written notice to a controlled substance licence holder, cancel a controlled substance licence if it is satisfied that—

- (a) in an application for the grant of licence, or any statutory declaration made in respect of the application, the licence holder—
    - (i) gave information that was false or misleading in a material particular; or
    - (ii) gave information that omitted a matter or thing without which the information was misleading; or
    - (iii) failed to give information that should have been given in the application or declaration; or
  - (b) the licence holder has been convicted of an offence under any enactment, in New Zealand or elsewhere; or
  - (c) the licence holder's actions indicate that the person is no longer a fit and proper person to hold the licence.
- (2) The written notice must notify the licence holder of—
- (a) the reasons for cancelling the controlled substance licence; and
  - (b) the licence holder's right of appeal to the District Court against the decision to cancel the licence (*see* regulation 7.10).
- (3) On notice of the cancellation of the licence, the licence holder must immediately return the licence document to WorkSafe.

Compare: SR 2001/122 r 6E

## **7.9 Exemption from requirement to hold controlled substance licence**

The following persons do not require a licence under this Part to carry out their official duties:

- (a) an inspector or any other person who may exercise the powers of an inspector under the Act;
- (b) an enforcement officer appointed under the HSNO Act;
- (c) a member of the Civil Staff employed by the New Zealand Defence Force under the Defence Act 1990 whose duties include the collection, storage, or disposal of explosives;
- (d) an ACVM officer appointed under the Agricultural Compounds and Veterinary Medicines Act 1997;
- (e) a person appointed as a Customs officer for the purposes of the Customs and Excise Act 1996 by the chief executive within the meaning of that Act;
- (f) an authorised person within the meaning of section 6 of the Fire and Emergency New Zealand Act 2017;
- (g) a member of the New Zealand Police;
- (h) an aviation security officer employed in the Aviation Security Service under the Civil Aviation Act 1990.

### **7.10 Right to appeal against certain decisions**

The following decisions are appealable decisions under subpart 5 of Part 4 of the Act:

- (a) a refusal to grant in whole or in part a controlled substance licence under regulation 7.1:
- (b) an imposition of a condition when granting a controlled substance licence under regulation 7.1:
- (c) a cancellation of a controlled substance licence under regulation 7.8.

### **7.11 Replacement licence document**

- (1) The holder of a controlled substance licence must give written notice to WorkSafe as soon as practicable if the licence document is lost, stolen, or destroyed.
- (2) If a licence document is lost, stolen, or destroyed, the licence holder may apply to WorkSafe for a replacement.
- (3) An application for a replacement licence document must be made in the form required by WorkSafe (if any).
- (4) The application must—
  - (a) include a statutory declaration describing the circumstances in which the original licence document was lost, stolen, or destroyed; and
  - (b) be accompanied by the relevant fee (if any) prescribed in Schedule 2.
- (5) WorkSafe must issue the replacement licence document if satisfied that the original licence document was lost, stolen, or destroyed.

#### *Register of controlled substance licence holders*

### **7.12 WorkSafe must enter controlled substance licence on register**

If WorkSafe grants a controlled substance licence under this Part, it must enter the licence on the register of controlled substance licence holders kept in accordance with regulation 7.13.

### **7.13 Register of controlled substance licence holders**

- (1) WorkSafe must keep and maintain a register of controlled substance licence holders.
- (2) If WorkSafe grants a controlled substance licence, it must enter in the register the following information about each licence holder:
  - (a) the date on which the licence was granted:
  - (b) the name, residential address, and work contact information (for example, a street address, email address, or telephone number) of the licence holder:
  - (c) the name of the substance or the class of substance to which the licence applies:

- (d) the type of work the substance or class of substance will be used for;
  - (e) any conditions imposed on the licence;
  - (f) the date on which the licence expires;
  - (g) any other matters relating to the licence as WorkSafe considers appropriate.
- (3) WorkSafe must also enter in the register the following information about a controlled substance licence holder:
  - (a) details of any suspension of the person's licence that is in force on the commencement of this regulation or that is imposed under these regulations, the grounds for the suspension, and the period of suspension;
  - (b) information about any revocation of the person's licence under regulation 6E of the Hazardous Substances and New Organisms (Personnel Qualifications) Regulations 2001 (as it read before its revocation) or under these regulations, and the grounds for the cancellation.
- (4) WorkSafe may search the register in the performance of its functions.
- (5) In addition, the following persons may search the register for the following purposes:
  - (a) an individual, or a person with the written consent of an individual, for the purpose of obtaining information about that individual under the Privacy Act 1993;
  - (b) an approved person, for a purpose that—
    - (i) is necessary to prevent or reduce a serious and imminent threat to the health or safety of any person; or
    - (ii) is necessary for the enforcement of the Act or these regulations or the conduct of proceedings for an offence against the Act or these regulations; or
    - (iii) has been authorised by the Privacy Commissioner under section 54(1) of the Privacy Act 1993; or
    - (iv) is necessary to plan for responses to any workplace emergency.
- (6) In subclause (5)(b), **approved person** means—
  - (a) an inspector appointed under section 163 of the Act;
  - (b) the Commissioner of Police;
  - (c) the chief executive of Fire and Emergency New Zealand;
  - (d) the chief executive of the New Zealand Security Intelligence Service.

## Part 8

### Controls applying to all class 1 to 5 substances

#### 8.1 Compliance certification

- (1) A PCBU with management or control of a hazardous substance location within a workplace must ensure that a compliance certificate that is required for a hazardous substance location under Part 9, 10, 11, or 12 (except regulation 9.36) is renewed at intervals not exceeding 12 months (unless that period is extended under regulation 8.2).
- (2) Despite subclause (1), the interval for renewal of a compliance certificate for a hazardous substance location that comprises less than 300 kg of LPG (*see* regulation 10.34) is 36 months.
- (3) If the PCBU is required to obtain more than 1 compliance certificate,—
  - (a) the compliance certifier may, at the request of the PCBU, examine at the same time any or all of those matters that require compliance certification that the certifier is competent to certify; and
  - (b) if the compliance certifier examines more than 1 matter, the certifier must ensure that his or her report indicates whether the respective requirements have been met and gives the reasons for any failure to meet those requirements; and
  - (c) a single compliance certificate may be issued for any or all of those matters if the requirements have been met.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 7

#### 8.2 Extension of renewal period of compliance certificate

- (1) For the purposes of regulation 8.1, WorkSafe may, on application by the PCBU, extend the period after which a compliance certificate must be renewed.
- (2) An application for extension must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (3) An extended period must not exceed 36 months.
- (4) When specifying the extension, WorkSafe must take into account—
  - (a) the maximum quantities and types of hazardous substances present or likely to be present at the hazardous substance location; and



- (b) the review and monitoring systems in place for the management of those substances; and
- (c) the compliance history of the PCBU under the Act or any enactment that previously set controls for the management of hazardous substances in the workplace and of the persons in charge of the substances.

### **8.3 Public transportation of class 1 to 5 substances (except LPG)**

- (1) A person must not carry or convey on a passenger service vehicle any quantity of—
  - (a) a class 1 substance other than the class 1 substances specified in the second column of the table in Schedule 6;
  - (b) a class 3.1A, 4.1.2A, 4.1.3A, 4.1.3B, 4.1.3C, 4.2A, 4.3A, 5.1.1A, or 5.2A substance.
- (2) A person must not carry or convey any class 1, 2, 3, 4, or 5 substance on a passenger service vehicle unless the quantities of substances per package within each hazard classification are less than or equal to those specified for the relevant classification in the third column of the table in Schedule 6.
- (3) A person who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding \$2,000.

Compare: SR 2001/116 r 8

### **8.4 Public transportation of LPG**

- (1) A person must not carry or convey more than 20 kg of LPG on a passenger service vehicle.
- (2) A PCBU in charge of a passenger service vehicle used to carry or convey LPG must ensure that—
  - (a) no more than 20 kg of LPG is carried or conveyed on the vehicle at any one time; and
  - (b) the LPG is in 1 or more containers that are stowed on the vehicle in a separate compartment that complies with subclause (3); and
  - (c) no other hazardous substance is stored in the compartment with the LPG; and
  - (d) the compartment is labelled with a class 2—gas diamond.
- (3) A compartment that is used to carry LPG must be—
  - (a) ventilated so as to allow any LPG that escapes to dissipate rather than build up in the compartment; and
  - (b) able to be accessed only from outside the vehicle; and
  - (c) made of fire-resistant material; and
  - (d) located in the vehicle in a place that will provide maximum protection for the LPG container in the event of an accident.

- (4) A person who contravenes subclause (1) commits an offence and is liable on conviction to a fine not exceeding \$2,000.
- (5) A PCBU who contravenes subclause (2) or (3) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

*Exemptions from controls in Parts 9 to 12*

**8.5 Tactical policing**

Parts 9, 10, 11, and 12 do not apply to a class 1 to 5 substance when it is used—

- (a) in policing operations by Police tactical groups or in training for such operations; or
- (b) on a vehicle, a ship, or an aircraft used by Police tactical groups to carry the substance to such operations or training.

Compare: SR 2001/116 r 9B

**8.6 Training explosives detector dogs**

- (1) Regulations 9.18 to 9.27 do not apply to a class 1 substance used by an agency listed in subclause (2) in relation to the training of explosives detector dogs in accordance with a relevant safe work instrument.
- (2) The agencies are—
  - (a) the New Zealand Customs Service;
  - (b) the New Zealand Police;
  - (c) the Aviation Security Service.

Compare: SR 2001/116 r 12

**8.7 Ethanol dilutions**

Regulations 8.1 and 8.3 and Part 10 do not apply to an ethanol-water dilution intended for drinking, if the ethanol content of the substance is more than 15% by volume, if the following requirements are met:

- (a) the substance is stored in containers of a capacity greater than 5 L at premises used for storing, processing, or handling alcohol intended for drinking;
- (b) the area at the premises where the substance is stored is equipped with a drainage and drenching system and a vapour detector designed and constructed in accordance with—
  - (i) Appendix G of AS 1940—2004—The storage and handling of flammable and combustible liquids; or
  - (ii) a standard in a relevant safe work instrument:

- (c) the containers are constructed of stainless steel or of another material specified in a relevant safe work instrument.

## Part 9

### Class 1 substances

#### 9.1 Overview

This Part imposes the following controls on class 1 substances:

- (a) general controls set out in subpart 1:
- (b) controls on hazardous substance locations where class 1 substances are present set out in subpart 2:
- (c) controls on intended detonation and deflagration of class 1 substances set out in subpart 3:
- (d) controls on indoor and outdoor pyrotechnic displays set out in subpart 4:
- (e) controls on the transfer and transportation of class 1 substances set out in subpart 5.

Compare: SR 2001/116 r 10

#### 9.2 Interpretation

In this Part, unless the context otherwise requires,—

**aerial shell** means a pyrotechnic article of class 1.1G, 1.2G, 1.3G, or 1.4G that—

- (a) is fired or designed to be fired from a mortar tube; and
- (b) contains a lift charge capable of lifting the article above the firing point before any pyrotechnic display is produced

**article** means a manufactured thing containing, incorporating, or including any hazardous substance with explosive properties

**discharge area** means a place from which class 1 category G substances are to be fired in an outdoor pyrotechnic display or indoor pyrotechnic display

**electro-explosive device**—

- (a) means a device designed to initiate a detonation or deflagration with an electrical impulse; and
- (b) includes an electric detonator, an electric initiator, and an electric blasting initiator

**exclusion zone** means a place established under regulation 9.32 or 9.43 for receiving burning material, malfunctioning pyrotechnics, or other debris from an outdoor pyrotechnic display or indoor pyrotechnic display

**explosive** means a class 1 substance, including an article

**firearms dealer's licence** means a dealer's licence issued under section 5 of the Arms Act 1983

**firearms licence** means a licence issued under section 24 of the Arms Act 1983

**firework**—

- (a) has the same meaning as in section 2 of the HSNO Act; and
- (b) includes any pyrotechnic novelty or noise maker

**hazardous fragment** means a projectile produced as the result of a detonation or deflagration that has a kinetic energy of more than 79 J

**indoor pyrotechnic display** means an indoor display of indoor pyrotechnics

**indoor pyrotechnics** means class 1 category G substances designed for indoor use that—

- (a) contain no more than a trace of antimony, arsenic, cadmium, chromium, lead, mercury, nickel, selenium, or zinc, or their compounds; and
- (b) have a height and duration of operation and a radius within which any burning or burnt material may be expected to fall that are specified by the manufacturer

**lightning interceptor** means any permanently located object, including a natural feature, that is exposed to the atmosphere and capable of intercepting lightning discharges in the vicinity of any hazardous substance location in which class 1 substances are present

**magazine**—

- (a) means a place in which explosives or partly manufactured explosives are stored; but
- (b) does not include a room or building in an explosives factory in which explosives or partly manufactured explosives are stored for use in manufacturing processes in the factory

**manufacture**, in relation to an explosive, includes the following processes:

- (a) making an explosive;
- (b) adapting an explosive to make any other explosive;
- (c) dividing up an article into component parts;
- (d) breaking up or unmaking an article;
- (e) remaking or altering or repairing an article;
- (f) separating or picking out defective or damaged portions of an article;
- (g) assembling, inspecting, or packaging an explosive

**outdoor pyrotechnic display** means an outdoor display of pyrotechnics

**outdoor pyrotechnics** means class 1 category G substances other than—

- (a) indoor pyrotechnics; and

- (b) retail fireworks

**retail fireworks** means fireworks to which the Hazardous Substances (Fireworks) Regulations 2001 apply

**rocket**—

- (a) means a class 1 category G pyrotechnic that is propelled or designed to be propelled into the air on ignition; but
- (b) does not include model rockets or rockets propelled by a rocket motor with a category C, J, or L classification

**salute** means a class 1 category G pyrotechnic designed to produce a loud report.

Compare: SR 2001/116 r 11

### Subpart 1—Controls on class 1 substances

#### 9.3 Class 1 substances generally to be under control of certified handlers

- (1) A PCBU with management or control of work using any quantity of a class 1 substance must, subject to this regulation, ensure that the substance is under the personal control of a certified handler.
- (2) The following class 1 substances are not required to be under the personal control of a certified handler:
  - (a) safety ammunition (including pre-primed cartridges and primers) of class 1.4S:
  - (b) airbag initiators and seatbelt pretensioners of class 1.4G and 1.4S:
  - (c) cable cutters of class 1.4S (UN0070):
  - (d) power device cartridges of class 1.4S (UN0323):
  - (e) signal tubes and shock tubes of class 1.4S (UN0349):
  - (f) cassette degradation devices of class 1.4S (UN0432):
  - (g) any other class 1 substance specified in a relevant safe work instrument.
- (3) The following class 1 substances are not required to be under the personal control of a certified handler before being sold to the public:
  - (a) retail fireworks in a quantity of less than 500 kg (gross weight):
  - (b) emergency flares and signalling devices of class 1.3G, 1.4G, and 1.4S in a quantity of less than 100 kg (gross weight):
  - (c) model rocket motors of class 1.4G and 1.4S in a quantity of less than 100 kg (gross weight):
  - (d) propellants of class 1.3C (UN0161 and UN0499) and 1.1C (UN0160) in a quantity of less than 50 kg:
  - (e) gunpowder of class 1.1D (UN0027) in a quantity of less than 50 kg:

- (f) igniting fuses of class 1.4G (UN0317) in a quantity of less than 100 kg (gross weight):
  - (g) igniters of class 1.4S (UN0454) in a quantity of less than 50 kg (gross weight):
  - (h) any other class 1 substance specified in a relevant safe work instrument.
- (4) The following class 1 substances are not required to be under the personal control of a certified handler after being sold to the public:
  - (a) retail fireworks:
  - (b) emergency flares and signalling devices of class 1.3G, 1.4G, and 1.4S:
  - (c) model rocket motors of class 1.4G and 1.4S:
  - (d) propellants of class 1.3C (UN0161 and UN0499) and 1.1C (UN0160) in a quantity of less than 15 kg:
  - (e) gunpowder of class 1.1D (UN0027) in a quantity of less than 15 kg:
  - (f) igniting fuses of class 1.4G (UN0317):
  - (g) igniters of class 1.4S (UN0454):
  - (h) any other class 1 substance specified in a relevant safe work instrument.
- (5) A class 1 substance is not required to be under the personal control of a certified handler if—
  - (a) a certified handler—
    - (i) is present at the location where the substance is being handled; and
    - (ii) has provided guidance to the person in respect of the handling; and
    - (iii) is available at all times to provide assistance, if necessary, to the person while the substance is being handled by the person; or
  - (b) the substance is handled by a person who does not require a compliance certificate as a certified handler (as provided in regulation 4.4), and who is handling the substance as part of his or her official duties.
- (6) A class 1 substance is not required to be under the personal control of a certified handler if it is secured at a hazardous substance location or designated use zone in a container that meets the applicable requirements of regulations 9.19, 9.20, and 9.21.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000:
  - (b) for any other person, to a fine not exceeding \$30,000.

**9.4 Safe work instrument may amend table 1 or 2 in Schedule 7**

- (1) A safe work instrument may add an item to, or delete an item from, table 1 or 2 in Schedule 7.
- (2) Table 1 or 2 in Schedule 7 applies as amended by a safe work instrument approved for the purposes of this regulation.

**9.5 Controlled substance licence generally required for class 1 substances**

- (1) An individual must not possess any quantity of a substance described in table 1 in Schedule 7 unless the individual holds a controlled substance licence that authorises possession of the substance.
- (2) Despite subclause (1), an individual who does not hold a controlled substance licence may possess a controlled substance described in table 1 in Schedule 7 if the individual—
  - (a) is under the direct supervision of an individual who holds a controlled substance licence for that substance; or
  - (b) is a member of the New Zealand Police and is in possession of the relevant substance for the purpose of policing; or
  - (c) does not require a controlled substance licence (as provided in regulation 7.9).
- (3) Despite subclause (1), the holder of a firearms licence or a firearms dealer's licence may possess less than 15 kg of black powder (gunpowder) UN0027.
- (4) An individual is not required to hold a controlled substance licence to possess a substance described in table 2 in Schedule 7.
- (5) An individual who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding \$2,000.

Compare: SR 2001/116 r 13

**9.6 Licence required for possession of smokeless powders and certain other propellants**

- (1) An individual must not possess any quantity of a substance described in table 3 in Schedule 7 unless the individual—
  - (a) holds a controlled substance licence authorising possession of the substance; or
  - (b) is under the direct supervision of an individual who holds any one of those licences.
- (2) Despite subclause (1), the holder of a firearms licence or a firearms dealer's licence may possess less than 15 kg of a substance described in table 3 in Schedule 7.
- (3) An individual who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding \$2,000.

**9.7 Exceptions to requirement to have licence for transportation of certain class 1 substances**

- (1) Regulations 9.5 and 9.6 do not apply to a person who possesses a substance described in table 1 or 3 in Schedule 7 for transportation if,—
  - (a) for a substance transported by sea,—
    - (i) the person is the holder of a relevant maritime document issued under Part 5 of the Maritime Transport Act 1994; and
    - (ii) Part 24A of the Maritime Rules (carriage of cargoes—dangerous goods) is complied with; and
  - (b) for a substance transported by air,—
    - (i) the person is the holder of a relevant aviation document issued under Part 1 of the Civil Aviation Act 1990; and
    - (ii) the Civil Aviation Rules are complied with; and
  - (c) for a substance transported by rail,—
    - (i) the rail wagon or freight container containing the substance is continuously locked or secured (or both); and
    - (ii) a person who holds a controlled substance licence is present (except in an emergency) at dispatch and receipt of the substance and at any place between dispatch and receipt where the rail wagon or freight container is opened; and
    - (iii) the Land Transport Rule: Dangerous Goods 2005 is complied with.
- (2) Regulations 9.5 and 9.6 do not apply to a person who possesses a substance described in table 4 in Schedule 7 for transportation by land if—
  - (a) the quantity of the substance that the person possesses at any time is less than 15 kg; and
  - (b) the Land Transport Rule: Dangerous Goods 2005 is complied with.

**9.8 Requirement to have controlled substance licence for supply**

- (1) A PCBU must not supply a substance described in table 1 or 3 in Schedule 7 to another person unless the person acquiring the substance holds a controlled substance licence that authorises possession of the substance.
- (2) Despite subclause (1), a PCBU may supply no more than 15 kg of the following substances to the holder of a firearms licence or a firearms dealer's licence:
  - (a) black powder (gunpowder) UN0027:
  - (b) a substance described in table 3 in Schedule 7.
- (3) Despite subclause (1), a person who does not have a controlled substance licence may acquire a substance for the purpose of transporting it if the person has a current dangerous goods endorsement on his or her driver licence.



- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

### **9.9 Prohibition on display of class 1 substance for sale**

- (1) A PCBU must not exhibit or expose a class 1 substance for sale on any premises.
- (2) Subclause (1) does not apply to—
- (a) retail fireworks;
  - (b) safety ammunition, including pre-primed cartridges and primers of class 1.4S.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 13A

### **9.10 General restrictions on location of class 1 substances**

- (1) Subject to this Part, a PCBU with management or control of a class 1 substance must ensure that the substance is—
- (a) at a hazardous substance location; or
  - (b) at a designated use zone or, in the case of a class 1 category G substance, a discharge area; or
  - (c) at a designated transfer zone; or
  - (d) on or in a vehicle, a ship, or an aircraft under the direct control of its driver, master, or pilot in circumstances to which the Land Transport Rules, Maritime Rules, or Civil Aviation Rules (as the case may be) apply; or
  - (e) at a location authorised by WorkSafe.
- (2) Subject to this Part, a PCBU with management or control of a class 1 substance must ensure that a class 1 substance is not—
- (a) at a transit depot; or
  - (b) at a designated transfer zone for more than—
    - (i) 24 hours, for retail fireworks and for substances in hazard classifications 1.4C, 1.4E, 1.4G, and 1.4S;
    - (ii) 8 hours, for all other class 1 substances.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—

- (a) for an individual, to a fine not exceeding \$10,000:
- (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 14

#### **9.11 Limits on impact or pressure shock**

- (1) A PCBU with management or control of a class 1 substance must ensure that the substance is not subject to any impact or pressure shock that could inadvertently result in an explosion or a fire.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 15

#### **9.12 Limits on spark energy**

- (1) A PCBU with management or control of a class 1 substance must ensure that the substance is not exposed to any ignition source that may release spark energy in a way that could inadvertently result in an explosion or a fire.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 16

#### **9.13 Limits on heat and fire**

- (1) A PCBU with management or control of a class 1 substance must ensure that the substance is not exposed to any ignition source capable of generating heat or fire where that could inadvertently result in an explosion or a fire.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 17

#### **9.14 Limits on static electricity in relation to equipment**

- (1) A PCBU with management or control of a class 1 substance must ensure that the substance is not exposed to a build-up of static electrical charge that could result in an unintended explosion or fire.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 18

### 9.15 Protection from stray electrical currents

- (1) A PCBU with management or control of a class 1 substance that is to be fired using an electrical firing system must ensure that the area within 2 m of any uninsulated portion of the firing system is not subject to stray electrical currents of more than 60 mA.
- (2) Subclause (1) does not apply to a firing system initiated only by electrical currents modulated to specific waveforms or pulse sequences.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 19

### 9.16 Protection from electromagnetic radiation

- (1) A PCBU with management or control of an electro-explosive device or electrical lead set out for firing a class 1 substance must ensure that the device or lead complies with either or both of the following:
  - (a) the device or lead is located at a distance from any electromagnetic radiation source of at least the safety distance in metres given by the following formula:

$$\text{safety distance} = [(G \times P)/(4 \times \pi \times S_p)]^{1/2}$$

where—

- G is the power ratio gain of the transmitter antennae
- P is the mean power in watts fed to the transmitter antennae calculated from the product of peak power × pps × pulse width
- pps is the number of pulses per second
- S<sub>p</sub> is the safe power density in watts per square metre, determined by the formula:

$$(3 \times 10^{-6})\text{pps}/0.13\lambda^2$$

where—

- λ is the wavelength of the electromagnetic source.

- (b) the device is of a type that, according to either a pre-test or specifications in the device design, cannot be initiated by induced current.
- (2) The PCBU who manufactures an unprotected electro-explosive device must ensure that any equipment for holding or handling the device during its manufacture has an earthing system with a resistance of less than 10 Ω.

- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 20

### *Segregation of incompatible substances*

#### **9.17 Requirement to segregate incompatible substances and materials**

- (1) Except as provided in table 1 in Schedule 8, a PCBU in control or possession of a class 1 substance must ensure that—
- (a) the substance is not present in the same hazardous substance location, designated transfer zone, or means of transportation as another class 1 substance that is of the same subclass but in a different category classification; and
  - (b) if the substance is the category K classification of its subclass, it is not present in the same hazardous substance location, designated transfer zone, or means of transportation as another class 1 substance in the category K classification of a different subclass; and
  - (c) if the substance is the category L classification of its subclass, it is not present in the same hazardous substance location, designated transfer zone, or means of transportation as another class 1 substance in the category L classification of a different subclass.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 21

### *Securing class 1 substances*

#### **9.18 Requirement to secure class 1 substances**

- (1) A PCBU with management or control of a class 1 substance specified in table 7 in Schedule 8 must, before using the substance, ensure that the substance is secured at a hazardous substance location or designated use zone in a container that—
- (a) is of a kind specified in that table for the specified hazard classification and quantity; and
  - (b) meets the applicable requirements of regulations 9.19, 9.20, and 9.21.
- (2) A PCBU with management or control of a class 1 category G substance at a discharge area must, before using the substance, ensure that the substance is se-

cured in a way that ensures that a person not authorised by the PCBU cannot gain access to the substance.

- (3) It is sufficient for the following substances, when left unattended, to be secured in a way that ensures that an unauthorised person cannot gain access to the substance:
  - (a) cartridges and primers, of class 1.4S safety ammunition, including pre-primed cartridges;
  - (b) airbag initiators and seatbelt pretensioners of class 1.4G or 1.4S;
  - (c) cable cutters of class 1.4S (UN0070);
  - (d) power device cartridges of class 1.4S (UN0323);
  - (e) signal tubes or shock tubes of class 1.4S (UN0349);
  - (f) cassette degradation devices of class 1.4S (UN0432).
- (4) It is sufficient for a class 1 substance to be under the personal control of a certified handler.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 22

### 9.19 Requirements for containers

- (1) If regulation 9.18 requires a substance to be secured in a container that is a magazine, a PCBU with management or control of the substance must ensure that the magazine—
  - (a) has the following:
    - (i) an outer case that complies with the requirements for material of construction as detailed in AS 2187.1–1998; and
    - (ii) locking arrangements, for any entry into the magazine, with a tensile strength of at least 1 250 kN/m<sup>2</sup>; and
  - (b) is built to a design that complies with, and is certified in accordance with, regulation 9.20.
- (2) If regulation 9.18 requires a class 1 substance to be secured in a readily movable container (that is not packaging), a PCBU with management or control of the container must ensure that it—
  - (a) complies with the following design requirements:
    - (i) it has an interior that is unable to generate a spark;
    - (ii) it has an exterior completely sheathed in fire-resistant material;
    - (iii) it has a close-fitting lid and is secured so that an unauthorised person cannot gain access to the substance;

- (iv) it is designed and constructed so that it can be readily moved by 1 person in the event of a fire or similar emergency that could put the substance at a risk of unintended detonation; and
- (b) is certified in accordance with regulation 9.20.

Compare: SR 2001/116 r 23

## 9.20 Design and certification of containers

- (1) For the purposes of regulation 9.19(1)(b), the design for a magazine must—
  - (a) specify the material type to be used in making it, its dimensions, and its components, including any part of the magazine through which access is gained to the contents, the arrangements for securing the magazine against unauthorised entry, and the arrangements for securing it against removal; and
  - (b) have a compliance certificate certifying that the design meets the requirements specified in paragraph (a) and regulation 9.19(1)(a).
- (2) For the purposes of regulation 9.19(2)(b), a readily movable container must have a compliance certificate certifying that the container is constructed according to the design requirements of regulation 9.19(2)(a).
- (3) Despite subclauses (1) and (2), a container may be designed and certified in accordance with requirements set out in a relevant safe work instrument.
- (4) A compliance certificate under this regulation must—
  - (a) be obtained by the PCBU with management or control of the container at intervals not exceeding 5 years; and
  - (b) certify that the container continues to meet the relevant design requirements.

Compare: SR 2001/116 r 24

## 9.21 Requirements for containers securing fireworks

- (1) A PCBU with management or control of a hazardous substance location used to secure retail fireworks must ensure that—
  - (a) the container (that is not packaging) that contains the fireworks either complies with regulations 9.19 and 9.20 or is—
    - (i) of fire-resistant construction; and
    - (ii) secured so that a person cannot gain access to it without tools, keys, or any other device for operating locks; and
    - (iii) monitored by a security system; or
  - (b) the building that contains the fireworks is—
    - (i) of fire-resistant construction; and
    - (ii) secured so that a person cannot gain access to it without tools, keys, or any other device for operating locks; and

- (iii) monitored by a security system.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

### Subpart 2—Hazardous substance locations

#### 9.22 PCBU to establish hazardous substance location

- (1) This regulation applies to a place within a workplace where a class 1 substance is present—
  - (a) for more than 2 hours; and
  - (b) in at least the quantity specified for the relevant classification in table 5 in Schedule 8.
- (2) A PCBU with management or control of the place must establish 1 or more hazardous substance locations in which the substances are to be located.
- (3) Despite subclause (2), a hazardous substance location is not required for any of the following class 1 substances in a quantity below 10 000 kg (gross weight):
  - (a) safety ammunition, including pre-primed cartridges and primers, of class 1.4S;
  - (b) airbag initiators and seatbelt pretensioners of class 1.4G or 1.4S;
  - (c) cable cutters of class 1.4S (UN0070);
  - (d) power device cartridges of class 1.4S (UN0323);
  - (e) signal tubes or shock tubes of class 1.4S (UN0349);
  - (f) cassette degradation devices of class 1.4S (UN0432).
- (4) A PCBU with management or control of a hazardous substance location must notify WorkSafe, at least 30 working days before commissioning the location for class 1 substances, of—
  - (a) the street address at which the hazardous substance location is situated; and
  - (b) the maximum quantity and hazard classification of each class 1 substance that the hazardous substance location is designed or constructed to accommodate.
- (5) A PCBU with management or control of a hazardous substance location must,—
  - (a) if regulation 9.3 applies, be a certified handler for the relevant substances or demonstrate that a person is available who is a certified handler for the substances; and

- (b) ensure that any container or building used to hold the substance is secured in accordance with regulation 9.18.
- (6) A PCBU with management or control of a hazardous substance location must ensure that,—
  - (a) if regulation 9.26 applies to the location, a compliance certificate is obtained that certifies that the requirements of that regulation are met; and
  - (b) a site plan is available for inspection showing, in relation to the legal boundary of the place where the hazardous substance location is situated, the physical position of—
    - (i) all hazardous substance locations in the place; and
    - (ii) all controlled zones in the place.
- (7) This regulation does not apply to a place within a workplace that is—
  - (a) a designated use zone;
  - (b) a designated transfer zone;
  - (c) a discharge area;
  - (d) a location authorised by WorkSafe under regulation 9.10(1)(e).
- (8) A PCBU who contravenes subclause (2), (5), or (6) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (9) A PCBU who contravenes subclause (4) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/116 r 26

### **9.23 PCBU to reduce likelihood of unintended initiation**

- (1) A PCBU with management or control of a hazardous substance location must ensure that—
  - (a) all handling systems and equipment used in relation to class 1 substances meet the requirements of regulation 9.11; and
  - (b) any piece of fixed equipment or part of the facility structure that is capable of producing a spark or transferring spark energy to any class 1 substance meets the requirements of regulation 9.12; and
  - (c) any piece of equipment or part of the facility structure that is capable of generating heat or fire meets the requirements of regulation 9.13; and
  - (d) for a class 1 substance other than retail fireworks, no readily combustible material is present within 5 m of the outside of the hazardous substance location; and



- (e) for retail fireworks, no readily combustible material is present within 2 m of the outside of a hazardous substance location holding no more than 10 000 kg of fireworks in a standard ISO transport container, or within 5 m of the outside of a hazardous substance location holding more than 10 000 kg of fireworks; and
  - (f) any equipment or part of the facility structure that is capable of accumulating a static electrical charge meets the requirements of regulation 9.14; and
  - (g) where the quantity of class 1 substances (except retail fireworks) requires, there is a lightning conducting system in place that meets the requirements of regulations 9.24 and 9.25; and
  - (h) where an electro-explosive device or a class 1 category A substance is being manufactured or is unprotected, or where a class 1 category B substance is being manufactured,—
    - (i) every entrance to the immediate area where the device or substance is present is equipped with a means of grounding any person who enters, and every person who enters is grounded; and
    - (ii) any person handling the substance in that area wears clothing and footwear or has earthing systems that meet the requirements of subclause (2); and
  - (i) where there are unprotected electro-explosive devices,—
    - (i) the hazardous substance location meets the safety distance requirements imposed by regulation 9.16 and has in place documented procedures to exclude devices that are sources of electromagnetic radiation unless those safety distance requirements continue to be met when the device is operating; and
    - (ii) any equipment for holding or handling an unprotected electro-explosive device meets the requirements of regulation 9.16(2).
- (2) The earthing systems referred to in subclause (1)(h)(ii) must—
- (a) have a resistance of between  $10^5 \Omega$  and  $10^6 \Omega$ ; or
  - (b) be unable to accumulate a static electrical charge capable of producing a discharge of more than—
    - (i) 0.001 J to a class 1 category A substance; and
    - (ii) 0.2 J to a class 1 category B article or to an electro-explosive device.
- (3) If a thunderstorm approaches a hazardous substance location,—
- (a) any loading or unloading of a class 1 substance into or out of the hazardous substance location must cease; and
  - (b) any manufacturing involving a class 1 substance must cease; and

- (c) all persons must be evacuated to a distance in metres from the substance (unless the substance is retail fireworks) of at least that calculated in accordance with the following formula:

$$D = 10 \times \text{NEQ}^{1/3}$$

where—

D is the distance in metres

NEQ (net quantity of class 1 substance) is the gross weight of the article, less the weight of any construction materials of the article, in kilograms.

- (4) A PCBU with management or control of the hazardous substance location must ensure that no class 2, 3, 4, 5, 6, 8, or 9 substance is present in the hazardous substance location, other than a substance used to manufacture a class 1 substance.
- (5) Despite subclause (3), inspecting and packaging may continue for any retail fireworks or class 1.4 substances.
- (6) Subclause (3)(c) does not apply to class 1.4S substances.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 27

## **9.24 Protection from lightning strike**

- (1) A PCBU with management or control of a hazardous substance location at which class 1 substances (except fireworks) are present must ensure that—
  - (a) there is an earthing system between the atmosphere above the hazardous substance location and earth that—
    - (i) has a resistance to earth of less than 10  $\Omega$  prior to any bonding of any metallic structures and service conduits to the earthing system; and
    - (ii) is separated from any class 1 substance so that any build-up of static electrical charge along the earthing system cannot produce a discharge from the earthing system to the substance; and
  - (b) there are lightning interceptors as provided in regulation 9.25.
- (2) This regulation applies only if the quantity of class 1 substances present exceeds the following amounts:
  - (a) for class 1.1 or 1.5 substances, 50 kg; or
  - (b) for class 1.2 or 1.6 substances, 100 kg; or
  - (c) for class 1.3 substances, 200 kg.

- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 28

### 9.25 Lightning interceptors

- (1) A PCBU with management or control of a hazardous substance location that requires lightning protection must ensure, subject to subclause (2), that the location has lightning interceptors that comply with either of the following requirements:
- (a) the hazardous substance location must fall completely within the space of a cone or plane projected at 30° from the vertical from the top of the lightning interceptors; or
  - (b) the lightning interceptors must be positioned so as to ensure that the hazardous substance location completely falls outside an arc generated by a 20 m radius sphere rolled over the hazardous substance location and the lightning interceptors, as illustrated in figures 4.1 and 4.2 of section 4 in AS/NZS 1768: 2007—Lightning protection.
- (2) A hazardous substance location does not require separate lightning interceptors if the complete outer shell of the location acts as the lightning earthing system.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 29

### 9.26 Compliance certificate for hazardous substance location

- (1) A PCBU with management or control of a hazardous substance location where a class 1 substance is present must ensure that the hazardous substance location has a current compliance certificate certifying that the location complies with the requirements of regulations 9.17, 9.18, 9.22(4), (5), and (6)(b), and 9.23.
- (2) The requirements of subclause (1) do not apply to a hazardous substance location where the only class 1 substances present are present in a quantity less than the quantity specified for the relevant classification in table 6 in Schedule 8.
- (3) Subclause (1) does not apply to the following class 1 substances:
- (a) safety ammunition (including pre-primed cartridges and primers) of class 1.4S;
  - (b) airbag initiators and seatbelt pretensioners of class 1.4G or 1.4S;
  - (c) cable cutters of class 1.4S (UN0070):

- (d) power device cartridges of class 1.4S (UN0323):
  - (e) signal tubes and shock tubes of class 1.4S (UN0349):
  - (f) cassette degradation devices of class 1.4S (UN0432).
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 30

### 9.27 PCBU to control adverse effects of unintended initiation

- (1) A PCBU with management or control of a hazardous substance location must—
- (a) authorise to be in the hazardous substance location or its abutting controlled zone only—
    - (i) those persons necessary for the handling of class 1 substances; and
    - (ii) for limited periods only, persons carrying out maintenance, inspection, or management activities, or site visitors under the direct supervision of a certified handler; and
  - (b) exclude from the hazardous substance location and controlled zone persons not authorised to be there.
- (2) A PCBU with management or control of a hazardous substance location must manage all class 1 substances present within the location (except safety ammunition) to ensure that, in the event of an unintended initiation,—
- (a) public traffic routes of low density and places where people may occasionally be present in numbers up to 200 persons on average in any 24-hour period are not subject to any of the following:
    - (i) a blast overpressure more than 13 kPa:
    - (ii) for class 1 substances that have a fire hazard or a minor projection hazard (or both) but not a mass explosion hazard, being within a distance described by the following formula:
$$D = 4.3Q^{1/3}$$
where—
      - D is distance in metres
      - Q is quantity in kilograms:
    - (iii) more than 2 hazardous fragments per 60 m<sup>2</sup> of surface area; and
  - (b) public traffic routes of medium density, places where people may occasionally be present in numbers up to 900 persons on average in any 24-hour period, and the interior of any proximate building within the boun-

dary of the place where people not directly handling explosive substances are present are not subject to any of the following:

- (i) a blast overpressure more than 9 kPa;
- (ii) for class 1 substances that have a fire hazard or a minor projection hazard (or both) but not a mass explosion hazard, being within a distance described by the following formula:

$$D = 4.3Q^{1/3}$$

D is distance in metres

Q is quantity in kilograms:

- (iii) more than 2 hazardous fragments per 60 m<sup>2</sup> of surface area; and
- (c) public traffic routes of high density, areas of high intensity land use, or any area where a person may be legally present inside the boundary of the place where the hazardous substance location is located are not subject to any of the following:
- (i) a blast overpressure more than 5 kPa;
  - (ii) for class 1 substances that have a fire hazard or a minor projection hazard (or both) but not a mass explosion hazard, being within a distance described by the following formula:

$$D = 6.4Q^{1/3}$$

D is distance in metres

Q is quantity in kilograms:

- (iii) more than 1 hazardous fragment per 60 m<sup>2</sup> of surface area; or
- (d) vulnerable facilities are not subject to more than a blast overpressure of 2 kPa.
- (3) A hazardous substance location complies with subclause (2) if—
- (a) the total quantity and type of class 1 substances are limited to meet the requirements of subclause (2) at the boundary of the hazardous substance location; or
  - (b) the distances between the class 1 substances and the boundary of the hazardous substance location are set to meet the requirements of subclause (2); or
  - (c) the PCBU with management or control of the hazardous substance location complies with requirements in a relevant safe work instrument.
- (4) A PCBU with management or control of a hazardous substance location that is used solely for securing and holding a class 1 substance must limit the quantities of any class 1 substance at the location to ensure that, in the event of an unintended initiation,—

- (a) the interior of any proximate building where a class 1 substance is manufactured would not be subject to a blast overpressure of more than 24 kPa; and
    - (b) the exterior of any proximate building where a class 1 substance is manufactured would not be subject to more than 3 hazardous fragments per 60 m<sup>2</sup> of exterior surface area.
  - (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
    - (a) for an individual, to a fine not exceeding \$10,000;
    - (b) for any other person, to a fine not exceeding \$50,000.
- Compare: SR 2001/116 r 31

### Subpart 3—Intended detonation and deflagration of class 1 substances

#### **9.28 Duty of PCBU who directs detonation or deflagration**

- (1) At any place within a workplace where a class 1 substance (except a class 1 substance described in regulation 9.3(2)) is to be intentionally detonated or deflagrated, the PCBU who directs the carrying out of the detonation or deflagration must,—
  - (a) if regulation 9.3 requires the substance to be under the personal control of a certified handler, ensure that there is a certified handler personally in control of the substance, or that the substance is secured as specified in regulation 9.18; and
  - (b) establish a designated use zone within which such substances are to be detonated; and
  - (c) ensure that regulations 9.29 and 9.30 are complied with.
- (2) At least 3 working days before the first firing occurs at the place, the PCBU who directs the carrying out of the detonation or deflagration must—
  - (a) notify WorkSafe of the place where the firing is to occur, the date of the firing, and the time and number of firings; and
  - (b) if regular firings are to occur at the place, notify WorkSafe of the likely frequency of firings per year, and at 12-monthly intervals confirm or modify the notification; and
  - (c) give WorkSafe sufficient information to enable an inspector to contact the PCBU who directs the detonation and deflagration and the certified handler during normal business hours.
- (3) The PCBU who directs the carrying out of the detonation or deflagration must ensure that all persons not specifically authorised by a certified handler to be in the designated use zone are excluded, using the following methods:
  - (a) information must be displayed that—

- (i) warns that a substance is being detonated and that entry is prohibited; and
    - (ii) is visible from all points that are 5 m from the outer side of the perimeter of the designated use zone; and
  - (b) 1 minute before firing, a distinctive warning sound must be generated that is of sufficient volume to be heard throughout the zone, and at all points that are 5 m from the outer side of the perimeter of the zone, by a person with normal hearing; and
  - (c) a visual check must be made of the zone immediately before firing to ensure that all people not directly involved with the firing have been excluded.
- (4) Subclauses (1)(b), (2), and (3) do not apply—
- (a) to any place if the quantity of class 1 substances being detonated or deflagrated in any one firing does not exceed the quantities for the relevant classifications specified in table 6 in Schedule 8:
  - (b) to the use of a class 1 category G substance in a pyrotechnic or special effects display.
- (5) For substances of hazard classification 1.1 or 1.5, and for other class 1 substances in a quantity exceeding the quantities for the relevant classifications specified in table 6 in Schedule 8, the PCBU who directs the carrying out of the detonation or deflagration must not detonate or deflagrate a class 1 substance during the hours of darkness unless that person—
- (a) develops and documents procedures for the detonation or deflagration of those substances; and
  - (b) obtains a compliance certificate to certify that those procedures meet the requirements of this regulation without natural lighting.
- (6) Where persons not specifically authorised are excluded from any designated use zone under the provisions of the Government Roading Powers Act 1989, compliance by the New Zealand Transport Agency with that agency's Active Control Procedures for Avalanche Control is sufficient to meet the requirements of subclauses (2) and (3).
- (7) A PCBU who contravenes subclause (1), (3), (5), or (6) commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.
- (8) A PCBU who contravenes subclause (2) commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000:
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/116 r 32

**9.29 Additional duties of PCBU who directs detonation or deflagration of class 1 substance**

- (1) A PCBU who directs the carrying out of the detonation or deflagration of a class 1 substance at any place within a workplace must ensure that—
  - (a) any persons required to be at the place, whether for conducting the detonation or deflagration of such substances or for the making and recording of film and video special effects, are authorised by the PCBU; and
  - (b) any class 1 substance is kept packaged until the point where the explosive charge is to be made up; and
  - (c) any container from which any class 1 substance is being taken is closed as soon as the quantity needed to make up the explosive charge or charges for immediate use has been removed; and
  - (d) the making up of any explosive charge is sufficiently segregated from any container holding class 1 substances so that unintended initiation of the charge could not cause a blast overpressure on the container exceeding 180 kPa; and
  - (e) the system for firing an explosive charge is not readied to the point that only the 1 final action needs to be taken to fire the charge, until the requirements of regulation 9.28(3) have been complied with; and
  - (f) the firing is monitored and any misfired charge is identified.
- (2) If a misfired charge is identified under subclause (1)(f), the PCBU who directs detonation or deflagration of the class 1 substance must—
  - (a) ensure that no person approaches the misfired charge for 10 minutes in the case of an electrically fired charge or 60 minutes in the case of a charge fired by a fuse; and
  - (b) safely dispose of the malfunctioning charge without undue delay in accordance with the Hazardous Substances (Disposal) Notice 2017 and advise the PCBU who directed the carrying out of the detonation or deflagration to maintain the requirements of regulation 9.28(3) until this has been completed.
- (3) If a thunderstorm approaches a place where a class 1 substance is being detonated or deflagrated,—
  - (a) any handling or preparation of the class 1 substance for detonation or deflagration must cease; and
  - (b) all persons must be evacuated to a distance in metres from any container holding a class 1 substance, and from any position where a class 1 substance is present for intended detonation or deflagration, of at least that calculated in accordance with the following formula:

$$D = 10 \times NEQ^{1/3}$$

where—



D is the distance in metres

NEQ (net quantity of class 1 substance) is the gross weight of the article less the weight of any construction materials of the article, in kilograms.

- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 33

### **9.30 Duty of PCBU to control adverse effects of intended detonation or deflagration**

- (1) A PCBU with management or control of a class 1 substance must limit the quantity of any class 1 substances to be detonated or deflagrated at any place within a workplace, so as to ensure that—
- (a) no place where a person may legally be present is,—
    - (i) for a vulnerable facility, subject to a blast overpressure more than 2 kPa, and for an area of high intensity land use, to a blast overpressure of more than 5 kPa; or
    - (ii) for class 1 substances that have a fire hazard or a minor projection hazard (or both) but not a mass explosion hazard, within a distance described by the following formula:

$$D = 6.4Q^{1/3}$$

where—

D is distance in metres

Q is quantity in kilograms; or

- (iii) subject to any hazardous fragment; and
- (b) no low-rise residential building outside the designated use zone is subject to a ground vibration leading to more than 10 mm per second peak particle velocity; and
- (c) no commercial or industrial building outside the designated use zone is subject to a ground vibration leading to more than 25 mm per second peak particle velocity; and
- (d) no other building for which WorkSafe has specified a lesser peak particle velocity limit is subject to a ground vibration of more than that peak particle velocity; and
- (e) no person authorised by the PCBU to be present in the place—
  - (i) is subject to a blast overpressure more than 9 kPa; or

- (ii) for class 1 substances that have a fire hazard or a minor projection hazard (or both) but not a mass explosion hazard, is within a distance described by the following formula:

$$D = 4.3Q^{1/3}$$

where—

D is distance in metres

Q is quantity in kilograms; or

- (iii) is subject to any hazardous fragment.

- (2) Despite the limits specified in subclause (1)(b), (c), and (d), the PCBU may calculate a variation to the specified limit that takes account of the frequency of ground vibration expected to result from the blast in accordance with Appendix J of AS 2187.2—2006—Explosives—Storage, transport and use, and undertake detonations in accordance with that limit provided the operating practice requirements of Appendix J5 of that standard are complied with.
- (3) Despite subclause (1)(e), an authorised person who is directly involved with the detonation or deflagration of a class 1 substance may be subject to a blast overpressure of up to 24 kPa, and for class 1 substances that have a fire hazard or a minor projection hazard (or both) but not a mass explosion hazard, a distance described by the formula,  $D = 3.2Q^{1/3}$  if—
  - (a) the PCBU has obtained a compliance certificate to certify that, if the documented procedures are followed, those figures represent the highest levels of blast overpressure and fire hazard or minor projection hazard to which the person could be subject; and
  - (b) the authorised person has accepted those figures in writing.
- (4) For the purposes of this regulation, **peak particle velocity** means the maximum velocity of ground particles resulting from a detonation and measured as described in Appendix J of AS 2187.2—2006—Explosives—Storage, transport and use, where the particle velocity is measured as the sum of the instantaneous components of particle velocity on the x, y, and z axes given by the following formula:

$$v_p = (v_x^2 + v_y^2 + v_z^2)^{1/2}$$

where v equals velocity.

- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 34

## Subpart 4—Controls on indoor and outdoor pyrotechnic displays

*Controls on outdoor pyrotechnic displays***9.31 PCBU who directs outdoor pyrotechnic display to ensure certifier handler in control of pyrotechnics**

- (1) A PCBU who directs the carrying out of an outdoor pyrotechnic display that uses outdoor pyrotechnics or indoor pyrotechnics (but not retail fireworks) must ensure that a certified handler, who has an appropriate certificate of competency for conducting a display at the height planned, is personally in control of the pyrotechnics at all times except when a provision of this subpart allows or requires the pyrotechnics to be secured in another way.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 35

**9.32 PCBU to establish discharge area and exclusion zone for outdoor pyrotechnic display**

- (1) A PCBU who directs the carrying out of an outdoor pyrotechnic display that uses only outdoor pyrotechnics must establish—
  - (a) a discharge area within which the substances are to be ignited, in accordance with regulation 9.33; and
  - (b) an exclusion zone to receive any debris or malfunctioning pyrotechnics from the display, in accordance with regulation 9.34(1), (2), and (3).
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 36

**9.33 Requirements for discharge area**

A PCBU who establishes a discharge area must ensure that the discharge area has a boundary that is at least—

- (a) 30 m from any building, temporary structure, vehicle, ship, or aircraft, other than one that is—
  - (i) used for staging the display; or
  - (ii) of a construction that prevents, or is protected from being ignited by contact with, burning debris or ignited pyrotechnic material; and

- (b) 250 m from any place where class 1 Category G substances that are not part of the display or any class 2, 3, 4, and 5 substances are present in quantities more than those specified in table 2 in Schedule 8; and
- (c) 200 m from any place used for the purpose of housing people if the people cannot be evacuated without external assistance; and
- (d) 200 m from any place containing captive animals; and
- (e) 25 m from the outermost firing point for a class 1 category G substance.

Compare: SR 2001/116 r 37

### **9.34 Requirements for exclusion zone**

- (1) A PCBU who establishes an exclusion zone must ensure that the exclusion zone has a minimum boundary that—
  - (a) encompasses the discharge area for ground-level displays; and
  - (b) for low-level displays, is 50 m from the outermost firing point in the discharge area; and
  - (c) for high-level displays over 60 m,—
    - (i) has a horizontal width, measured at right angles to the intended line of flight from either side of the most lateral points of firing for aerial shells from the discharge area, of at least the distance specified in table 3 in Schedule 8; and
    - (ii) has a horizontal length, measured along the intended line of flight from the point of firing for aerial shells from the discharge area, of at least the distance specified in table 4 in Schedule 8.
- (2) Despite subclause (1), if a shell with a diameter of 300 mm or more is to be used in such an outdoor display, and if WorkSafe has specified distances more than those in tables 3 and 4 in Schedule 8 as sufficient to ensure that any debris or malfunctioning shells fall within the exclusion zone so defined, the exclusion zone may have those dimensions.
- (3) Despite subclause (1), if a shell to be used in the outdoor display has a diameter of less than 300 mm and a restricted burst pattern radius, and if WorkSafe has specified distances less than those in tables 3 and 4 in Schedule 8 for shells of that diameter but not less than twice the burst radius, the exclusion zone may have those dimensions.
- (4) The PCBU must have documented arrangements for excluding from the exclusion zone people, vehicles, boats, and aircraft not associated with the display.
- (5) The PCBU must control all exclusion zones so as to—
  - (a) exclude persons, vehicles, boats, or aircraft not associated with the display; and

- (b) exclude class 2, 3, 4, and 5 substances unless they are protected so that they cannot be ignited by burning debris or ignited pyrotechnic material; and
  - (c) treat or safeguard the ground and any vegetation so that a fire cannot spread more than 5 m from the point of ignition; and
  - (d) provide the fire fighting capability specified by Fire and Emergency New Zealand.
- (6) A PCBU who contravenes subclause (4) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.
- (7) A PCBU who contravenes subclause (5) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 38

### **9.35 Notification and recording of outdoor pyrotechnic displays**

- (1) A PCBU who directs the carrying out of an outdoor pyrotechnic display that uses only outdoor pyrotechnics must, at least 3 working days (or any shorter period allowed by WorkSafe in exceptional circumstances) before the first firing occurs,—
  - (a) notify WorkSafe of the location where the display is to occur, the date of the display, and the time and number of firings; and
  - (b) give WorkSafe sufficient information to enable an inspector to contact the PCBU who will direct the carrying out of the display and the certified handler during normal business hours.
- (2) The PCBU must obtain prior written agreement for the holding of the display from—
  - (a) Fire and Emergency New Zealand; and
  - (b) if the display involves firing to heights over 60 m, the agency responsible for air safety in the vicinity of the display.
- (3) If the display involves firing to heights over 60 m, the agreement of Fire and Emergency New Zealand must record that the documented procedures for the display will enable the PCBU to comply with the requirements of regulation 9.34(5)(c) and (d).
- (4) The PCBU must keep a record of the outdoor pyrotechnic display that includes—
  - (a) a site plan of the discharge area and any exclusion zone; and

- (b) details of arrangements for identifying and securing the discharge area and exclusion zone; and
- (c) the name of the manufacturer of, and the size, type, and number of, pyrotechnic articles to be used; and
- (d) details of the positioning of firing points and mortar tubes and the methods of firing; and
- (e) the names and responsibilities of all authorised persons operating the display.
- (5) The record must—
  - (a) be available for inspection by an inspector at least 3 working days before the display as far as it relates to the matters specified in subclause (4); and
  - (b) be retained by the PCBU for at least 12 months after the display.
- (6) The PCBU must—
  - (a) notify WorkSafe as soon as practicable after the display of any malfunctioning pyrotechnics and any incidents of fire or injury; and
  - (b) maintain a record of those incidents for a period of not less than 5 years after the display.
- (7) A PCBU who contravenes subclause (1), (2), or (6)(a) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.
- (8) A PCBU who contravenes subclause (4), (5), or (6)(b) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

Compare: SR 2001/116 r 39

### **9.36 Compliance certificate for outdoor pyrotechnic displays**

- (1) A PCBU who directs the carrying out of an outdoor pyrotechnic display that uses only outdoor pyrotechnics must obtain a compliance certificate at least 3 working days before the display to certify that the planning for the proposed display specifies the following:
  - (a) that a certified handler has an appropriate certificate of competency for conducting a display that involves firing to the height planned;
  - (b) that the boundary of a discharge area is as specified in regulation 9.33, and the boundary of the exclusion zone is as specified in regulation 9.34;
  - (c) the requirements of regulation 9.38;
  - (d) the number and type of pyrotechnic articles to be used in the display;

- (e) that the requirements of regulation 9.35(2), (3), and (4) have been met;
  - (f) in the case of an aerial display that involves firing to heights over 60 m, the requirements of regulation 9.39(2)(a), (b), (d), (e), (f), and (i).
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 40

### **9.37 Duties of PCBU within discharge area**

- (1) A PCBU who directs the carrying out of an outdoor pyrotechnic display that uses only outdoor pyrotechnics must, in a discharge area established under regulations 9.32 and 9.33, ensure that—
- (a) the only class 1 substances in the area are those intended for use in the display; and
  - (b) when not under the personal control of a certified handler, the substances are secured from access by unauthorised persons.
- (2) The PCBU must authorise and supervise the display operators and limit the number of display operators to those necessary to undertake the operation of the display.
- (3) The PCBU must, in addition to complying with regulation 15 of the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, ensure that all display operators present in the discharge area have—
- (a) body, head, and eye protection during the display sufficient to withstand a 100 g burning object for 2 seconds; and
  - (b) sufficient hearing protection to ensure that they are subject to no more than 120 dB during the display.
- (4) The PCBU must also—
- (a) ensure that no person can be struck by any class 1 category G substance while firing that substance; and
  - (b) ensure that the display operator monitors the firing; and
  - (c) identify any malfunctioning class 1 category G substance; and
  - (d) mark all firing points containing a malfunctioning class 1 category G substance; and
  - (e) advise authorised persons of the presence of a malfunctioning class 1 category G substance; and
  - (f) ensure that the malfunctioning class 1 category G substance is incapable of igniting before removing and disposing of it in accordance with the Hazardous Substances (Disposal) Notice 2017.

- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 41

**9.38 Additional duties of PCBU who directs carrying out of outdoor pyrotechnic display**

- (1) A PCBU who directs the carrying out of an outdoor pyrotechnic display that uses only outdoor pyrotechnics must ensure that—
- (a) the requirements of subclauses (2) to (4) are met from the time when any class 1 category G substance is brought into the discharge area until the display has been completed; and
  - (b) any remaining class 1 category G substance has been either removed or disposed of in accordance with the Hazardous Substances (Disposal) Notice 2017.
- (2) The PCBU must ensure that any unfired class 1 category G substance does not come into contact with sparks or hot fragments unless the sparks or fragments are part of an intended ignition system.
- (3) The PCBU must ensure that there are no class 2, 3, 4, or 5 substances present in the discharge area unless those substances are protected in such a way that they cannot be ignited by—
- (a) burning debris or ignited pyrotechnic material generated as a result of the display; or
  - (b) the heat able to be generated by the display in the discharge area.
- (4) The PCBU must ensure that the firing circuit of an electric ignition system—
- (a) is insulated from earth and has been tested to ensure continuity where the test current is less than 60 mA; and
  - (b) is protected from stray electrical currents of more than 60 mA; and
  - (c) satisfies the requirements for protection from electromagnetic radiation as specified in regulation 9.16; and
  - (d) is arranged so that only a certified handler may initiate firing and so that each firing sequence requires a positive action.
- (5) If a thunderstorm approaches a discharge area,—
- (a) any handling or preparation of a class 1 category G substance must cease; and
  - (b) all persons must be evacuated to a distance in metres from any container holding class 1 category G substances, and from any firing positions where class 1 category G substances are present, of at least that calculated in accordance with the following formula:



$$D = 10 \times \text{NEQ}^{1/3}$$

where—

D is the distance in metres

NEQ (net quantity of class 1 substance) is the gross weight of the article less the weight of any construction materials of the article, in kilograms.

- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 42

### **9.39 Additional duties of PCBU if display involves firing to heights over 60 m**

- (1) This regulation applies to an outdoor pyrotechnic display that uses only outdoor pyrotechnics and involves the firing to a height of more than 60 m above an exclusion zone of aerial shells, salutes, rockets, or other pyrotechnics classified in category G of class 1.1, 1.2, or 1.3.
- (2) A PCBU who directs the carrying out of the display and who is in control of the firing of the aerial shells, salutes, or rockets must ensure that—
  - (a) a mortar tube made of metal or PVC is not used; and
  - (b) any type of mortar tube used in the display has, prior to use, been designed and tested for—
    - (i) the aerial shell with which it is to be used; and
    - (ii) its ability to guide that aerial shell along any predetermined path; and
    - (iii) its ability to withstand the ignition of an upside-down shell within the mortar tube without producing any hazardous fragments; and
  - (c) any mortar tube used in the display has the shell size for which the tube is designed marked on the tube in a manner that is clearly legible and can be read from a distance of not less than 3 m; and
  - (d) the aerial shells do not have contact with liquid water, and prior to loading, the inside of the mortar tubes are free from liquid water and remain so until fired or unloaded; and
  - (e) the pyrotechnic effect of the aerial shells, salutes, or rockets is generated only after the article reaches a height more than 60 m above the exclusion zone; and
  - (f) the aerial shells, salutes, or rockets follow the line of flight used to set the exclusion zone, and that line of flight is not less than 8 m from any overhead object; and

- (g) no aerial shell, salute, or rocket crosses over or bursts above any area occupied by people or buildings; and
  - (h) any burning fragment or malfunctioning aerial shell, salute, or rocket falls into the exclusion zone or in the discharge area; and
  - (i) all firing of class 1 category G substances ceases if—
    - (i) the wind speed within the discharge area exceeds 30 km/h; or
    - (ii) any burning fragment more than 10 g from the firing falls outside the exclusion zone; and
  - (j) where the reloading of a mortar tube for firing an aerial shell is required, the aerial shell is of the size marked on the mortar tube.
- (3) A PCBU who directs the carrying out of the display and who is in control of the firing of pyrotechnics other than aerial shells, salutes, and rockets must ensure compliance with subclause (2) to the extent applicable to those pyrotechnics.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 43

#### **9.40 Outdoor pyrotechnic display using only indoor pyrotechnics**

- (1) A PCBU who directs the carrying out of an outdoor pyrotechnic display that uses only indoor pyrotechnics must ensure that this regulation is complied with.
- (2) Regulations 9.42 and 9.43 apply in relation to the display and the indoor pyrotechnics as if the display were an indoor display.
- (3) Regulation 9.34(5)(c) applies in relation to the display and the indoor pyrotechnics, but the rest of regulations 9.31 to 9.39 do not apply.
- (4) A PCBU who contravenes this regulation by failing to comply with a requirement in regulation 9.42(1)(b) or (2) commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.
- (5) A PCBU who contravenes this regulation in any other way commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 43A

**9.41 Outdoor pyrotechnic display using both indoor pyrotechnics and outdoor pyrotechnics**

- (1) A PCBU who directs the carrying out of an outdoor pyrotechnic display using both indoor and outdoor pyrotechnics must ensure that this regulation is complied with.
- (2) Regulations 9.31, 9.34(5)(c) and (d), and 9.35 to 9.39 apply in relation to the entire display and both the indoor pyrotechnics and the outdoor pyrotechnics.
- (3) Regulations 9.32 and 9.33 and the rest of regulation 9.34 apply only in relation to the outdoor pyrotechnics.
- (4) However, regulation 9.36 applies under subclause (2) as if—
  - (a) regulation 9.36(1)(b) also referred to the boundary of an exclusion zone as specified in regulation 9.43(2)(d); and
  - (b) regulation 9.36 included a paragraph that refers to the requirements of regulation 9.43(4)(b).
- (5) Regulation 9.43(2)(c) and (d) and (4)(a) and (b) apply in relation to the indoor pyrotechnics as if the display were an indoor display.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 43B

*Controls on indoor pyrotechnic displays***9.42 Duty of PCBU who directs carrying out of indoor pyrotechnic displays using class 1 category G substances**

- (1) Before commencing an indoor pyrotechnic display that uses class 1 category G substances, the PCBU who directs the carrying out of the display must—
  - (a) ensure that a certified handler is personally in control of the substances; and
  - (b) at least 3 working days before the display occurs,—
    - (i) notify WorkSafe of the location where the display is to occur, the date of the display, and the time and number of firings; and
    - (ii) give WorkSafe sufficient information to enable an inspector to contact the PCBU and the certified handler during normal business hours; and
  - (c) ensure that the requirements for indoor pyrotechnic displays set out in regulation 9.43 are complied with.
- (2) The PCBU who directs the carrying out of the display must also—

- (a) obtain prior written agreement for the holding of the display from Fire and Emergency New Zealand; and
- (b) provide any fire-fighting capability specified by Fire and Emergency New Zealand in addition to that required by regulation 9.43(4)(c).
- (3) A PCBU who contravenes subclause (1)(a) or (c) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (4) A PCBU who contravenes subclause (1)(b) or (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/116 r 44

**9.43 Duty of PCBU who directs carrying out of indoor pyrotechnic display using class 1 category G substances**

- (1) At any indoor pyrotechnic display using class 1 category G substances, the PCBU who directs the carrying out of the display must—
  - (a) authorise the display operators and limit the number of display operators to those necessary to undertake the operation of the display; and
  - (b) supervise all such operators; and
  - (c) secure all class 1 category G pyrotechnic substances so as to comply with regulation 9.19(2).
- (2) In preparing for the indoor pyrotechnic display, the PCBU must—
  - (a) use only those class 1 category G substances designed for indoor use that—
    - (i) contain no more than a trace of antimony, arsenic, cadmium, chromium, lead, mercury, nickel, selenium, or zinc, or their compounds; and
    - (ii) have a height and duration of operation and a radius within which any burning or burnt material may be expected to fall that are specified by the manufacturer; and
  - (b) if the indoor display is fired by an electrical current,—
    - (i) protect the firing circuit against being disturbed by any associated activities; and
    - (ii) test the firing circuit before firing (by applying a test current of not more than 60 mA) to ensure electrical continuity; and
    - (iii) arrange the firing circuit so that a positive action is required before firing is initiated, and only a certified handler or a person

- acting under the certified handler's direct supervision can initiate firing; and
- (c) test examples of all the class 1 category G pyrotechnic substances intended to be used in the display with only display operators and performers authorised by the PCBU present at the testing; and
  - (d) establish exclusion zones around the firing points within which any burning material must fall, based on the fallout radius specified in paragraph (a)(ii) and any test firing for the class 1 category G pyrotechnic substances to be fired.
- (3) In relation to the planning and recording of the indoor pyrotechnic display, the PCBU must—
- (a) have a display plan available for inspection by an inspector at least 3 working days before the firing that—
    - (i) specifies the number and type of devices to be used; and
    - (ii) has a diagram of the indoor area showing firing points, the exclusion zone, the position of the audience, the location of the secure container holding the class 1 category G pyrotechnic substances, and the location of the area for preparing any class 1 category G pyrotechnic devices; and
    - (iii) specifies the names and responsibilities of the display operators authorised by the PCBU; and
  - (b) record any malfunctioning class 1 category G pyrotechnic substances and any incidents of fire or injury; and
  - (c) retain the display plan and records for at least 12 months after the display.
- (4) During the display, the PCBU must—
- (a) ensure that the distance to any member of an audience is a minimum of twice the greatest distance from the firing point to the boundary of the exclusion zone; and
  - (b) ensure that any combustible material in the exclusion zone is sufficiently fire resistant to withstand contact with a 10 g mass burning object of a type likely to be generated by the display; and
  - (c) provide a portable fire extinguisher that—
    - (i) is located so that a person authorised by the PCBU is able to obtain the extinguisher and hold it ready for use within 10 seconds; and
    - (ii) has a class A classification in accordance with AS/NZS 1850:2009—Portable fire extinguishers—Classification, rating and performance testing.

- (5) The PCBU who directs the carrying out of the display must ensure that all pyrotechnic articles and class 1 category G substances are removed at the end of the display or any performance involving a display.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 45

## Subpart 5—Transfer and transportation of class 1 substances

### *Transfer*

#### **9.44 PCBU who directs transfer from one type of transport to another to establish designated transfer zone**

- (1) At any place in a workplace where the transfer of class 1 substances from one type of transport to another occurs, the PCBU with management or control of the workplace must—
  - (a) establish a designated transfer zone that fully contains all vehicles, ships, aircraft, or other forms of transport involved in the transfer operation; and
  - (b) where regulation 9.3 requires a class 1 substance to be under the personal control of a certified handler, ensure that there is a certified handler personally in control of the substances being transferred.
- (2) The PCBU must—
  - (a) display signage warning of the danger from the presence of a class 1 substance; and
  - (b) ensure that the signage meets the requirements of regulation 2.6 and is visible from points of access to the designated transfer zone.
- (3) The requirements of this regulation do not apply to the transfer of—
  - (a) class 1 substances if the amount of class 1 substances present does not exceed the quantities for the relevant classifications specified in table 6 in Schedule 8; or
  - (b) safety ammunition.
- (4) The PCBU must ensure that containers containing class 1 substances held within a designated transfer zone are separated from other hazardous substances by a distance of not less than 15 m.
- (5) A PCBU who contravenes subclause (1) or (4) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;

- (b) for any other person, to a fine not exceeding \$50,000.
- (6) A PCBU who contravenes subclause (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/116 r 46

#### **9.45 PCBU who directs transfer to ensure emergency management**

- (1) The requirements of subpart 2 of Part 5 apply to a designated transfer zone in which class 1 hazardous substances specified in the first column of the table in Schedule 5 and in a form specified in the second column of that table are at any time present or likely to be present in an aggregate quantity that is greater than the relevant quantity specified in the third column of that table.
- (2) A PCBU who directs the transfer of class 1 substances located in a designated transfer zone must ensure that the emergency planning requirements imposed by subpart 2 of Part 5 on a PCBU with management or control of a workplace are met in the designated transfer zone during the time that class 1 substances (except retail fireworks or safety ammunition) are present in the zone.
- (3) A PCBU who contravenes subclause (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 47

#### **9.46 Duties of PCBU with management or control of class 1 substances at designated transfer zone**

- (1) A PCBU with management or control of a workplace in which class 1 substances are being transferred within a designated transfer zone (other than a transfer operation involving only retail fireworks or safety ammunition) must—
  - (a) exclude from the zone all persons not under direct supervision; and
  - (b) exclude all persons not necessary for the management or performance of the transfer operation.
- (2) The PCBU must also—
  - (a) establish and have available for inspection documented procedures for the implementation of the requirements of regulations 9.11 to 9.14 and 9.16; and
  - (b) ensure that the documentation is able to be readily located by the people involved in the transfer operation.
- (3) The PCBU must also—

- (a) ensure that the time during which any class 1 substance is present in the designated transfer zone is minimised; and
- (b) ensure in every case that the time during which any class 1 substance is present in the designated transfer zone is less than 8 hours (or less than 24 hours for substances of class 1.4C, 1.4E, 1.4G, or 1.4S).
- (4) If a thunderstorm approaches the designated transfer zone, the PCBU must ensure that—
  - (a) any loading or unloading of a class 1 substance ceases, and any packages of class 1 substances are returned to one or the other means of transport and enclosed; and
  - (b) all persons are evacuated to a distance in metres from any transport container for holding class 1 substances, and from any means of transport holding class 1 substances, of at least that calculated in accordance with the following formula:

$$D = 10 \times \text{NEQ}^{1/3}$$

where—

D is the distance in metres

NEQ (net quantity of class 1 substance) is the gross weight of the article less the weight of any construction materials of the article, in kilograms.

- (5) This regulation does not apply to a transfer operation involving only retail fire-works or safety ammunition.
- (6) A PCBU who contravenes subclause (1), (3), or (4) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (7) A PCBU who contravenes subclause (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

Compare: SR 2001/116 r 48

#### **9.47 Requirements for substance quantity limits within designated transfer zones**

- (1) A PCBU with management or control of class 1 substances in a designated transfer zone must manage all class 1 substances present (other than retail fire-works or safety ammunition) within the zone so that, if there is an unintended initiation of any or all of the class 1 substances, any place where a person may legally be present outside the zone is not,—



- (a) if the class 1 substance is held in a special-purpose transport container of equivalent strength to a standard ISO transport container of 6 m in length and approximately 2.6 m in height,—
  - (i) subject to a blast overpressure more than 24 kPa; or
  - (ii) for class 1 substances that have a fire hazard or a minor projection hazard (or both) but not a mass explosion hazard, within a distance described by the following formula:
$$D = 3.2Q^{1/3}$$
where—
    - D is distance in metres
    - Q is quantity in kilograms; or
  - (iii) subject to more than 3 hazardous fragments per 60 m<sup>2</sup> of surface area; or
- (b) if the class 1 substance is not held in a special-purpose transport container of equivalent strength to a standard ISO transport container of 6 m in length and approximately 2.6 m in height,—
  - (i) subject to a blast overpressure of 9 kPa; or
  - (ii) for class 1 substances that have a fire hazard or minor projection hazard (or both) but not a mass explosion hazard, within a distance described by the following formula:
$$D = 4.3Q^{1/3}$$
where—
    - D is distance in metres
    - Q is quantity in kilograms; or
  - (iii) 2 hazardous fragments per 60 m<sup>2</sup> of surface area.
- (2) The designated transfer zone complies with subclause (1) if—
  - (a) the total quantity and type of class 1 substances are limited to meet the requirements of subclause (1) at the boundary of the designated transfer zone; or
  - (b) the distances between the class 1 substances and the boundary of the designated transfer zone are set to meet the requirements of subclause (1); or
  - (c) the PCBU with management or control of class 1 substances in the designated transfer zone complies with requirements in a relevant safe work instrument.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 49

### *Transportation*

#### **9.48 Requirements for transportation by road or rail of class 1 substances**

- (1) A PCBU who directs the transportation of a class 1 substance on public roads or by rail must ensure that, during transportation,—
- (a) the substance is—
    - (i) under the personal control of a certified handler; or
    - (ii) secured in a way that ensures that persons not authorised by the PCBU cannot gain access to it; and
  - (b) the requirements of regulations 9.11 to 9.13 and 9.17 are met by the vehicle or rail wagon itself and by any arrangements for stowing the class 1 substances in the vehicle or train; and
  - (c) in addition to the requirements relating to fire extinguishers specified in Schedule 4, a 9-litre foam fire extinguisher is present on the vehicle or train; and
  - (d) only persons necessary for the transportation or implementation of emergency procedures are in the vehicle, but when quantities of more than 250 kg (gross weight) of substances in class 1.1, 1.2, 1.3, or 1.5 are carried in a vehicle, a minimum of 2 persons are present; and
  - (e) the maximum quantity of class 1 substances on a vehicle or rail wagon is within the safe load limit for that vehicle or rail wagon, but where the substances are transported in a special-purpose transport container, the quantity is not more than the quantity that can be contained in 1 standard ISO transport container of 6 m in length and approximately 2.6 m in height; and
  - (f) there are separation distances between—
    - (i) vehicles in convoy carrying class 1 substances; or
    - (ii) rail wagons on the same train carrying class 1 substances,—so that any unintended detonation or deflagration in 1 vehicle or rail wagon cannot transmit more than the pressure shock specified in regulation 9.11 to any following or preceding vehicle or rail wagon carrying class 1 substances; and
  - (g) each driver of any vehicle in convoy carrying class 1 substances is orally instructed as to the separation distance and provided with a written copy of the separation distance.
- (2) A driver of a vehicle in convoy carrying class 1 substances on public roads must maintain the separation distance required by subclause (1)(f) until the vehicle reaches its intended destination.

- (3) A person must not, in any circumstances, transport a class 1.1A substance on a public road or by rail.
- (4) This regulation and regulation 9.50 do not apply to the transportation of any class 1 (other than class 1.1A) substance in a quantity equal to or less than the quantities specified for the relevant classification in table 6 in Schedule 8.
- (5) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (6) A person who contravenes subclause (2) commits an offence and is liable on conviction to a fine not exceeding \$10,000.
- (7) A person who contravenes subclause (3) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 51

#### **9.49 Sufficient compliance with regulation 9.48(1)(b)**

The requirements of regulation 9.48(1)(b) are sufficiently met if,—

- (a) in vehicles carrying more than 50 kg (gross weight) of substances in class 1.1B or 1.2B, or more than 250 kg (gross weight) of substances in class 1.1 (other than 1.1B), 1.2 (other than 1.2B), or 1.3,—
  - (i) the whole of the exhaust pipe, and the fuel tank containing fuels with a flash point less than 60°C, is separated from the class 1 substances by a fire-resistant screen; and
  - (ii) the underside of the tray holding the class 1 substances and the area at the front of the tray facing the cab is covered with 1.5 millimetre iron sheet, or the cab itself is of fire-resistant construction; and
  - (iii) the tray is constructed of material unable to generate a spark and is enclosed;
- (b) in vehicles carrying more than 250 kg (gross weight) of substances in class 1.1B or 1.2B, or more than 2 000 kg (gross weight) of substances in class 1.1 (other than 1.1B), 1.2 (other than 1.2B), or 1.3, in addition to the requirements applicable under paragraph (a),—
  - (i) the substances are contained in a standard ISO transport container that is fixed to the vehicle by locked twist locks; or
  - (ii) the substances are enclosed in a solid walled vehicle with a locked door.

Compare: SR 2001/116 r 51A

### **9.50 Requirements to be met during interruptions of transportation**

- (1) A PCBU who directs the transportation of a class 1 substance must not stop during transportation, except as a result of an accident, incident, or emergency, or urgent refuelling, or as required under the Land Transport Act 1998 or any regulations or rules made under that Act.
- (2) If a road vehicle transporting a class 1 substance is stopped for any reason,—
  - (a) the duration of the stop must be minimised; and
  - (b) during the stop, the substance must be managed by means of an emergency response plan prepared and implemented in accordance with sub-part 2 of Part 5 as if the vehicle were a place within a workplace for the purposes of regulation 5.6.
- (3) This regulation does not limit or otherwise affect the provisions of the Land Transport Act 1998, or any regulations or rules made under that Act, and those provisions prevail in the event of any inconsistency between them and this regulation.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 52

### **9.51 Exemptions from transportation requirements for certain substances**

Regulations 9.48 and 9.50 do not apply to the following substances:

- (a) safety ammunition, including pre-primed cartridges and primers, of class 1.4S:
- (b) airbag initiators and seatbelt pretensioners of class 1.4G or 1.4S:
- (c) cable cutters of class 1.4S (UN 0070):
- (d) power device cartridges of class 1.4S (UN 0323):
- (e) signal tubes or shock tubes of class 1.4S (UN 0349):
- (f) cassette degradation devices of class 1.4S (UN 0432):
- (g) retail fireworks and small arms ammunition.

Compare: SR 2001/116 r 52A

## **Part 10**

### **Class 2, 3, and 4 substances**

#### **10.1 Interpretation**

In this Part, unless the context otherwise requires,—

**AS/NZS 1020:1995** means the standard on The control of undesirable static electricity

**AS/NZS 5026:2012** means the standard on The storage and handling of Class 4 dangerous goods

**AS/NZS 5149:2016** means the standard on Refrigeration systems and heat pumps — Safety and environmental requirements (Parts 1 to 4)

**AS/NZS 60079.10.1:2009** means the standard on Explosive atmospheres—Part 10.1: Classification of areas—Explosive gas atmospheres (IEC 60079–10–1)

**AS/NZS 60079.14:2009** means the standard on Explosive atmospheres—Part 14: Electrical installations design, selection and erection (IEC 66079–14)

**auto-ignition temperature**, in relation to any class 2.1.1, 2.1.2, or 3.1 substance, means the minimum temperature at which a mixture of flammable vapour and air, or gas and air, is marginally self-igniting when tested in accordance with—

- (a) ASTM E659—14—Standard test method for autoignition temperature of liquid chemicals; or
- (b) AS/NZS 60079.20.1:2012—Explosive atmospheres—Part 20.1—Material characteristics for gas and vapour classification—Test methods and data

**compatible**, in relation to a class 2, 3, or 4 substance or material, means that, in the absence of an ignition source—

- (a) the substance or material is chemically inert in relation to another class 2, 3, or 4 substance for the range of temperatures and pressures at which the substances are brought into contact; or
- (b) if the substance or material does react with the other class 2, 3, or 4 substance, it does so in a way that does not cause or contribute to a fire or explosion; or
- (c) when the substance or material is mixed with another class 2, 3, or 4 substance, it does not lead to a substance of a different hazardous property, or type or degree of hazard; or
- (d) the substance or material is not listed as incompatible in table 1 in Schedule 9

**LEL** means lower explosive limit, being the concentration of flammable gas, vapour, or mist in standard air, below which an explosive gas atmosphere will not be formed at 20°C and at 101.3 kPa absolute pressure

**mixture of vapour or gas and air** means a mixture of flammable vapour and air, or gas and air

**NZS 5263:2003** means the standard on Gas detection and odorization

**revised auto-ignition temperature** means the minimum temperature required to ignite a mixture of flammable gas, vapour, or mist in an atmosphere contain-

ing a different proportion of oxygen than standard air, when that mixture is within a flammable range

**revised minimum ignition energy** means the minimum amount of ignition energy required to ignite a mixture of flammable gas, vapour, or mist in an atmosphere containing a different proportion of oxygen than standard air, when that mixture is within a flammable range

**RLEL<sub>(o)</sub>** means revised lower explosive limit, being the concentration of flammable gas, vapour, or mist in an atmosphere containing a different proportion of oxygen than standard air, below which an explosive gas atmosphere will not be formed

**RUEL<sub>(o)</sub>** means revised upper explosive limit, being the concentration of flammable gas, vapour, or mist in an atmosphere containing a different proportion of oxygen than standard air, above which an explosive gas atmosphere will not be formed

**standard air** means air containing 20.9% oxygen (by volume)

**UEL** means upper explosive limit, being the concentration of flammable gas, vapour, or mist in standard air, above which an explosive gas atmosphere will not be formed.

Compare: SR 2001/116 r 54

## 10.2 Anhydrous ammonia

This Part does not apply to anhydrous ammonia that is contained in plant in which anhydrous ammonia is used as a refrigerant.

## 10.3 General controls on class 2, 3, and 4 substances

- (1) A PCBU with management or control of a class 2, 3, or 4 substance must ensure that the substance is held at a hazardous substance location or at a transit depot if the quantity exceeds that specified in table 4 in Schedule 9 for the substance for more than—
  - (a) 2 hours, in the case of a substance that is subject to the tracking provisions of Part 19:
  - (b) 24 hours, in the case of a substance that is not subject to the tracking provisions of Part 19.
- (2) This regulation does not apply to low flashpoint diesel, HSNO approval number HSR001447.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 55

**10.4 Substances that must be secured**

- (1) A PCBU with management or control of a class 2, 3, or 4 substance in a quantity specified in table 2 in Schedule 9 must ensure that the substance, if left unattended, is—
  - (a) secured to the standard of security specified in regulation 10.24(1), in the case of a class 4.1.2A, 4.1.2B, 4.1.2C, or 4.1.2D substance; or
  - (b) appropriately secured from access by persons other than those permitted by the PCBU to access the substance, in the case of any other class 2, 3, or 4 substance.
- (2) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

**10.5 Requirement to segregate class 2, 3, and 4 substances**

- (1) Except where the ignition of the substance is intended, a PCBU with management or control of work using a class 2, 3, or 4 substance must ensure that—
  - (a) the substance is not in contact with any substance or material with which it is incompatible; and
  - (b) containers of incompatible substances are stored separately.
- (2) For the purposes of this regulation, a class 2, 3, or 4 substance is incompatible with a class 1, 2, 3, 4, 5, 6, or 8 substance as set out in table 1 in Schedule 9.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 76

**Subpart 1—Controls on class 2.1.1, 2.1.2, and 3.1 substances****10.6 Duty of PCBU to establish hazardous area**

- (1) A PCBU with management or control of work using a class 2.1.1A, 2.1.1B, 2.1.2A, 3.1A, 3.1B, or 3.1C substance at a place within a workplace must ensure that a hazardous area is established at the place that complies with—
  - (a) AS/NZS 60079.10.1:2009, if the threshold quantity in that standard for a particular substance is met; or
  - (b) a relevant safe work instrument that specifies hazardous areas and takes into account the risk of the presence of flammable materials.
- (2) This regulation does not apply to low flashpoint diesel, HSNO approval number HSR001447.

- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 58

### **10.7 Application of other legislation to electrical systems located in hazardous areas**

- (1) If any electrical installation or any electrical appliance within the scope of the Electricity (Safety) Regulations 2010 is located within a hazardous area referred to in regulation 10.6, the controls imposed on that installation or appliance under the Act are the same controls as are included in those parts of the Electricity Act 1992, and regulations, codes, and standards made or recognised under that Act, that relate to hazardous areas as defined in regulation 4(1) of the Electricity (Safety) Regulations 2010.
- (2) If electrical equipment is installed on a ship, vessel, or boat (other than a pleasure vessel containing connectible installations), the controls imposed on that electrical equipment under the Act are the same controls as are included in those parts of the Maritime Rules made under the Maritime Transport Act 1994 that relate to hazardous areas.
- (3) If electrical equipment is installed on any train, locomotive, tram, or trolley bus, the controls imposed on that electrical equipment under the Act are the same controls as are included in those parts of the Land Transport Act 1998, and regulations or rules made under that Act, that relate to hazardous areas.
- (4) If any electrical equipment is installed on an aircraft that is under the jurisdiction of the Civil Aviation Rules, the controls imposed on that electrical equipment under the Act are the same controls as are included in those parts of the Civil Aviation Rules that relate to hazardous areas.
- (5) If any electrical equipment is used within a hazardous area referred to in regulation 10.6 around an aircraft but is not installed on the aircraft, the controls imposed on that electrical equipment under the Act are the same controls as are included in those parts of the Electricity Act 1992, and regulations, codes, and standards made or recognised under that Act, that relate to hazardous areas.
- (6) For the purposes of subclause (1), **electrical appliance** and **electrical installation** have the same meanings as in section 2(1) of the Electricity Act 1992.

Compare: SR 2001/116 r 59

### **10.8 Duty of PCBU to reduce likelihood of unintended ignition of class 2.1.1, 2.1.2, and 3.1 substances**

- (1) Unless a class 2.1.1, 2.1.2, or 3.1 substance is intentionally burned, in circumstances where any air or oxygen is present with such a substance a PCBU with management or control of work using the substance must—



- (a) elect to manage the substance under the sets of conditions specified in any one of regulations 10.11, 10.13, 10.15, 10.17, and 10.19; and
  - (b) where regulation 10.11 is elected, manage the substance under the conditions specified—
    - (i) in subclause (3), (4), or (5) of that regulation for a substance in a hazardous area;
    - (ii) in subclause (6) of that regulation for a substance that is not in a hazardous area; and
  - (c) where regulation 10.13 is elected, manage the substance under the conditions specified in either subclause (3) or (4) of that regulation; and
  - (d) where regulation 10.15 is elected, manage the substance under the conditions specified in either subclause (3) or (4) of that regulation; and
  - (e) ensure that the requirements of the chosen regulation are complied with in full; and
  - (f) record which regulation the substance is being managed under, and have that record available for inspection.
- (2) A PCBU who contravenes subclause (1)(a) to (e) commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (3) A PCBU who contravenes subclause (1)(f) commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

Compare: SR 2001/116 r 60

### 10.9 Requirement to use odorant or alternative means of leak detection

- (1) Despite regulation 10.8, a PCBU with management or control of a workplace where LPG, propane, butane, or isobutane is located must ensure that the substance is—
- (a) odorised in accordance with NZS 5263:2003; or
  - (b) odorised in accordance with a relevant safe work instrument; or
  - (c) kept in a place that has a flammable vapour detection system (an **FVD system**) that complies with subclauses (2) to (5); or
  - (d) kept in a place that is managed in accordance with a relevant safe work instrument and that sets out an alternative means of leak detection.
- (2) An FVD system must have at least 4 permanently mounted continuously operating detection heads, in locations that will enable the detection heads to detect the presence of escaped gas.

- (3) An FVD system must activate whenever any of the substances specified in subclause (1) are present in the atmosphere at a concentration of 20% or more of the LEL of that substance.
- (4) If activated, an FVD system must—
  - (a) trigger an automatic alarm that produces a sound of not less than 105 decibels and gives a visual signal; and
  - (b) cause an immediate shutdown of the gas supply; and
  - (c) require any gas supply that is shut down to be reset manually before recommencing supply.
- (5) An FVD system must be tested and recalibrated at least every 6 months.
- (6) Subclauses (1) to (5) do not apply to a PCBU involved in the manufacture of LPG, propane, butane, or isobutane in relation to the manufacturing process.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**10.10 Requirements for refrigeration systems containing LPG, propane, butane, isobutane, or other flammable refrigerant**

- (1) A PCBU with management or control of a refrigeration system that contains LPG, propane, butane, isobutane, or other flammable refrigerant as an integral part of that refrigeration system must ensure that the quantity and the means of containing the LPG, propane, butane, isobutane, or other flammable refrigerant comply with—
  - (a) section 2.6 of AS/NZS 5149:2016; or
  - (b) a relevant safe work instrument that sets out the requirements for containing LPG, propane, butane, isobutane, or other flammable refrigerant in a refrigeration system.
- (2) Subclause (1) does not apply to domestic refrigerators, domestic heat pumps, or room air conditioners.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**10.11 Circumstances involving control of ignition sources available to class 2.1.1, 2.1.2, and 3.1 substances**

- (1) A PCBU who elects under regulation 10.8 to manage under this regulation a class 2.1.1, 2.1.2, or 3.1 substance by controlling ignition sources (but not the proportion of flammable vapour or gas to air) must ensure that in any place

within a workplace where the substance is located the requirements of this regulation are met.

- (2) Where a class 2.1.1, 2.1.2, or 3.1 substance is within any hazardous area,—
- (a) the temperature of the substance and the temperature of any surface in contact with the substance must not exceed 80% of the auto-ignition temperature in degrees Celsius for that substance; and
  - (b) any permanently fixed equipment or container or part of any such equipment or container must be effectively electrically bonded and earthed so that the maximum resistance to earth is—
    - (i) 1 M $\Omega$ , for components that have an electrical resistance equal to or more than 1 M $\Omega$ ; and
    - (ii) 10  $\Omega$ , for components that have an electrical resistance of between 10  $\Omega$  and 1 M $\Omega$ ; and
  - (c) the substance must be managed under 1 of the 3 sets of conditions set out in subclauses (3), (4), and (5).

*Set of conditions 1*

- (3) In this set of conditions, there must be no ignition source present unless it can be shown that any release of spark energy would transfer to the mixture of vapour or gas and air less than 10% of the minimum ignition energy of the substance in air.

*Set of conditions 2*

- (4) In this set of conditions, there must be no ignition source present unless it can be shown that any release of spark energy would transfer to the mixture of vapour or gas and air less than 25% of the minimum ignition energy of the substance in air.

*Set of conditions 3*

- (5) In this set of conditions, in any situation except situations covered by regulation 10.7, any ignition source located in a hazardous area must be protected in such a way that, in the circumstances in which it is installed (including the presence of dust and particulate matter), it cannot ignite any mixture of vapour or gas and air formed from the substances present.
- (6) At any place where the quantity of class 2.1.1, 2.1.2, or 3.1 substances present is not sufficient to require the establishment of a hazardous area but where—
- (a) the concentration of vapour or gas may exceed 25% of the LEL; and
  - (b) flammable gases or liquids are present in quantities more than 10% of that required to trigger the hazardous area requirements,—

then the following requirements apply:

- (c) there must be no ignition source present unless it can be shown that any release of spark energy would transfer to the mixture of vapour or gas

and air less than 10% of the minimum ignition energy of the substance in air; and

- (d) the temperature of the substance, or the temperature of any surface in contact with the substance, must not exceed 80% of the auto-ignition temperature for that substance.
- (7) Subclauses (3), (4), and (5) do not apply to a vehicle, a ship, or an aircraft at the dispensing unit of a refuelling outlet if, when petrol, aviation gasoline, racing gasoline, or LPG is being delivered to the fuel tank of the vehicle, ship, or aircraft,—
  - (a) the engine of the vehicle, ship, or aircraft is turned off; and
  - (b) no source of ignition is brought within 3 m of the fuel tank of the vehicle, ship, or aircraft.
- (8) Despite subclause (7), a ship or an aircraft that is being refuelled with class 3.1C or 3.1D substances may have its engines operating if no source of ignition is within the hazardous area.
- (9) A PCBU with management or control of any aircraft that is being refuelled must, in addition to complying with subclause (7) or (8), also comply with the requirements of the Civil Aviation Rules relating to refuelling of aircraft.
- (10) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 61

#### **10.12 Methods of complying with regulation 10.11**

- (1) In the case of an electrical ignition source, compliance with one of, or where applicable a combination of, the explosion-protection techniques listed in AS/NZ 60079.14:2009 meets the requirements of regulation 10.11(5).
- (2) The requirements of regulation 10.11(2)(a) are met if—
  - (a) there is compliance with table 1 of AS/NZS 60079.14:2009 relating to the matters described in regulation 10.11(2)(a); or
  - (b) any equipment and any surface in contact with the substance conform to the temperatures specified in table 5 in Schedule 9 and the temperature of the substance is kept below 40°C.
- (3) Compliance with AS/NZS 1020:1995 is a means of meeting the requirement of regulation 10.11(2)(b) for the dissipation of static electricity from components that have an electrical resistance of between 10  $\Omega$  and 1 M $\Omega$ .

Compare: SR 2001/116 r 62

**10.13 Circumstances involving control of both proportion of vapour or gas to air and amount of energy available**

- (1) A PCBU who elects under regulation 10.8 to manage under this regulation a class 2.1.1, 2.1.2, or 3.1 substance by controlling both the proportion of flammable vapour or flammable gas to air and the amount of energy available must ensure that in any place within a workplace where the substance is located the requirements of this regulation are met.
- (2) A class 2.1.1, 2.1.2, or 3.1 substance must be managed under one of the 2 sets of conditions set out in subclauses (3) and (4).

*Set of conditions 1*

- (3) In this set of conditions,—
  - (a) the proportion of flammable vapour or flammable gas to air at all times must be less than 25% of the LEL or more than 4 times the UEL; and
  - (b) either—
    - (i) there must be no ignition source present unless it can be shown that any release of spark energy would transfer to the mixture of vapour or gas and air less than 25% of the minimum ignition energy of the substance in air; or
    - (ii) in any situation except situations covered by regulation 10.7, any ignition source located in an area where flammable vapour or gas is present at more than 10% of the LEL must be protected in such a way that, in the circumstances in which it is installed (including the presence of dust and particulate matter), it cannot ignite any mixture of vapour or gas and air formed from the substances present; and
  - (c) there must be a system in place to continuously monitor and control the concentration of vapours to meet the requirements of paragraphs (a) and (b).

*Set of conditions 2*

- (4) In this set of conditions,—
  - (a) the proportion of flammable vapour to air must at all times be less than 50% of the LEL; and
  - (b) there must be a system in place to continuously monitor and control the concentration of vapour to meet the requirements of paragraph (a); and
  - (c) a PCBU who manages substances with flammable properties according to this subclause must operate in accordance with any relevant safe work instrument as well as the requirements of this subclause; and
  - (d) either—
    - (i) there must be no ignition source present unless—

- (A) it can be shown that any release of spark energy would transfer to the mixture of vapour or gas and air less than 50% of the minimum ignition energy of the substance in air; and
  - (B) there is a system in place to continuously monitor and control the amount of ignition energy present to meet the requirements of this subclause; or
- (ii) in any situation except situations covered by regulation 10.7, any ignition source located in an area where flammable vapour or gas is present at more than 10% of the LEL must be protected in such a way that, in the circumstances in which it is installed (including the presence of dust and particulate matter), it cannot ignite any mixture of vapour or gas and air formed from the substances present.
- (5) The temperature of the substance and the temperature of any surface in contact with the substance must not exceed 80% of the auto-ignition temperature for that substance.
- (6) At any place where a class 2.1.1A, 2.1.1B, 2.1.2A, 3.1A, 3.1B, or 3.1C substance is present in a quantity exceeding that specified in table 3 in Schedule 9 for the substance, any permanently fixed equipment or container or part of any such equipment or container must be electrically bonded and earthed so that the maximum allowable resistance to earth is—
  - (a) 1 MΩ, for dissipation of static electricity from components that have an electrical resistance equal to or more than 1 MΩ; and
  - (b) 10 Ω, for the dissipation of static electricity from components that have an electrical resistance of less than 1 MΩ.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 63

#### **10.14 Methods of complying with regulation 10.13**

- (1) In the case of an electrical ignition source, compliance with one of, or where applicable a combination of, the explosion-protection techniques listed in section 5 of AS/NZS 60079.14:2009 meets the requirements of regulation 10.13(3)(b)(ii) and (4)(d)(ii).
- (2) The requirements of regulation 10.13(5) are met if—
  - (a) there is compliance with section 5 of AS/NZS 60079.14:2009 relating to the matters described in regulation 10.13(5); or

- (b) any equipment and any surface in contact with the substance conform to the temperatures specified in table 5 in Schedule 9 and the temperature of the substance is kept below 40°C.
- (3) Compliance with AS/NZS 1020:1995 is a means of meeting the requirements of regulation 10.13(6) for the dissipation of static electricity from components that have an electrical resistance of between 10  $\Omega$  and 1 M $\Omega$ .

Compare: SR 2001/116 r 64

### **10.15 Circumstances involving control of proportion of vapour or gas to air, but not level of energy**

- (1) A PCBU with management or control of work using a class 2.1.1, 2.1.2, or 3.1 substance who elects under regulation 10.8 to manage such a substance by controlling the proportion of vapour or gas to air (but not the level of energy) must ensure that, in any place within a workplace where such a substance is located, the requirements of this regulation are met.
- (2) A class 2.1.1, 2.1.2, or 3.1 substance must be managed under one of the 2 sets of conditions set out in subclauses (3) and (4).

#### *Set of conditions 1*

- (3) In this set of conditions, the proportion of vapour or gas to air must at all times be less than 10% of the LEL or more than 10 times the UEL.

#### *Set of conditions 2*

- (4) In this set of conditions, where the proportion of vapour or gas to air may be more than 10% of the LEL or less than 10 times the UEL,—
  - (a) the proportion of vapour to air must at all times be less than 50% of the LEL or more than 2 times the UEL; and
  - (b) there must be a system in place to continuously monitor and control the concentration of vapour to meet the requirements of paragraph (a); and
  - (c) a PCBU with management or control of work using substances with flammable properties according to this subclause must have an operating procedure that meets the requirements of this subclause.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 65

### **10.16 Methods of complying with regulation 10.15**

Compliance with sections 5–2 and 5–4 of NFPA 86 (2015) relating to the matters described in regulation 10.15(4) is a means of meeting the requirements of regulation 10.15(4).

Compare: SR 2001/116 r 66

**10.17 Circumstances where flammable vapour or gas is present in atmosphere and proportion of oxygen in atmosphere (by volume) is more than 20.9%**

- (1) A PCBU with management or control of work using a class 2.1.1, 2.1.2, or 3.1 substance who elects under regulation 10.8 to manage under this regulation a flammable gas of a class 2.1.1 or 2.1.2 substance, or the flammable vapour of a class 3.1 substance, within an atmosphere where the proportion of oxygen is more than 20.9% volume for volume must ensure that, in any place within a workplace where such a substance is located, the requirements of this regulation are met.
- (2) A  $RLEL_{(O)}$  and a  $RUEL_{(O)}$  applicable to the proportion of flammable vapour or flammable gas to oxygen present must be established by the PCBU, and—
  - (a) the  $RLEL_{(O)}$  and the  $RUEL_{(O)}$  must be available for inspection at any time; and
  - (b) at all times, the proportion of vapour or gas of a class 2.1.1, 2.1.2, or 3.1 substance to oxygen in the atmosphere must be less than 25% of the  $RLEL_{(O)}$  or more than 4 times the  $RUEL_{(O)}$ ; and
  - (c) to meet the requirements of paragraph (b), there must be a system in place to continuously monitor and control—
    - (i) the proportion of oxygen present in the atmosphere; and
    - (ii) the proportion of vapour or gas to oxygen present.
- (3) In a place where the substance is present in concentrations more than 10%  $RLEL_{(O)}$ , the requirements of either of the following paragraphs must be met:
  - (a) the PCBU must establish a revised minimum ignition energy for the maximum proportion of oxygen to air expected within the system, and—
    - (i) where such a revised minimum ignition energy is established, it must be available for inspection at any time; and
    - (ii) there must be no item capable of generating a flame or spark present unless it can be shown that any release of spark energy would transfer to the mixture of vapour or gas and oxygen-enriched air less than 25% of the revised minimum ignition energy; or
  - (b) in any situation except situations covered by regulation 10.7, any ignition source located within the area where flammable vapour or gas is present must be protected in such a way that, in the circumstances in which it is installed (including the presence of dust and particulate matter), it cannot ignite any mixture of vapour or gas and air formed from the substances present.
- (4) A revised auto-ignition temperature must be established for the maximum proportion of oxygen to air expected to be experienced within the system, and—



- (a) the revised auto-ignition temperature must be available for inspection at any time; and
  - (b) at all times, the temperature of the substance and of any surface in contact with the substance must be less than 80% of the revised auto-ignition temperature for that substance and oxygen level; and
  - (c) there must be a system in place to continuously monitor and control the temperature of the substance and of any surface in contact with the substance to meet the requirements of paragraph (b).
- (5) At any place where a class 2.1.1A, 2.1.1B, 2.1.2A, 3.1A, 3.1B, or 3.1C substance is present in a quantity exceeding that specified in the second column of table 3 in Schedule 9 for the substance, any permanently fixed equipment or container at the place, or part of any such equipment or container, must be electrically bonded and earthed so that the maximum allowable resistance to earth is—
  - (a) 1 M $\Omega$ , for the gradual dissipation of static electricity from components that have an electrical resistance equal to or more than 1 M $\Omega$ ; and
  - (b) 10  $\Omega$ , for the dissipation of static electricity from components that have an electrical resistance of less than 1 M $\Omega$ .
- (6) The PCBU must—
  - (a) have a documented operating procedure that meets the requirements of subclauses (3) to (5); and
  - (b) manage the substance in accordance with that operating procedure.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 67

#### **10.18 Methods of complying with regulation 10.17**

Compliance with AS/NZS 1020:1995 is a means of meeting the requirements of regulation 10.17(5)(b).

Compare: SR 2001/116 r 68

#### **10.19 Circumstances where flammable vapour or flammable gas may be present and proportion of oxygen in atmosphere (by volume) controlled so as to be less than 20.9%**

- (1) A PCBU with management or control of work using a class 2.1.1, 2.1.2, or 3.1 substance who elects under regulation 10.8 to manage under this regulation a flammable gas of a class 2.1.1 or 2.1.2 substance, or the flammable vapour of a class 3.1 substance, within an atmosphere where the proportion of oxygen present is controlled so as to be less than 20.9% (by volume) must ensure that

in any place within a workplace where such a substance is located the requirements of this regulation are met.

- (2) The PCBU must ensure that, in the place,—
  - (a) at all times, the proportion of flammable gas of a class 2.1.1 or 2.1.2 substance to air, or flammable vapour of a class 3.1 substance to air, is less than 25% of the LEL or more than 4 times the UEL; or
  - (b) an  $RLEL_{(O)}$  and  $RUEL_{(O)}$  is established applicable to the range of proportions of flammable gas of class 2.1.1 or 2.1.2 to oxygen present, or flammable vapour of a class 3.1 substance to oxygen present, in which case—
    - (i) that  $RLEL_{(O)}$  and  $RUEL_{(O)}$  must be available for inspection at any time; and
    - (ii) at all times, the proportion of vapour or gas to oxygen in the atmosphere must be less than 25% of the  $RLEL_{(O)}$  or more than 4 times the  $RUEL_{(O)}$ ; and
    - (iii) there must be a system in place to continuously monitor and control the proportion of oxygen to air present and the proportion of vapour or gas to oxygen present to meet the requirements of subparagraph (ii).
- (3) The PCBU must ensure that, in the place,—
  - (a) there is no ignition source present unless it can be shown that any release of spark energy would transfer to the mixture of vapour or gas and air less than 25% of the minimum ignition energy; or
  - (b) in any situation except situations covered by regulation 10.7, any ignition source located in the area where flammable vapour or gas is present is protected in such a way that, in the circumstances in which it is installed (including the presence of dust and particulate matter), it cannot ignite any mixture of vapour or gas and air formed from the substances present.
- (4) The PCBU must ensure that, in the place, either—
  - (a) the temperature of the substance and of any surface in contact with the substance does not exceed 80% of the auto-ignition temperature for that substance; or
  - (b) a revised auto-ignition temperature is established for the range of proportions of oxygen expected to be present, in which case—
    - (i) the revised temperature must be available for inspection at any time; and
    - (ii) at all times, the temperature of the substance and of any surface in contact with the substance must be less than 80% of the revised auto-ignition temperature; and

- (iii) there must be a system in place to continuously monitor and control the proportion of oxygen to air present, and the temperature of the substance and the temperature of any surface in contact with the substance, to meet the requirements of subparagraph (ii).
- (5) At any place where a class 2.1.1A, 2.1.1B, 2.1.2A, 3.1A, 3.1B, or 3.1C substance is present in a quantity exceeding that specified in the second column of table 3 in Schedule 9 for the substance, any permanently fixed equipment or container at the place, or part of any such equipment or container, must be electrically bonded and earthed so that the maximum allowable resistance to earth is—
  - (a) 1 MΩ, for the dissipation of static electricity from components that have an electrical resistance equal to or more than 1 MΩ; and
  - (b) 10 Ω, for the dissipation of static electricity from components that have an electrical resistance of less than 1 MΩ.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 69

#### **10.20 Methods of complying with regulation 10.19**

- (1) In the case of an electrical ignition source, compliance with any one of the explosion-protection techniques, or a combination of explosion-protection techniques, listed in section 5 of AS/NZS 60079.14:2009 relating to matters described in regulation 10.19(3)(b) are a means of meeting the requirements of regulation 10.19(3)(b).
- (2) The requirements of regulation 10.19(4) are met if—
  - (a) there is compliance with AS/NZS 60079.14:2009 relating to the matters described in regulation 10.19(4); or
  - (b) any equipment and any surface in contact with the substance conform to the temperatures specified in table 5 in Schedule 9 and the temperature of the substance is kept below 40°C.
- (3) Compliance with AS/NZS 1020:1995 is a means of meeting the requirements of regulation 10.19(5)(b).

Compare: SR 2001/116 r 70

### **Subpart 2—Controls on class 3.2 and 4 substances**

#### **10.21 Limits on ignition sources**

- (1) A PCBU with management or control of a class 3.2 or 4 substance must ensure that, except where the ignition of the substance is intended, the substance is not

exposed to any ignition source that may release spark energy in a way that could result in an explosion or a fire.

- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 71

### **10.22 Specific limits on temperature**

- (1) A PCBU with management or control of any place within a workplace where a class 3.2, 4.1.3, or 4.2 substance is present (including in or on any motor vehicle, ship, or aircraft) must ensure that the temperature of the substance does not exceed the control temperature specified in the third column of table 6 in Schedule 9 unless ignition of the substance is intended.
- (2) The PCBU with management or control of any place within a workplace where a class 4.1.2 substance is present must ensure that there is a temperature control plan and system in place that—
- (a) monitors and controls the temperature of the space in which the substance is located; and
  - (b) for cases where the control temperature specified in the third column of table 6 in Schedule 9 is exceeded, describes the steps and provides the equipment necessary to restore ambient temperature of the substance to below the control temperature in less than the time it would take for the temperature of the substance to reach the emergency temperature specified in that table.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 72

### *Requirements to reduce likelihood of unintended ignition of class 3.2 and certain class 4 substances*

#### **10.23 Requirements to reduce likelihood of unintended ignition of class 4.1.1 substances that may cause fire through friction**

- (1) A PCBU with management or control of class 4.1.1 substances that have any of the serial numbers UN1331, UN1343, UN1944, UN1945, and UN2254 must ensure that those substances are not subject to more than 50% of the minimum amount of friction required to cause ignition of that substance when tested as prescribed in Test Series 3 type (b), paragraph 13.5 of the UN Manual of Tests and Criteria.

- (2) Subclause (1) does not apply if the substance is intentionally burned.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 73

#### **10.24 Duty to reduce likelihood of unintended ignition of class 4.1.2 substances**

- (1) A PCBU with management or control of a class 4.1.2A, 4.1.2B, 4.1.2C, or 4.1.2D substance that is required under regulation 10.4 to be secured must ensure that the substance is secured in a storage area that conforms to—
  - (a) the appropriate construction requirements for storage areas set out in section 5 of AS/NZS 5026:2012; or
  - (b) requirements specified in a relevant safe work instrument concerning storage areas in which a substance must be secured.
- (2) Where a class 4.1.2A, 4.1.2B, 4.1.2C, 4.1.2D, 4.1.2E, or 4.1.2F substance is contained in packaging or in a container, the PCBU with management or control of the packaging or container must ensure that—
  - (a) it is handled in accordance with subclauses (5) and (6) and regulations 10.5, 10.21, and 10.22; and
  - (b) the maximum capacity and thermal properties of the packaging or container are such that they will not cause or contribute to a fire or an explosion when tested as prescribed in Packaging Instruction P520 and paragraph 4.1.7.1 of chapter 4.1 of the UN Model Regulations.
- (3) At any place within a workplace where the amount of a substance exceeds the applicable quantity specified in table 4 in Schedule 9, the capacity of an individual package or container may be increased to more than that applying under subclause (2)(b) so long as—
  - (a) the requirements of subclause (5) are met; and
  - (b) the temperature of the substance is at least 20°C below the modified SADT, where the modified SADT is the SADT obtained by performing the test prescribed in Test Series H, paragraph 28.2 of the UN Manual of Tests and Criteria for determining a SADT, but with the intended larger quantity of the substance used.
- (4) Where a modified SADT is obtained for the purposes of subclause (3), the PCBU must ensure that the test result data from the modified SADT test is available for inspection.
- (5) A PCBU with management or control of a class 4.1.2 substance must ensure that, except where the ignition of the substance is intended, the substance is not subject to any impact or pressure shock that could result in an explosion or a fire.

- (6) A PCBU with management or control of a class 4.1.2 substance must ensure that it is not subjected to more than 50% of the minimum amount of friction required to cause ignition of that substance when tested as prescribed in Test Series 3 type (b), paragraph 13.5 of the UN Manual of Tests and Criteria.
- (7) A PCBU with management or control of a class 4.1.2A substance must ensure that it is not—
  - (a) packaged or contained in any quantity more than 500 g per package or container; or
  - (b) transported or consigned for transport by sea or air or on any public road or on any public railway.
- (8) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 74

**10.25 Duty to reduce likelihood of unintended ignition of class 3.2 or 4.1.3 substances**

- (1) A PCBU with management or control of work using a class 3.2 or 4.1.3 substance must—
  - (a) identify the minimum concentration of desensitising agent that, when added to the substance, would be sufficient to ensure that the substance so formed did not show a projection, fire, smoke, heat, or noise effect external to itself when tested as prescribed in Test Series 6 type (c), paragraph 16.6 of the UN Manual of Tests and Criteria; and
  - (b) ensure that the amount of desensitising agent present does not fall below 125% of the minimum concentration calculated under paragraph (a).
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 75

### Subpart 3—Controls on hazardous substance locations and transit depots where class 2, 3, or 4 substances present

#### *Controls on hazardous substance locations where class 2, 3, or 4 substances present*

#### **10.26 Duty of PCBU to establish hazardous substance location**

- (1) A PCBU with management or control of a place within a workplace where any class 2, 3, or 4 substance is located must establish in that place 1 or more hazardous substance locations where the substance is to be situated if the substance is present—
  - (a) in a quantity exceeding that specified in table 4 in Schedule 9 for the substance; and
  - (b) for a period exceeding—
    - (i) 2 hours, in the case of a substance subject to the tracking provisions of Part 19;
    - (ii) 24 hours, in the case of substance that is not subject to the tracking provisions of Part 19.
- (2) The PCBU with management or control of the hazardous substance location must notify WorkSafe at least 30 working days (or, in the case of LPG, at least 5 working days) before the commissioning of the hazardous substance location as a place for accommodating class 2, 3, or 4 substances of—
  - (a) the street address of the place in which the hazardous substance location is located; and
  - (b) the maximum quantity and hazard classification of each class 2, 3, or 4 substance that the hazardous substance location is designed or constructed to accommodate.
- (3) The PCBU with management or control of the hazardous substance location must ensure that the requirements of regulation 10.4 are met.
- (4) The PCBU with management or control of the hazardous substance location must ensure that,—
  - (a) if a compliance certificate is required under regulation 10.34 or 10.36, a compliance certificate is obtained that certifies that the requirements of the relevant regulation are met; and
  - (b) a site plan is available for inspection that shows the physical position, in relation to the legal boundary of the site in which the hazardous substance location or hazardous substance locations are located, of—
    - (i) all hazardous substance locations within the workplace that contain class 2, 3, or 4 substances; and

- (ii) all hazardous areas and controlled zones within the workplace; and
- (c) if required under regulation 10.6, a hazardous area is established and maintained in accordance with that regulation; and
- (d) all persons handling a class 2, 3, or 4 substance are provided with the information, instruction, and training required by regulation 4.5.
- (5) This regulation does not apply to LPG, propane, butane, or isobutane if—
  - (a) it is contained in non-refillable, threaded, or self-sealing cartridges of up to 1 000 ml water capacity and manufactured to EN 417:2012 or a standard in a relevant safe work instrument; and
  - (b) the aggregate water capacity of the cartridges at any one place is less than 3 000 L.
- (6) This regulation does not apply to a PCBU with management or control of a tank wagon that is used to refuel aircraft carrying out the aerial application of a substance while—
  - (a) the tank wagon is on a farm of not less than 4 ha; and
  - (b) the tank wagon is located—
    - (i) at least 20 m from any protected place; and
    - (ii) at least 6 m from any combustible materials; and
    - (iii) in a compound or other place that will ensure that any spillage of aviation gasoline or JetA-1 aviation turbine fuel at that place will not endanger any building, or flow into any stream, lake, or natural water.
- (7) This regulation does not apply to low flashpoint diesel, HSNO approval number HSR001447.
- (8) A PCBU who contravenes subclause (1), (3), or (4) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (9) A PCBU who contravenes subclause (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/116 r 77

#### **10.27 Duty of PCBU to reduce likelihood of unintended ignition of class 3.2 or 4 substances present at hazardous substance location**

- (1) A PCBU with management or control of a hazardous substance location at which a class 3.2 or 4 substance is present must ensure that,—



- (a) except where the ignition of the substance is intended, all class 3.2 and 4 substances are isolated from any ignition source by—
    - (i) a wall—
      - (A) with a fire-resistance rating of 240/240/240 minutes; and
      - (B) that is constructed to prevent a fire on one side of the wall from coming into contact with any such substances on the other side of the wall; or
    - (ii) a distance of not less than 3 m; and
  - (b) any electrical equipment is designed and constructed—
    - (i) so as to prevent moisture or combustible particulate matter from getting into the electrical equipment; and
    - (ii) so that in the event of failure of the electrical equipment, no resulting ignition source will contact either the substance or its package; and
  - (c) all items of fixed equipment that are at any time in contact with the substance are electrically bonded and earthed so that the maximum allowable resistance to earth is—
    - (i)  $10^6 \Omega$ , for the dissipation of static electricity from components that have an electrical resistance of equal to or more than  $10^6 \Omega$ ; and
    - (ii)  $10 \Omega$ , for the dissipation of static electricity from components that have an electrical resistance of less than  $10^6 \Omega$ ; and
  - (d) the requirements of regulation 10.5 are met.
- (2) Compliance with those parts of the Electricity Act 1992 and regulations made under that Act, the Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016, or the Civil Aviation Rules that relate to the matters described in subclause (1)(b) is a means of meeting the requirements of that subclause.
- (3) One means of meeting the requirements of subclause (1)(d) is by separating the substance from any substance with which it is incompatible by—
- (a) a wall with a fire-resistance rating of 120/120/120 minutes; or
  - (b) a distance of not less than 3 m unless otherwise provided in these regulations.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 78

**10.28 Duty of PCBU to control adverse effects of unintended ignition of class 3.2 or 4 substances present at hazardous substance location**

- (1) A PCBU with management or control of a hazardous substance location at which a class 3.2 or 4 substance is present must—
  - (a) establish a controlled zone around the location that complies with subclauses (2) and (3); and
  - (b) ensure that regulations 10.5 and 10.23 to 10.25 are complied with within the location; and
  - (c) exclude all unauthorised personnel from the controlled zone.
- (2) If class 3.2 or 4 substances are at the location, the PCBU must ensure that the boundary of the controlled zone is a wall with a fire-resistance rating of 240/240/240 minutes where it abuts a protected place, and of 120/120/120 minutes where it abuts a public place.
- (3) In addition to subclause (2), the PCBU must ensure that where class 4.1.2 substances are present at the location, the controlled zone is of sufficient size so that, in the event of a fire or an explosive decomposition involving those substances, no area beyond the controlled zone is exposed to a blast overpressure of—
  - (a) more than 9 kPa if the area beyond the controlled zone is a public place; or
  - (b) more than 5 kPa if the area beyond the controlled zone is a protected place.
- (4) The hazardous substance location complies with subclauses (2) and (3) if—
  - (a) the boundary of the controlled zone is at a distance from the substance of not less than the relevant distance specified in table 7 or 8 in Schedule 9; or
  - (b) the location complies with a standard referred to in a relevant safe work instrument as a method of meeting the requirements of subclauses (2) and (3).
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 79

**10.29 Method of complying with regulation 10.28**

For the purposes of regulation 10.28,—

- (a) a reinforced concrete wall 100 mm thick meets the requirements for a firewall with a fire-resistance rating of 120/120/120 minutes:

- (b) a reinforced concrete wall 150 mm thick meets the requirements for a firewall with a fire-resistance rating of 240/240/240 minutes.

Compare: SR 2001/116 r 80

*Secondary containment for class 3 and 4 pooling substances*

**10.30 Requirement to have secondary containment system for pooling substances**

- (1) This regulation applies to a place within a workplace if—
  - (a) an aggregate quantity of class 3 or 4 substances more than the quantity specified in table 9 in Schedule 9 is held, or is reasonably likely to be held, at the place at any time; and
  - (b) the place is not a port, or part of a port facility, that is used to store hazardous substances for 72 hours or less.
- (2) The PCBU with management or control of the place must ensure that there is a system in place that, depending on the capacities of the container or containers in which the substances are held, complies with,—
  - (a) for a surface container, regulation 10.31, 10.32, or 10.33; or
  - (b) for an above ground stationary container, regulation 17.100 and (if applicable) regulation 17.102; or
  - (c) for a below ground stationary container, regulation 17.101.
- (3) If 2 or more containers of different capacities (as described in regulations 10.31, 10.32, and 10.33) are held at 1 place, the PCBU must ensure that the secondary containment system has a capacity of at least the sum of each container category.
- (4) The PCBU must ensure, in relation to a stationary containment system at that place, that the following controls can be instituted in or in respect of the system:
  - (a) if flammable substances must be contained, controls that exclude any energy source capable of igniting them;
  - (b) controls that prevent the substances retained from being contaminated by incompatible substances and materials.
- (5) For the purposes of this regulation and regulations 10.31, 10.32, 10.33, 17.100, 17.101, and 17.102, if a class 3 or 4 substance is contained in pipework that is installed and operated so as to manage any loss of containment in the pipework, the substance—
  - (a) must not be taken into account in determining whether a place is required to have a secondary containment system; and
  - (b) is not required to be located in a secondary containment system.
- (6) This regulation does not apply to a place where there is stored—

- (a) E10, E85, petrol, aviation gasoline, or racing gasoline in total quantities of less than 1 000 L; or
  - (b) at a farm of not less than 4 ha, E10, E85, petrol, aviation gasoline, racing gasoline, kerosene, or diesel fuel in total quantities of less than 2 000 L and located so that any spillage will not endanger any building or flow into any stream, lake, or natural water; or
  - (c) E10, E85, petrol, aviation gasoline, racing gasoline, kerosene, or diesel fuel in total quantities of less than 2 000 L contained in a tank wagon or in secure containers, each individual container having a capacity of less than 250 L, located so that any spillage will not endanger any building or flow into any stream, lake, or natural water, and where the proposed or actual duration of the storage is for a continuous period of less than 14 days.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **10.31 Requirements for surface containers of up to 60 L**

If the pooling substances held in a place within a workplace above ground are in containers each of which has a capacity of 60 L or less,—

- (a) if the place's total pooling potential is less than 5 000 L, the secondary containment system must have a capacity of at least 50% of that total pooling potential:
- (b) if the place's total pooling potential is 5 000 L or more, the secondary containment system must have a capacity of the greater of—
  - (i) 2 500 L; and
  - (ii) 25% of that total pooling potential.

#### **10.32 Requirements for surface containers of more than 60 L and up to 450 L**

- (1) If the pooling substances held in a place within a workplace above ground are in containers 1 or more of which have a capacity of more than 60 L but none of which has a capacity of more than 450 L,—
- (a) if the place's total pooling potential is less than 5 000 L, the secondary containment system must have a capacity of at least that total pooling potential:
  - (b) if the place's total pooling potential is 5 000 L or more, the secondary containment system must have a capacity of the greater of—
    - (i) 5 000 L; and
    - (ii) 50% of that total pooling potential.

- (2) This regulation does not apply to a stationary container to which regulation 17.100 applies.

### **10.33 Requirements for surface containers of more than 450 L**

- (1) If the pooling substances held in a place within a workplace above ground are in containers 1 or more of which have a capacity of more than 450 L,—
- (a) if the place's total pooling potential is less than 5 000 L, the secondary containment system must have a capacity of at least that total pooling potential;
  - (b) if the place's total pooling potential is 5 000 L or more, the secondary containment system must have a capacity of the greater of—
    - (i) 5 000 L; and
    - (ii) 50% of that total pooling potential.
- (2) Despite the requirements of subclause (1), if the pooling substances are contained in a tank wagon, the secondary containment system must have a capacity of at least 110% of the capacity of the largest compartment of the tank wagon.
- (3) This regulation does not apply to a stationary container to which regulation 17.100 applies.

### *Compliance certificate requirements*

### **10.34 Requirement to have compliance certificate if class 2.1.1, 2.1.2, or 3.1 substance present at hazardous substance location**

- (1) A PCBU with management or control of a hazardous substance location where class 2.1.1, 2.1.2, or 3.1 substances are present must ensure that the location has a current compliance certificate certifying that—
- (a) the notification requirements of regulation 10.26 are complied with and the maximum quantities as notified are not exceeded; and
  - (b) the hazardous substance location can be appropriately secured from access by persons other than those permitted by the PCBU to access the location; and
  - (c) the PCBU with management or control of the hazardous substance location can demonstrate that any worker at the location who handles a class 2.1.1, 2.1.2, or 3.1 substance has received information, training, and instruction in accordance with regulation 4.5; and
  - (d) if a hazardous area is required by regulation 10.6, a hazardous area has been established in accordance with that regulation, and the extent of the hazardous area is documented; and
  - (e) the requirements of regulation 10.5 are complied with; and

- (f) the hazardous substance location has signage in place that complies with regulations 2.5 and 2.6; and
- (g) if the quantity of substance requires it, the requirements for emergency management specified in Part 5 are complied with; and
- (h) if the quantity of substance requires it, the requirements for secondary containment specified in regulation 10.30 are complied with; and
- (i) the requirements of regulation 10.26(4) are complied with; and
- (j) the requirements of Part 11 are complied with; and
- (k) any stationary container systems containing LPG, propane, butane, or isobutane comply with—
  - (i) the separation requirements specified in subpart 3 of Part 17; and
  - (ii) the fire-fighting system requirements of subpart 7 of Part 17; and
  - (iii) the requirements relating to plans specified in regulation 17.80; and
  - (iv) if the stationary container system contains a vapouriser, the vapouriser complies with regulation 17.56.
- (2) This regulation does not apply to a PCBU with management or control of a hazardous substance location on a farm of not less than 4 ha, where the combined quantity of each class 3.1B or 3.1C pesticide or veterinary medicine, or any petrol, aviation gasoline, or racing gasoline, stored at the location is less than 2 000 L if—
  - (a) the following requirements are complied with:
    - (i) each substance is stored in 1 or more secure containers, each of which has a capacity of less than 250 L; and
    - (ii) each container complies with the relevant packaging requirements for flammable liquids (subclass 3.1) set out in the Hazardous Substances (Packaging) Notice 2017 relating to the packaging; and
    - (iii) the hazardous substance location is situated not less than 15 m from any protected place; and
    - (iv) the hazardous substance location is situated either in the open or in a well-ventilated building; and
    - (v) the hazardous substance location is in a compound or other place where any spillage of the substance will not endanger any building or flow into any stream, lake, or natural water; or
  - (b) the following requirements are complied with:
    - (i) each substance is stored in an above ground stationary tank that complies with requirements for stationary containers specified in Part 17; and

- (ii) each substance is situated not less than 20 m from any protected place; and
  - (iii) each substance is situated 6 m from any combustible materials; and
  - (iv) each substance is in a compound or other place where any spillage of the substance will not endanger any building or flow into any stream, lake, or natural water.
- (3) This regulation does not apply to a PCBU with management or control of a hazardous substance location where petrol, aviation gasoline, racing gasoline, or kerosene is stored in total quantities of less than 2 000 L if—
  - (a) the proposed or actual duration of the storage is for a continuous period of less than 14 days; and
  - (b) the substance is stored in 1 or more secure containers, each of which—
    - (i) has a capacity of less than 250 L; and
    - (ii) complies with the relevant packaging requirements for flammable liquids (subclass 3.1) set out in the Hazardous Substances (Packaging) Notice 2017 relating to the packaging; and
  - (c) the substance is situated at a distance not less than 15 m from any protected place; and
  - (d) the substance is situated either in the open or in a well-ventilated building; and
  - (e) the substance is in a compound or other place where any spillage of the substance will not endanger any building or flow into any stream, lake, or natural water.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 81

**10.35 Alternative compliance certification requirements if more than 100 kg but less than 300 kg of LPG, propane, butane, or isobutane present at hazardous substance location**

- (1) Despite regulation 10.34, a PCBU with management or control of a hazardous substance location where more than 100 kg but less than 300 kg of LPG, propane, butane, or isobutane is present does not require a current location compliance certificate if—
  - (a) the PCBU has been granted a previous location compliance certificate for that location in respect of LPG, propane, butane, or isobutane; and

- (b) the location has passed a compliance check in accordance with the requirements of regulation 11.43.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**10.36 Requirement to have compliance certificate if class 3.2 or 4 substance present at hazardous substance location**

- (1) A PCBU with management or control of a hazardous substance location where class 3.2 or 4 substances are present must ensure that the hazardous substance location has a current compliance certificate certifying that—
  - (a) the notification requirements of regulation 10.26 are complied with and the maximum quantities as notified are not exceeded; and
  - (b) the PCBU with management or control of the hazardous substance location can demonstrate that any worker at the location who handles a class 3.2 or 4 substance has received information, training, and instruction in accordance with regulation 4.5; and
  - (c) the hazardous substance location can be appropriately secured from access by persons other than those permitted by the PCBU to access the location; and
  - (d) where regulation 10.22 requires temperature control, there is a temperature control plan and system in place that meets the requirements of that regulation; and
  - (e) if the boundary of the controlled zone—
    - (i) is defined by a wall as required by regulation 10.28; or
    - (ii) is defined by separation distances as specified in table 7 or 8 in Schedule 9; or
    - (iii) meets the requirements of a relevant safe work instrument in regulation 10.28,—
 that boundary complies with the barrier, distance, or standard requirements; and
  - (f) the requirements of regulation 10.26(4) are complied with; and
  - (g) the requirements of regulations 10.5 and 10.23 to 10.25 are complied with; and
  - (h) the hazardous substance location has signage in place that complies with regulations 2.5 and 2.6; and
  - (i) if the quantity of substance requires it, the requirements for emergency management specified in Part 5 are complied with; and



- (j) if the quantity of substance requires it, the requirements for secondary containment specified in regulation 10.30 are met.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 82

*Controls on transit depots where class 2, 3, or 4 substances present*

**10.37 Requirement for transit depot**

- (1) A PCBU with management or control of a transit depot where there is present a quantity of any class 2, 3, or 4 substance greater than the quantity specified in table 4 in Schedule 9 for that substance must,—
  - (a) at least 30 working days (or, in the case of LPG, at least 5 working days) before the commissioning of the transit depot as a place for accommodating class 2, 3, or 4 substances, notify WorkSafe of—
    - (i) the street address of the transit depot; and
    - (ii) the maximum quantity and the hazard classification of each of the class 2, 3, or 4 substances that the depot is designed to accommodate; and
  - (b) ensure that any worker at the transit depot who handles a class 2, 3, or 4 substance listed in table 4 in Schedule 9, has received information, training, and instruction in accordance with regulation 4.5; and
  - (c) ensure that the requirements of regulation 10.4 are met; and
  - (d) ensure that any road vehicle loaded with containers of class 2, 3, or 4 substances is—
    - (i) not less than 3 m from any other vehicle that is loaded with compatible substances; and
    - (ii) not less than 5 m from any other vehicle that is loaded with incompatible substances; and
    - (iii) not less than 3 m from any place where containers of compatible substances not on a vehicle are located; and
    - (iv) not less than 5 m from any place where containers of incompatible substances not on a vehicle are located; and
  - (e) ensure that any containers of class 2, 3, or 4 substances held in the transit depot but not loaded onto a vehicle are—
    - (i) not less than 3 m from containers of incompatible substances, if the substances are being consolidated at a loading dock in readiness to be transported:

- (ii) not less than 5 m from containers of incompatible substances, in all other circumstances; and
- (f) ensure that all class 2, 3, or 4 substances located at the transit depot remain within their containers and that the containers remain closed; and
- (g) ensure that any electrical equipment at the transit depot is designed and constructed so that in the event of failure of the electrical equipment no resulting ignition source will contact either the substance or its package; and
- (h) designate and clearly identify with signs areas for containment, pending disposal of any leaked or spilled material or damaged packages.
- (2) Compliance with those parts of the Electricity Act 1992 and regulations made under that Act, the Health and Safety at Work (Mining Operations and Quarrying Operations) Regulations 2016, or the Civil Aviation Rules that relate to the matter described in subclause (1)(g) is a means of meeting the requirements of that subclause.
- (3) Subclause (1)(e) does not apply to a PCBU with management or control of—
  - (a) a port, if the PCBU complies with the requirements for shipboard separation prescribed in the International Maritime Dangerous Goods Code;
  - (b) a transit depot, if the hazardous substances are being transported in accordance with clause 2.3 of the Land Transport Rule: Dangerous Goods 2005.
- (4) This regulation does not apply to low flashpoint diesel, HSNO approval number HSR001447.
- (5) A PCBU who contravenes subclause (1)(a) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.
- (6) A PCBU who contravenes subclause (1)(b) to (h) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 83

## **Part 11**

### **Controls relating to adverse effects of unintended ignition of class 2 and 3.1 substances**

#### **11.1 Interpretation**

In this Part, unless the context otherwise requires,—

**AS 1940—2004** means the standard on The storage and handling of flammable and combustible liquids

**AS/NZS 4114.1:2003** means the standard on Spray painting booths, designated spray painting areas and paint mixing rooms—Design, construction and testing

**AS/NZS 3833:2007** means the standard on The storage and handling of mixed classes of dangerous goods, in packages and intermediate bulk containers

**BS EN 14470–1:2004** means the British/European standard on Safety storage cabinets for flammable liquids

**NZS 4232.2:1988** means the standard on Fire resisting glazing systems

**NZS 4541:2013** means the standard on Automatic fire sprinkler systems

**retail shop—**

- (a) means—
  - (i) an area at premises where goods are displayed for sale to the general public or an end user; or
  - (ii) an area behind a sales counter where goods are kept for the purpose of selling them to the general public or an end user; and
- (b) includes an area where goods are received at the premises and stored before being displayed for sale or placed on the shelves behind the sales counter

**retailer of agricultural chemicals** means a retail shop selling agricultural chemicals predominantly to commercial users

**type 1 workroom** means a building or room—

- (a) where hazardous substances are held in open containers or used; and
- (b) that is constructed in accordance with the following:
  - (i) the floor, walls, and ceiling have a minimum fire-resistance rating of 60/60/60 minutes:
  - (ii) every door opens towards the outside of the building or room, is self-closing, and has a fire-resistance rating of at least -/60/60 minutes:
  - (iii) every window in the building or room complies with NZS 4232.2:1988; and
- (c) that is not occupied either in whole or in part as a dwelling; and
- (d) that has a secondary containment system with a capacity of at least 100% of the total pooling potential

**type 2 workroom** means a building or room—

- (a) where hazardous substances are held in open containers or used; and
- (b) that is constructed in accordance with the following:

- (i) the floor, walls, and ceiling have a minimum fire-resistance rating of 120/120/120 minutes;
  - (ii) every door opens towards the outside of the building or room, is self-closing, and has a fire-resistance rating of at least -/120/60 minutes;
  - (iii) every window in the building or room complies with NZS 4232.2:1988; and
- (c) that is not occupied either in whole or in part as a dwelling; and
- (d) that has a secondary containment system with a capacity of at least 100% of the total pooling potential

**type 3 workroom** means a building or room—

- (a) where hazardous substances are held in open containers or used; and
- (b) that is constructed in accordance with the following:
  - (i) the floor, walls, and ceiling have a minimum fire-resistance rating of 240/240/240 minutes;
  - (ii) every door opens towards the outside of the building or room, is self-closing, and has a fire-resistance rating of at least -/240/60 minutes;
  - (iii) every window in the building or room complies with NZS 4232.2:1988; and
- (c) that is not occupied either in whole or in part as a dwelling; and
- (d) that has a secondary containment system with a capacity of at least 100% of the total pooling potential

**type A storage** means an area that is designated for the storage of hazardous substances and that—

- (a) is located external to a building; and
- (b) may have a platform on which 1 or more containers are located, provided that the platform is made of non-combustible materials; and
- (c) may have a shelter roof, provided that the roof is made of non-combustible materials; and
- (d) is—
  - (i) secured from access by persons other than those permitted by a PCBU to access the storage area; and
  - (ii) is part of a secondary containment system

**type B storage** means a framed building where hazardous substances are stored that—

- (a) has non-combustible cladding; and
- (b) is part of a secondary containment system

**type C storage** means a building where hazardous substances are stored that—

- (a) has a fire-resistance rating of 120/120/120 minutes and is made of structurally strong materials such as brick, block concrete, and reinforced concrete; and
- (b) has a roof made of non-combustible materials; and
- (c) is part of a secondary containment system; and
- (d) has a door with a fire-resistance rating of at least -/120/60 minutes unless the building is standalone, in which case a lesser rated door may be used

**type D storage** means a building where hazardous substances are stored that—

- (a) has a fire-resistance rating of 240/240/240 minutes and is made of structurally strong materials such as brick, block concrete, and reinforced concrete; and
- (b) has a reinforced concrete roof with a fire-resistance rating of 240/240/240 minutes; and
- (c) is part of a secondary containment system; and
- (d) has a door with a fire-resistance rating of -/240/60 minutes unless the building is standalone, in which case a lesser rated door may be used.

## 11.2 Anhydrous ammonia

This Part does not apply to anhydrous ammonia that is contained in plant in which anhydrous ammonia is used as a refrigerant.

## 11.3 Duty of PCBU to ensure that adverse effects of unintended ignition are controlled

A PCBU with management or control of work using a hazardous substance to which this Part applies must ensure that the adverse effects of an unintended ignition of the substance are controlled in accordance with this Part.

Subpart 1—Separation requirements for class 2.1.1, 2.1.2, and 3.1 substances not located at hazardous substance location

## 11.4 Application of subpart 1

- (1) This subpart applies to a class 2.1.1, 2.1.2, or 3.1 substance that is present at a location at a workplace that is not a hazardous substance location.
- (2) This subpart does not apply to a location when the aggregate quantity of hazardous substances present is less than or equal to—
  - (a) 15 L, for a class 3.1A or 3.1B substance when kept in securely closed containers with a capacity of not more than 5 L; or
  - (b) 100 L, for a class 3.1C substance; or
  - (c) 500 L, for a class 3.1D substance.

**11.5 Duty of PCBU to separate class 2.1.1 permanent gases from protected places and public places**

- (1) This regulation applies to—
  - (a) 1 or more cylinders that—
    - (i) are located either singly or together at a place within a workplace; and
    - (ii) contain a class 2.1.1 permanent gas;
  - (b) an above ground stationary tank, transportable container, or tank wagon that contains a class 2.1.1 permanent gas.
- (2) A PCBU with management or control of a vehicle filling point for a class 2.1.1 permanent gas to which this subpart applies must ensure that it is separated by a distance of 2.5 m from the place of storage of the class 2.1.1 permanent gas.
- (3) A PCBU with management or control of a cylinder must ensure that it is separated from—
  - (a) a protected place by not less than the distance specified in column 2 of table 1 in Schedule 12 opposite the aggregate volume of the permanent gas contained in all of the cylinders located at the same place specified in column 1 of that table;
  - (b) a public place by not less than the distance specified in column 3 of table 1 in Schedule 12 opposite the aggregate volume of the permanent gas contained in all of the cylinders located at the same place specified in column 1 of that table.
- (4) Subclause (3) does not apply to the storage of a class 2.1.1 permanent gas that is stored in quantities of 100 m<sup>3</sup> or less and that is intended to be used on the premises.
- (5) A PCBU with management or control of an above ground stationary tank, transportable container, or tank wagon must ensure that it is separated from—
  - (a) a protected place by not less than the distance specified in column 2 of table 1 in Schedule 12 opposite the volume of the permanent gas contained in the above ground stationary tank, a transportable container, or a tank wagon specified in column 1 of that table;
  - (b) a public place by not less than the distance specified column 3 of table 1 in Schedule 12 opposite the volume of the permanent gas contained in the above ground stationary tank, transportable container, or tank wagon specified in column 1 of that table.
- (6) A PCBU with management or control of a tank fill transfer point that is connected to an above ground stationary tank must ensure that it is separated from—
  - (a) a protected place by not less than the distance specified in column 2 of table 1 in Schedule 12 opposite the volume of the permanent gas con-

tained in the above ground stationary tank that is connected to the tank fill transfer point specified in column 1 of that table:

- (b) a public place by not less than the distance specified in column 3 of table 1 in Schedule 12 opposite the volume of the permanent gas contained in the above ground stationary tank that is connected to the tank fill transfer point specified in column 1 of that table.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **11.6 Duty of PCBU to separate cylinders containing class 2.1.1 liquefiable gases from protected places and public places**

- (1) A PCBU with management or control of 1 or more cylinders containing a class 2.1.1 liquefiable gas to which this subpart applies that are located either singly or together at a place within a workplace must ensure that they are separated from—
- (a) a protected place by not less than the distance specified in column 2 of table 2 in Schedule 12 opposite the aggregate quantity of liquefiable gas contained in all of the cylinders located at the place specified in column 1 of that table;
  - (b) a public place by not less than the distance specified in column 3 of table 2 in Schedule 12 opposite the aggregate quantity of liquefiable gas contained in all of the cylinders located at the place specified in column 1 of that table.
- (2) A PCBU with management or control of cylinders that are located within 1 m of a building and that, individually or in aggregate, as the case may be, contain up to 100 kg of a class 2.1.1 liquefiable gas, must ensure that the building does not have any opening located—
- (a) below the top of any cylinder; or
  - (b) within 1 m of any cylinder.
- (3) A PCBU with management or control of 1 or more cylinders containing a class 2.1.1 liquefiable gas must ensure that they are not located within 1 m of an opening to a drain.
- (4) Subclause (1)(a) does not apply to 1 or more cylinders located together that each contain, or contain in aggregate, as the case may be, more than 100 kg and up to 300 kg of a class 2.1.1 liquefiable gas if—
- (a) there are no buildings within 2 m of the cylinder or cylinders; or
  - (b) there are 1 or more buildings within 2 m of the cylinder or cylinders and—

- (i) the walls of the buildings behind and 2 m either side of the cylinders are constructed of fire-resistant materials; and
- (ii) the building does not have any opening located—
  - (A) below the top of any cylinder; or
  - (B) within 2 m of any cylinder.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.7 Duty of PCBU to separate above ground stationary tank, transportable container, tank wagon, and transfer point for class 2.1.1 liquefiable gas from protected places and public places**

- (1) A PCBU with management or control of an above ground stationary tank, transportable container, or tank wagon that contains a class 2.1.1 liquefiable gas to which this subpart applies, and each transfer point connected to any of them, must ensure that the tank, container, or tank wagon is separated from—
  - (a) a protected place by not less than the distance specified in column 2 of table 3 in Schedule 12 opposite the capacity of the above ground stationary tank, transportable container, or tank wagon specified in column 1 of that table;
  - (b) a public place by not less than the distance specified in column 3 of table 3 in Schedule 12 opposite the capacity of the above ground stationary tank, transportable container, or tank wagon specified in column 1 of that table.
- (2) Despite subclause (1), a tank fill zone need not be separated from a protected place by any more than 15 m.
- (3) Despite subclause (1), a PCBU with management or control of an above ground stationary tank, transportable container, or tank wagon that contains LPG, propane, butane, or isobutane, and each tank fill transfer point connected to them, must ensure that it is separated from—
  - (a) a protected place by not less than the distance specified in column 2 of table 4 in Schedule 12 opposite the capacity of the above ground stationary tank, transportable container, or tank wagon specified in column 1 of that table;
  - (b) a public place by not less than the distance specified in column 3 of table 4 in Schedule 12 opposite the capacity of the above ground stationary tank, transportable container, or tank wagon specified in column 1 of that table.
- (4) Despite subclause (3), a tank fill transfer point is not required to be separated from a protected place by more than 15 m.



- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.8 Duty of PCBU to separate building holding class 2.1.2 flammable aerosols and threaded or self-sealing gas cartridges of LPG from a protected place**

- (1) This regulation applies in relation to a building that holds class 2.1.2 flammable aerosols and threaded or self-sealing gas cartridges of LPG, butane, propane, and isobutane of up to 1 000 ml water capacity manufactured to EN 417:2012 or a standard specified in a relevant safe work instrument, the aggregate capacity of which exceeds 3 000 L.
- (2) A PCBU with management or control of a building must ensure that the building is separated from a protected place by not less than 3 m.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.9 Duty of PCBU to separate above ground stationary tank, transportable container, or tank wagon containing class 3.1 substance from protected places and public places**

- (1) A PCBU with management or control of an above ground stationary tank, transportable container, or tank wagon that contains a class 3.1 substance to which this subpart applies must ensure that the tank, container, or tank wagon is separated from—
- (a) a protected place by not less than the distance specified in whichever of column 2 or 3 of table 5 in Schedule 12 relates to the substance opposite the capacity of the above ground stationary tank, transportable container that complies with chapter 6.7 of the UN Model Regulations, or tank wagon in column 1 of that table; or
  - (b) a public place by not less than the distance specified in column 4 of table 5 in Schedule 12 opposite the capacity of the above ground stationary tank, transportable container, or tank wagon in column 1 of that table.
- (2) The PCBU must ensure that where any above ground stationary tank, transportable container, or tank wagon with multiple compartments is installed, the separation distance to a protected place or public place is based on the aggregate volume of the compartments and the lowest flash point substance stored in any of the compartments.
- (3) This regulation does not apply to a stationary tank that complies with regulation 17.63(3)(b), (c), or (d).

- (4) Despite subclause (1), a PCBU with management or control of an above ground stationary tank that is manufactured and design certified to the requirements of SwRI 95–03 for a 4 hour fire rated tank may locate the tank at a distance of not less than 50% of the separation distances prescribed in subclause (1).
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **11.10 Repairs and servicing of tank wagons**

- (1) A tank wagon may be taken into a building for repairs, vehicle inspection, or servicing provided that the PCBU with management or control of the building ensures that—
  - (a) the tank wagon load tank cannot vent inside the building; and
  - (b) the tank wagon is not located where it can be subject to heating; and
  - (c) no ignition source is permitted within 8 m of the load tank; and
  - (d) for emergency repairs, the driver or other responsible representative of the owner remains with the vehicle until the repair is completed.
- (2) Subclause (1) overrides regulations 11.5, 11.7, and 11.9.
- (3) Subclause (1) does not apply to a tank wagon that is certified, by a person competent in this matter, as being free of flammable gases or vapours.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **11.11 Duty to hold certain packages or transportable containers of class 3.1 substance in building or external storage area of certain type**

- (1) A PCBU with management or control of a class 3.1A, 3.1B, or 3.1C substance to which this subpart applies that is contained in 1 or more packages or transportable containers that comply with chapter 6.5 of the UN Model Regulations (other than a package or container to which regulation 11.16 applies) must ensure that the packages or containers are held in a building or external storage area of a type specified in subclause (2).
- (2) The types of building or external storage area are—
  - (a) a type A storage; or
  - (b) a type B storage; or
  - (c) a type C storage; or
  - (d) a type D storage.

- (3) Despite subclause (1), a class 3.1A, 3.1B, or 3.1C substance to which this subpart applies that is contained in 1 or more packages may be held in a storage cabinet—
- (a) if the following requirements are met:
- (i) each package does not contain more than 20 L of the substance; and
- (ii) the aggregate quantity of all packages of a class 3.1A, 3.1B, or 3.1C substance held in the storage cabinet does not exceed 250 L; and
- (iii) the storage cabinet is—
- (A) constructed and installed in accordance with sections 4.9.2, 4.9.5, and 4.9.7 of AS 1940—2004; or
- (B) constructed, installed, independently tested, and certified in compliance with BS EN 14470-1:2004, for a storage cabinet that has a 60-minute or higher fire-resistance rating; or
- (b) in accordance with a relevant safe work instrument.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
- (b) for any other person, to a fine not exceeding \$50,000.

**11.12 Duty of PCBU to separate building or external storage area holding packages up to 60 L of class 3.1A or 3.1B substances or packages of any amount of class 3.1C substance from protected places**

- (1) This regulation applies to a type A, type B, type C, or type D storage that holds 1 or more packages each containing—
- (a) not more than 60 L of a class 3.1A or 3.1B substance to which this subpart applies; or
- (b) a class 3.1C substance to which this subpart applies.
- (2) A PCBU with management or control of a building or external storage area must ensure that the building or external storage area is separated from a protected place by not less than the distance specified in column 4 of table 6 in Schedule 12 opposite the aggregate quantity of all packages of class 3.1A, 3.1B, or 3.1C substances specified in whichever of columns 1, 2, and 3 of that table relates to the building or external storage area.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
- (b) for any other person, to a fine not exceeding \$50,000.

**11.13 Storage of packages holding class 3.1 substance in a store in a building**

- (1) A PCBU with management or control of class 3.1 substances to which this sub-part applies may place those substances in a store inside a building but only if they are stored—
  - (a) in a room with the walls and ceiling constructed with a 60/60/60 minutes fire-resistance rating and a door with at least a -/60/60 minutes fire-resistance rating, and—
    - (i) not more than 450 L of the substance is situated in the store; and
    - (ii) the substances are stored in containers, each not exceeding 20 L capacity; or
  - (b) in a room with the walls and ceiling constructed of reinforced concrete or an equivalent material with a 120/120/120 minutes fire-resistance rating and a door with at least a -/120/60 minutes fire-resistance rating, and—
    - (i) not more than 2 000 L of the substance is situated in the store; and
    - (ii) the substances are stored in containers, each not exceeding 60 L capacity (but one container of a maximum capacity of 250 L may be located in the store); and
    - (iii) any vents are fitted with fire dampers with at least a -/90/- minutes fire-resistance rating; or
  - (c) in a type D storage that has no openings to the interior of the building, except for—
    - (i) a door that is self-closing in the event of a fire and that opens into a type 1, type 2, or type 3 workroom; or
    - (ii) vents that are fitted with fire dampers with at least a -/180/- minutes fire-resistance rating.
- (2) For the purposes of subclause (1)(a) or (b), if the quantity of class 3.1 substances in the store does not exceed 2 000 L, the door may open into a building if—
  - (a) the door of the room has a fire-resistance rating of -/60/60 minutes for storage in accordance with subclause (1)(a) and -/120/60 minutes for storage in accordance with subclause (1)(b); and
  - (b) the door is fitted to be self-closing in the event of a fire near the doorway; and
  - (c) there are no combustible materials within 3 m of the doorway; and
  - (d) no portion of the structure within 3 m of the doorway is constructed of combustible materials; and
  - (e) the door is kept closed except when goods are placed in, or removed from, the store.

- (3) A PCBU with management or control of a building constructed in accordance with subclause (1)(c) or a building that has more than 2 walls in common with another building that is a protected place must ensure that the building has walls constructed of reinforced concrete or an equivalent material with a fire-resistance rating of 240/240/240 minutes and does not contain more than—
  - (a) 5 000 L of class 3.1A and 3.1B substances in aggregate, in containers exceeding 60 L capacity; or
  - (b) 10 000 L in aggregate, in the case of all other storage of class 3.1A and 3.1B substances in containers not exceeding 60 L capacity or class 3.1C substances in containers not exceeding 250 L capacity.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.14 Duty of PCBU to separate building or external storage area holding transportable containers or packages of more than 60 L of class 3.1A, 3.1B, or 3.1C substances from protected places**

- (1) This regulation applies to a type A, type B, type C, or type D storage that holds 1 or more packages or transportable containers each containing more than 60 L of a class 3.1A, 3.1B, or 3.1C substance to which this subpart applies.
- (2) A PCBU with management or control of a building or external storage area must ensure that the building or external storage area is separated from a protected place by not less than the distance specified in column 4 of table 7 in Schedule 12 opposite the aggregate quantity of all transportable containers that comply with chapter 6.7 of the UN Model Regulations or packages of class 3.1A, 3.1B, or 3.1C substances specified in whichever of columns 1, 2, and 3 of that table relates to the building or external storage area.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.15 Duty of PCBU to separate transfer point for class 3.1 substance from protected places**

- (1) A PCBU with management or control of a transfer point used to fill a tank wagon with a class 3.1 substance to which this subpart applies must ensure that the transfer point is separated from a protected place by—
  - (a) 10 m in relation to a class 3.1A, 3.1B, or 3.1C substance; or
  - (b) 5 m in relation to a class 3.1D substance.

- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.16 Class 3.1 substance being used or in open package or container to be held in building of certain type**

- (1) This regulation applies to a class 3.1A, 3.1B, or 3.1C substance to which this subpart applies that is—
  - (a) being used; or
  - (b) contained in 1 or more packages or containers, 1 or more of which are open.
- (2) A PCBU with management or control of a class 3.1A, 3.1B, or 3.1C substance that is to be held in a building must ensure that the substance is held in—
  - (a) a type 1 workroom; or
  - (b) a type 2 workroom; or
  - (c) a type 3 workroom; or
  - (d) a paint-mixing room that complies with AS/NZS 4114.1:2003.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.17 Duty to separate building holding package containing class 3.1 substance from protected place**

- (1) This regulation applies to every type of building specified in regulation 11.16(2) in which a class 3.1A, 3.1B, or 3.1C substance to which this subpart applies is—
  - (a) being used; or
  - (b) contained in 1 or more packages or containers, 1 or more of which are open.
- (2) A PCBU with management or control of the building must ensure that—
  - (a) if the building is a type 1 workroom or paint-mixing room that complies with AS/NZS 4114.1:2003, the building does not hold—
    - (i) a class 3 substance in a container that is more than 20 L in capacity; and
    - (ii) an aggregate quantity of class 3 substances of more than 450 L; and

- (b) if the building is a type 2 or type 3 workroom, the building does not hold more than—
    - (i) for a class 3.1A or 3.1B substance, an aggregate quantity of 7 500 L (as calculated in accordance with subclause (3)); or
    - (ii) for a class 3.1C substance, 10 000 L; and
  - (c) the building is constructed so as to hold any quantity of a class 3.1A or 3.1B substance that exceeds 60 L, or a quantity of a class 3.1C substance that exceeds 100 L, as close as practicable to ground level.
- (3) For the purposes of subclause (2)(b)(i), if the building holds class 3.1A, 3.1B, or 3.1C substances of more than 1 of those classes, the aggregate quantity must not exceed 7 500 L.
- (4) The PCBU must ensure that the building is separated from a protected place by not less than,—
  - (a) for a class 3.1A or 3.1B substance, the distance specified in whichever of columns 2, 3, and 4 of table 8 in Schedule 12 relates to that type of building opposite the aggregate quantity of the hazardous substance specified in column 1 of that table;
  - (b) for a class 3.1C substance, the distance specified in whichever of columns 2, 3, and 4 of table 8 in Schedule 12 relates to that type of building opposite the aggregate quantity of the hazardous substance specified in column 1 of that table.
- (5) Despite subclauses (1) to (4), if the maximum quantity of class 3.1 substances used in any building at any one time does not exceed 60 L of classes 3.1A and 3.1B substances in aggregate, or 250 L of class 3.1C substances, the use of those hazardous substances other than in a type 1, type 2, or type 3 workroom is permitted if the PCBU ensures that the following conditions are complied with:
  - (a) the building must be occupied by the same organisation that is storing the hazardous substances; and
  - (b) that part of the building in which the activity involving exposure of the hazardous substances to the atmosphere is being carried out must be constructed of fire-resistant materials to at least 6 m in all directions from any container in which hazardous substances are used; and
  - (c) no source of ignition must be permitted within 15 m of the area where work involving the exposure to the atmosphere of classes 3.1A and 3.1B substances in excess of 30 L in total is being carried out unless the working area is protected by an intervening wall; and
  - (d) no source of ignition must be permitted within 6 m of the area where work involving the exposure to the atmosphere of class 3.1C substances in excess of 30 L in total is being carried out unless the working area is protected by an intervening wall.

- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**Subpart 2—Separation requirements for class 2.1.1, 2.1.2, and 3.1  
substances located at hazardous substance location**

**11.18 Application of subpart 2**

This subpart applies to a class 2.1.1, 2.1.2, or 3.1 substance that is present at a workplace at which the PCBU with management or control of the workplace is required to have a hazardous substance location.

**11.19 Separation of class 2.1.1 permanent gas from protected places and public places**

- (1) This regulation applies to—
  - (a) 1 or more cylinders, each containing a class 2.1.1 permanent gas to which this subpart applies; or
  - (b) an above ground stationary tank, transportable container, or tank wagon that contains a class 2.1.1 permanent gas to which this subpart applies.
- (2) A PCBU with management or control of a vehicle filling point for a class 2.1.1 permanent gas must ensure that the vehicle filling point is separated by a distance of 2.5 m from the place of storage of the class 2.1.1 permanent gas.
- (3) A PCBU with management or control of a cylinder must ensure that it is separated from—
  - (a) a protected place by not less than the distance specified in column 2 of table 1 in Schedule 12 opposite the aggregate volume of the permanent gas contained in all of the cylinders specified in column 1 of that table;
  - (b) a public place by not less than the distance specified in column 3 of table 1 in Schedule 12 opposite the aggregate volume of the permanent gas contained in all of the cylinders specified in column 1 of that table.
- (4) Subclause (3) does not apply to the storage of a class 2.1.1 permanent gas on any premises in quantities not exceeding 100 m<sup>3</sup> if the gas is intended to be used on the premises.
- (5) A PCBU with management or control of an above ground stationary tank, a transportable container, or a tank wagon must ensure that it is separated from—
  - (a) a protected place by not less than the distance specified in column 2 of table 1 in Schedule 12 opposite the volume of the permanent gas contained in the above ground stationary tank, transportable container, or tank wagon specified in column 1 of that table;



- (b) a public place by not less than the distance specified in column 3 of table 1 in Schedule 12 opposite the volume of the permanent gas contained in the above ground stationary tank, transportable container, or tank wagon specified in column 1 of that table.
- (6) A PCBU with management or control of a tank fill transfer point that is connected to an above ground stationary tank must ensure that it is separated from—
  - (a) a protected place by not less than the distance specified in column 2 of table 1 in Schedule 12 opposite the volume of the permanent gas contained in the above ground stationary tank that is connected to the tank fill transfer point specified in column 1 of that table;
  - (b) a public place by not less than the distance specified in column 3 of table 1 in Schedule 12 opposite the volume of the permanent gas contained in the above ground stationary tank that is connected to the tank fill transfer point specified in column 1 of that table.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.20 Duty to separate cylinders containing class 2.1.1 liquefiable gas from protected places and public places**

- (1) A PCBU with management or control of 1 or more cylinders containing a class 2.1.1 liquefiable gas to which this subpart applies must ensure that they are separated from—
  - (a) a protected place by not less than the distance specified in column 2 of table 2 in Schedule 12 opposite the aggregate quantity of liquefiable gas contained in all of the cylinders at the hazardous substance location specified in column 1 of that table;
  - (b) a public place by not less than the distance specified in column 3 of table 2 in Schedule 12 opposite the aggregate quantity of liquefiable gas contained in all of the cylinders at the hazardous substance location specified in column 1 of that table.
- (2) The PCBU with management or control of cylinders that are located within 1 m of a building and that individually or in aggregate, as the case may be, contain up to 100 kg of a class 2.1.1 liquefiable gas must ensure that the building does not have any opening located—
  - (a) below the top of any cylinder; or
  - (b) within 1 m of any cylinder.

- (3) A PCBU with management or control of 1 or more cylinders containing a class 2.1.1 liquefiable gas must ensure that they are not located within 1 m of an opening to a drain.
- (4) Subclause (1)(a) does not apply to 1 or more cylinders present at a hazardous substance location containing either individually or in aggregate more than 100 kg but not more than 300 kg of class 2.1.1 liquefiable gas if—
  - (a) there are no buildings within 2 m of the cylinder or cylinders; or
  - (b) there are 1 or more buildings within 2 m of the cylinder or cylinders and—
    - (i) the cage or the walls of the buildings behind and 2 m either side of the cylinders are constructed of fire-resistant materials and are vapour-tight; and
    - (ii) the building does not have any opening located—
      - (A) below the top of any cylinder; or
      - (B) within 2 m of any cylinder.
- (5) Subclause (1)(a) does not apply to cylinders present at a hazardous substance location that contain in aggregate more than 300 kg but not more than 1 000 kg of class 2.1.1 liquefiable gas if—
  - (a) there are no buildings within 2 m of the cylinder or cylinders; or
  - (b) there are 1 or more buildings within 2 m of the cylinder or cylinders; but
    - (i) the wall of the building (or a wall between the cylinders and the building) is—
      - (A) vapour-tight; and
      - (B) has a minimum fire-resistance rating of 60/60/60 minutes for the length of the wall directly behind the cylinders and extending at each end to a distance of at least 2 m from the end of the bank of cylinders; and
    - (ii) any building within 2 m of the cylinder or cylinders does not have any opening located—
      - (A) below the top of any cylinder; or
      - (B) within 2 m either side of the cylinder.
- (6) If direct-fired vapourisers are used, the PCBU with management or control of those vapourisers must ensure that regulation 17.56(3) is complied with.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.21 Duty to separate above ground stationary tank, transportable container, or tank wagon and tank fill transfer point for class 2.1.1 liquefiable gas from protected places and public places**

- (1) A PCBU with management or control of an above ground stationary tank, transportable container, or a tank wagon that contains a class 2.1.1 liquefiable gas to which this subpart applies must ensure that each of those things and the tank fill transfer point connected to any or all of them is separated from—
  - (a) a protected place by not less than the distance specified in column 2 of table 3 in Schedule 12 opposite the capacity of the above ground stationary tank, transportable container, or tank wagon specified in column 1 of that table:
  - (b) a public place by not less than the distance specified in column 3 of table 3 in Schedule 12 opposite the capacity of the above ground stationary tank, transportable container, or tank wagon specified in column 1 of that table.
- (2) However, a tank fill transfer point need not be separated from a protected place by any more than 15 m.
- (3) Despite subclause (1), a PCBU with management or control of an above ground stationary tank, transportable container, or tank wagon that contains LPG, propane, butane, or isobutane and each tank fill transfer point connected to any or all of them must ensure that any of those things is separated from—
  - (a) a protected place by not less than the distance specified in column 2 of table 4 in Schedule 12 opposite the capacity of the above ground stationary tank, transportable container, or tank wagon specified in column 1 of that table:
  - (b) a public place by not less than the distance specified in column 3 of table 4 in Schedule 12 opposite the capacity of the above ground stationary tank, transportable container, or tank wagon specified in column 1 of that table.
- (4) However, a tank fill transfer point is not required to be separated from a protected place by more than 15 m.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.22 Duty to separate cylinder filling stations for class 2.1.1A liquefiable gas from protected places or public places**

- (1) A PCBU who installs or operates a cylinder filling station must ensure that the station is separated by at least—

- (a) 15 m from any protected place or public place if the quantity of class 2.1.1A liquefiable gas stored in cylinders at the filling station is 1 000 kg or more:
  - (b) 8 m from any protected place or public place if the quantity of class 2.1.1A liquefiable gas stored in cylinders at the filling station is more than 100 kg but less than 1 000 kg:
  - (c) 6 m from any protected place and 3 m from any public place if the quantity of class 2.1.1A liquefiable gas stored in cylinders at the filling station is not more than 100 kg.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.23 Duty to separate building holding class 2.1.2 flammable aerosols and threaded or self-sealing gas cartridges of LPG from protected place**

- (1) This regulation applies to a building that holds class 2.1.2 flammable aerosols and threaded or self-sealing gas cartridges of LPG of not more than 1 000 ml water capacity manufactured to EN 417:2012 or a design standard approved under Part 13, the aggregate capacity of which exceeds 3 000 L.
  - (2) A PCBU with management or control of a building must ensure that the building is separated from a protected place by not less than 3 m unless a lesser separation distance is permitted under any of regulations 11.24 to 11.27.
  - (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.24 Hazardous substance location holding not more than 10 000 L aggregate water capacity of flammable aerosols**

- (1) A separation distance of less than 3 m is permitted under regulation 11.23(2) if a hazardous substance location holds not more than 10 000 L aggregate water capacity of flammable aerosols and one of the following applies:
  - (a) the building or the room that is a hazardous substance location has walls and floor with a fire-resistance rating of 60/60/60 minutes, self-closing doors with a fire-resistance rating of -/60/60 minutes, and—
    - (i) parapets with a fire-resistance rating of 60/60/60 minutes that extend 0.6 m above the roofline; or
    - (ii) ceiling panels with a fire-resistance rating of -/60/60 minutes that extend back into the room by 2.4 m from the wall abutting the boundary of the protected place; or

- (b) the building or room that is the hazardous substance location has fire protection in accordance with NZS 4541:2013; or
  - (c) the hazardous substance location is in a general purpose warehouse and the flammable aerosols are separated from the rest of the warehouse by walls and floor with a fire-resistance rating of 60/60/60 minutes, self-closing doors with a fire-resistance rating of -/60/60 minutes, and—
    - (i) parapets with a fire-resistance rating of 60/60/60 minutes that extend 0.6 m above the roofline; or
    - (ii) ceiling panels with a fire-resistance rating of -/60/60 minutes that extend back into the room by 2.4 m from the wall; or
  - (d) the hazardous substance location is in a general purpose warehouse and the flammable aerosols are separated from the rest of the warehouse by—
    - (i) chain-link fencing from floor to roof of 2.9 mm or 9 gauge steel wire with a maximum 50 mm diamond mesh; and
    - (ii) self-closing gates or labyrinth openings of overlapping chain link fencing; and
    - (iii) fire protection in accordance with NZS 4541:2013.
- (2) In this regulation and regulations 11.25 and 11.26, **general purpose warehouse—**
  - (a) means a warehouse that—
    - (i) is used for receiving, storing, and distributing mixed goods (including flammable aerosols); and
    - (ii) is not accessible to the public; but
  - (b) does not include a warehouse for the primary purpose of storing hazardous substances.

**11.25 Hazardous substance location holding more than 10 000 L but not more than 100 000 L aggregate water capacity of flammable aerosols**

A separation distance of less than 3 m is permitted under regulation 11.23(2) if the hazardous substance location holds more than 10 000 L but not more than 100 000 L in aggregate water capacity of flammable aerosols and one of the following applies:

- (a) the building or the room that is a hazardous substance location has walls and floor with a fire-resistance rating of 120/120/120 minutes, self-closing doors with a fire-resistance rating of -/120/60 minutes, and—
  - (i) parapets with a fire-resistance rating of 120/120/120 minutes that extend 0.6 m above the roofline; or

- (ii) ceiling panels with a fire-resistance rating of -/120/120 minutes that extend back into the room by 2.4 m from the wall abutting the boundary of the protected place; or
- (b) the building or room that is a hazardous substance location has walls and floor with a fire-resistance rating of 60/60/60 minutes, self-closing doors with a fire-resistance rating of -/60/60 minutes, fire protection in accordance with NZS 4541:2013, and—
  - (i) parapets with a fire-resistance rating of 60/60/60 minutes that extend 0.6 m above the roofline; or
  - (ii) ceiling panels with a fire-resistance rating of -/60/60 minutes that extend back into the room by 2.4 m from the wall abutting the boundary of the protected place; or
- (c) the hazardous substance location is in a general purpose warehouse and the flammable aerosols are separated from the rest of the warehouse by walls and floor with a fire-resistance rating of 120/120/120 minutes, self-closing doors with a fire-resistance rating of -/120/120 minutes, and—
  - (i) parapets with a fire-resistance rating of 120/120/120 minutes that extend 0.6 m above the roofline; or
  - (ii) ceiling panels with a fire-resistance rating of -/120/120 minutes that extend back into the room by 2.4 m from the wall; or
- (d) the hazardous substance location is in a general purpose warehouse and the flammable aerosols are separated from the rest of the warehouse by—
  - (i) chain-link fencing from floor to roof of 2.9 mm or 9 gauge steel wire with a maximum 50 mm diamond mesh; and
  - (ii) self-closing gates or labyrinth openings of overlapping chain link fencing; and
  - (iii) fire protection in accordance with NZS 4541:2013.

**11.26 Hazardous substance location holding more than 100 000 L aggregate water capacity of flammable aerosols**

A separation distance of less than 3 m is permitted under regulation 11.23(2) if the hazardous substance location holds more than 100 000 L in aggregate water capacity of flammable aerosols and one of the following applies:

- (a) the building or the room that is a hazardous substance location has—
  - (i) the following items with a fire-resistance rating of 240/240/240 minutes:
    - (A) walls; and
    - (B) parapets that extend 0.6 m above the roofline; and

- (C) a floor; and
  - (ii) self-closing doors with a fire-resistance rating of -/240/60 minutes; or
- (b) the building or the room that is a hazardous substance location has—
  - (i) the following items with a fire-resistance rating of 120/120/120 minutes:
    - (A) walls; and
    - (B) parapets that extend 0.6 m above the roofline; and
    - (C) a floor; and
  - (ii) self-closing doors with a fire-resistance rating of -/120/60 minutes; and
  - (iii) fire protection in accordance with NZS 4541:2013; or
- (c) the hazardous substance location is in a general purpose warehouse and the flammable aerosols are separated from the rest of the warehouse by—
  - (i) the following items with a fire-resistance rating of 240/240/240 minutes:
    - (A) walls; and
    - (B) parapets that extend 0.6 m above the roofline; and
    - (C) a floor; and
  - (ii) self-closing doors with a fire-resistance rating of -/240/60 minutes; or
- (d) the hazardous substance location is in a general purpose warehouse and the flammable aerosols are separated from the rest of the warehouse by—
  - (i) chain-link fencing from floor to roof of 2.9 mm or 9 gauge steel wire with a maximum 50 mm diamond mesh; and
  - (ii) self-closing gates or labyrinth openings of overlapping chain link fencing; and
  - (iii) fire protection in accordance with NZS 4541:2013.

#### **11.27 Previous approval under Dangerous Goods (Class 2—Gases) Regulations 1980**

- (1) A separation distance of less than 3 m is permitted under regulation 11.23(2) if a compliance certificate is issued for a hazardous substance location holding not more than 10 000 L in aggregate water capacity of flammable aerosols.
- (2) A compliance certificate referred in subclause (1) may be issued only if the compliance certifier is satisfied that—

- (a) the hazardous substance location obtained an approval from an Inspector in accordance with regulation 116(2)(a) of the Dangerous Goods (Class 2—Gases) Regulations 1980 (before those regulations were revoked); and
- (b) the room or building that is the hazardous substance location has—
  - (i) floor, walls, and a roof substantially constructed of non-combustible materials; or
  - (ii) full fire protection from an automatic sprinkler system.

**11.28 Separation of above ground stationary tank, transportable container, or tank wagon containing class 3.1 substance from protected places and public places**

- (1) A PCBU with management or control of an above ground stationary tank, transportable container, or tank wagon that contains a class 3.1 substance to which this subpart applies must ensure that those things are separated from—
  - (a) a protected place by not less than the distance specified in whichever of column 2 or 3 of table 5 in Schedule 12 relates to the substance opposite the capacity of the above ground stationary tank, transportable container, or tank wagon in column 1 of that table;
  - (b) a public place by not less than the distance specified in column 4 of table 5 in Schedule 12 opposite the capacity of the above ground stationary tank, transportable container, or tank wagon in column 1 of that table.
- (2) A PCBU with management or control of an above ground stationary tank, transportable container, or tank wagon that has multiple compartments must ensure that the separation distance to a protected place or public place is based on the aggregate volume of the compartments and the lowest flash point substance stored in any of the compartments.
- (3) Despite subclause (1), a PCBU with management or control of an above ground stationary tank that is manufactured and design certified to the requirements of SwRI 93-01 may locate the tank at a distance of not less than 50% of the separation distances prescribed in subclause (1).
- (4) This regulation does not apply to a stationary tank that complies with regulation 17.63(3)(b), (c), or (d).
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.



**11.29 Duty to hold certain packages or transportable containers of class 3.1 substance in building or external storage area of certain type**

- (1) A PCBU with management or control of a class 3.1A, 3.1B, or 3.1C substance to which this subpart applies that is contained in 1 or more packages or transportable containers that comply with chapter 6.5 of the UN Model Regulations (other than a package or container to which regulation 11.36 applies) must ensure that the packages or containers are held in a building or an external storage area of a type specified in subclause (2).
- (2) The types of building or external storage area are—
  - (a) a type A storage; or
  - (b) a type B storage; or
  - (c) a type C storage; or
  - (d) a type D storage.
- (3) Despite subclause (1), a class 3.1A, 3.1B, or 3.1C substance that is contained in 1 or more packages may be held in a storage cabinet—
  - (a) if the following requirements are met:
    - (i) each package does not contain more than 20 L of the substance; and
    - (ii) the aggregate quantity of all packages of class 3.1A, 3.1B, or 3.1C substance does not exceed 250 L; and
    - (iii) the storage cabinet is—
      - (A) constructed and installed in accordance with sections 4.9.2, 4.9.5, and 4.9.7 of AS 1940—2004; or
      - (B) constructed, installed, independently tested, and certified in compliance with BS EN 14470-1:2004, for a storage cabinet that has a 60-minute or higher fire-resistance rating; or
  - (b) in accordance with a relevant safe work instrument.
- (4) If more than 1 cabinet is located within a building for the storage of a class 3.1A, 3.1B, or 3.1C substance,—
  - (a) the aggregate capacity of the cabinets must not be more than 750 L per 250 m<sup>2</sup> on a ground floor or 250 L per 250 m<sup>2</sup> on other floors; and
  - (b) each cabinet must be at least 3 m apart.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.30 Duty to separate building or external storage area holding packages up to 60 L of class 3.1A or 3.1B substances or packages of any amount of class 3.1C substance from protected places**

- (1) This regulation applies to a type A, type B, type C, or type D storage that holds 1 or more packages containing (as the case may be)—
  - (a) not more than 60 L of a class 3.1A or 3.1B substance to which this subpart applies; or
  - (b) a class 3.1C substance to which this subpart applies.
- (2) A PCBU with management or control of a building or an external storage area must ensure that it is separated from a protected place by not less than the distance specified in column 4 of table 6 in Schedule 12 opposite the aggregate quantity of all packages of class 3.1A, 3.1B, or 3.1C substances specified in whichever of columns 1, 2, and 3 of that table relates to the building or external storage area.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.31 Storage of packages holding class 3.1 substances in store inside building**

- (1) A PCBU with management or control of class 3.1 substances may place those substances in a store inside a building but only if they are stored—
  - (a) in a room with the walls and ceiling constructed with a fire-resistance rating of 60/60/60 minutes and a door with a fire-resistance rating of at least -/60/60 minutes and—
    - (i) not more than 450 L of those substances are held in the store; and
    - (ii) the substances are stored in containers, each not exceeding 20 L capacity; and
    - (iii) the requirements of subclause (2) (if applicable) are complied with; or
  - (b) in a room with the walls and ceiling constructed of reinforced concrete or an equivalent material with a fire-resistance rating of 120/120/120 minutes and a door with fire-resistance rating of at least -/120/60 minutes and—
    - (i) not more than 2 000 L of those substances are held in the store; and
    - (ii) the substances are stored in containers, each not exceeding 60 L capacity (except that 1 container of a maximum capacity of 250 L may be located in the store); and

- (iii) any vents are fitted with fire dampers with at least a -/90/- minutes fire-resistance rating; and
    - (iv) the requirements of subclause (2) (if applicable) are complied with; or
  - (c) in a type D storage that has no openings to the interior of the building except for—
    - (i) a door that is self-closing in the event of a fire and that opens into a type 1, type 2, or type 3 workroom and complies with the requirements of subclause (2) (if applicable); or
    - (ii) vents that are fitted with fire dampers with at least a -/180/- minutes fire-resistance rating.
- (2) For the purposes of subclause (1), if the quantity of class 3.1 substances in the store does not exceed 2 000 L, the door may open into a building if—
  - (a) the door of the room has a fire-resistance rating of -/60/60 minutes in the case of subclause (1)(a) and -/120/60 minutes in the case of subclause (1)(b) or (c); and
  - (b) the door is fitted to be self-closing in the event of a fire near the doorway; and
  - (c) there are no combustible materials within 3 m of the doorway; and
  - (d) no portion of the structure within 3 m of the doorway is constructed of combustible materials; and
  - (e) the door is kept closed except when goods are placed into or removed from the store.
- (3) A PCBU with management or control of a building constructed in accordance with subclause (1)(c) or a building that has more than 2 walls with a fire-resistance rating of 240/240/240 minutes in common with another building that is a protected place must ensure that the walls are constructed of reinforced concrete or an equivalent material and the building does not contain more than—
  - (a) 5 000 L of classes 3.1A and 3.1B substances in aggregate, if those substances are stored in containers exceeding 60 L capacity; or
  - (b) 10 000 L in aggregate in the case of all other storage of classes 3.1A and 3.1B or class 3.1 substances in aggregate, if,—
    - (i) for class 3.1A and 3.1B substances, those substances are stored in containers not exceeding 60 L;
    - (ii) for class 3.1C substances, those substances are stored in containers not exceeding 250 L.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;

- (b) for any other person, to a fine not exceeding \$50,000.

**11.32 Storage of class 3.1 substances in retail stores**

- (1) The separation distance from and within a building containing a retail store to which the public has access and at which a class 3.1 substance is held, may be zero if—
  - (a) the substance is—
    - (i) available for retail sale; and
    - (ii) contained in closed packages of a capacity of not more than 10 L; and
  - (b) the quantities of the substance are not more than the quantities specified in table 4 in Schedule 9.
- (2) This regulation does not apply to a class 3.1B or 3.1C flammable liquid.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.33 Storage of class 3.1B and 3.1C flammable liquids in retail shops**

- (1) This regulation applies to a building—
  - (a) that is a retail shop or is a retailer of agricultural chemicals (as defined in regulation 11.1); and
  - (b) to which the public has access; and
  - (c) in which flammable liquids of classes 3.1B and 3.1C that are available for retail sale are held; and
  - (d) that, if it is a standalone building, is separated from any protected place that is external to the building by—
    - (i) a minimum separation distance of 3 m; or
    - (ii) a wall that has a fire-resistance rating of at least 240/240/240 minutes and maintains a minimum separation distance of 3 m (this distance being measured around the wall); and
  - (e) that, if it has a wall in common with another building, the common wall has a fire-resistance rating of at least 240/240/240 minutes and maintains a minimum separation distance of 3 m (this distance being measured around the wall).
- (2) The separation distance from and within the building may be zero if—
  - (a) all containers of classes 3.1B and 3.1C flammable liquids are closed, except that paint may be opened briefly for tinting; and
  - (b) classes 3.1B and 3.1C products are separated from—

- (i) class 2 substances by 1.5 m;
    - (ii) an aggregate quantity of aerosols exceeding 200 L by 1.5 m;
    - (iii) class 5 substances by 3 m; and
  - (c) the retail shop or retailer of agricultural chemicals complies with section 3.4 (General Requirements for Retail Storage) of AS/NZS 3833:2007; and
  - (d) the quantities of classes 3.1B and 3.1C flammable liquids are not more than the quantities specified in table 9 in Schedule 12.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.34 Duty to separate building or external storage area holding transportable containers or packages of more than 60 L containing class 3.1A, 3.1B, or 3.1C substances from protected places**

- (1) This regulation applies to every type A, type B, type C, or type D storage that holds 1 or more packages or transportable containers that comply with chapter 6.5 of the UN Model Regulations that contains or each contain (as the case may be) more than 60 L of a class 3.1A, 3.1B, or 3.1C substance to which this subpart applies.
- (2) A PCBU with management or control of a building or external storage area must ensure that the building or an external storage area is separated from a protected place by not less than the distance specified in column 4 of table 7 in Schedule 12 opposite the aggregate quantity of all packages of classes 3.1A, 3.1B, and 3.1C substances specified in whichever of columns 1, 2, and 3 of that table relates to the building or external storage area.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.35 Duty to separate transfer point for class 3.1 substance from protected place**

- (1) A PCBU with management or control of a transfer point used to fill a tank wagon with a class 3.1 substance to which this subpart applies must ensure that the transfer point is separated from a protected place by not less than—
  - (a) 10 m in relation to a class 3.1A, 3.1B, or 3.1C substance; or
  - (b) 5 m in relation to a class 3.1D substance.

- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.36 Class 3.1 substance being used or in open package or container to be held in building of certain type**

- (1) This regulation applies to a class 3.1A, 3.1B, or 3.1C substance to which this subpart applies that is—
  - (a) being used; or
  - (b) contained in 1 or more packages or containers, 1 or more of which are open.
- (2) A PCBU with management or control of a substance that is to be used or held in a building, must ensure that the building is—
  - (a) a type 1 workroom; or
  - (b) a type 2 workroom; or
  - (c) a type 3 workroom; or
  - (d) a paint mixing room that complies with AS/NZS 4114.1:2003.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**11.37 Separation of building holding package containing class 3.1 substance from protected place**

- (1) This regulation applies to each type of building specified in regulation 11.36(2) in which a class 3.1A, 3.1B, or 3.1C substance to which this subpart applies is—
  - (a) being used; or
  - (b) contained in 1 or more packages or containers, 1 or more of which are open.
- (2) A PCBU with management or control of a building must ensure that,—
  - (a) if the building is a type 1 workroom or paint mixing room that complies with AS/NZS 4114.1:2003, the building does not hold—
    - (i) a class 3 substance in a container that is more than 20 L in capacity; and
    - (ii) an aggregate quantity of class 3 substances of more than 450 L; and

- (b) if the building is a type 2 or type 3 workroom, the building does not hold more than,—
    - (i) for class 3.1A and 3.1B substances, an aggregate quantity of 7 500 L; or
    - (ii) for a class 3.1C substance, an aggregate quantity of 10 000 L; and
  - (c) the building is constructed so as to hold any class 3.1A or 3.1B substance that exceeds 60 L in quantity, or a class 3.1C substance that exceeds 100 L in quantity, as close as practicable to ground level.
- (3) For the purposes of subclause (2)(b)(ii), if the building holds class 3.1A, 3.1B, and 3.1C substances, the aggregate quantity held in the building must not exceed 7 500 L at any one time.
- (4) The PCBU must ensure that the building is separated from a protected place by not less than,—
- (a) for a class 3.1A or 3.1B substance, the distance specified in whichever of columns 2, 3, and 4 of table 8 in Schedule 12 relates to that type of building opposite the aggregate in quantity of the hazardous substance specified in column 1 of that table; or
  - (b) for a class 3.1C substance, the distance specified in whichever of columns 2, 3, and 4 of table 8 in Schedule 12 relates to that type of building opposite the aggregate quantity of the hazardous substance specified in column 1 of that table.
- (5) Despite subclauses (1) to (4), if the maximum quantity of class 3.1 substances used in any building at any one time does not exceed 60 L of classes 3.1A and 3.1B substances in aggregate, or 250 L of class 3.1C substances, the use of those hazardous substances other than in a type 1, type 2, or type 3 workroom is permitted if the PCBU ensures that the following conditions are complied with:
- (a) the building must be occupied by the same organisation that is storing the hazardous substances; and
  - (b) that part of the building in which the activity involving exposure of the hazardous substances to the atmosphere is being carried out must be constructed of fire-resistant materials to at least 6 m in all directions from any container in which hazardous substances are used; and
  - (c) no source of ignition must be permitted within 15 m of the area where work involving the exposure to the atmosphere of classes 3.1A and 3.1B substances in excess of 30 L in total is being carried out unless the working area is protected by an intervening wall; and
  - (d) no source of ignition must be permitted within 6 m of the area where work involving the exposure to the atmosphere of class 3.1C substances in excess of 30 L in total is being carried out unless the working area is protected by an intervening wall.

- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

### Subpart 3—Calculation of separation distances

#### **11.38 Calculation of separation distances for intermediate capacities or intermediate quantities**

- (1) For the purpose of applying subparts 1 and 2, if—
  - (a) the capacity of an above ground stationary tank; or
  - (b) the aggregate quantity of a hazardous substance contained in—
    - (i) 1 or more cylinders; or
    - (ii) 1 or more packages; or
    - (iii) 1 or more packages or containers, 1 or more of which is open,—is between any 2 successive capacities or quantities (an **intermediate capacity** or **intermediate quantity**, as the case may be) specified in those subparts in relation to that capacity or quantity, the separation distance must be calculated in accordance with subclause (2).
- (2) The separation distance that applies to an intermediate capacity or an intermediate quantity is the distance that is proportional to the difference in capacity or quantity, as the case may be.

#### **11.39 Additional and modified separation distances or other matters in subparts 1 and 2**

- (1) This regulation applies to separation distances or other matters in subpart 1 or 2 if the Minister approves a safe work instrument in relation to those separation distances or other matters for the purposes of this regulation.
- (2) The Minister may approve a safe work instrument for the purposes of this regulation if satisfied that compliance with the provisions of these regulations that apply to separation distances or other matters in subpart 1 or 2 will not appropriately control risk associated with those separation distances or other matters.
- (3) In deciding whether to approve a safe work instrument for the purposes of this regulation, the Minister must have regard to the following matters:
  - (a) whether compliance with the provisions of these regulations being considered will eliminate or minimise relevant risk so far as is reasonably practicable;
  - (b) whether it is practicable for relevant duty holders to comply with those provisions;



- (c) whether compliance with a modified form of those provisions, or with additional or alternative requirements, would be more practicable and no less effective in eliminating or minimising risk;
  - (d) whether a modified form of those provisions, or additional or alternative requirements, would be more appropriate to the nature of the hazards and risk being considered.
- (4) A safe work instrument approved for the purposes of this regulation may—
  - (a) set out any additional requirements that apply to separation distances or other matters under subpart 1 or 2;
  - (b) state which PCBUs are required to comply with each additional requirement;
  - (c) state which provisions of these regulations are to apply to separation distances or other matters in a way that is modified by the instrument.
- (5) A PCBU identified under subclause (4)(b) must ensure that any additional requirement relating to a separation distance or other matter is complied with.
- (6) A provision of these regulations that is modified under subclause (4)(c) by a safe work instrument approved for the purposes of this regulation applies, and must be complied with, as modified.
- (7) A PCBU who contravenes subclause (5) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (8) In this regulation,—

**additional requirement** means a new requirement set out in the safe work instrument approved for the purposes of this regulation

**appropriately control**, in relation to risk, means the risk is eliminated or minimised so far as is reasonably practicable

**modified**, in relation to a provision of these regulations, means the safe work instrument has the effect of—

- (a) varying, replacing, or deleting a requirement in the provision; or
- (b) providing an alternative means of complying with a requirement in the provision.

#### **11.40 Prescribed requirements relating to exemption from required separation distances or other matters in subparts 1 and 2**

- (1) An application for an exemption under section 220 of the Act from the required separation distances or other matters of subparts 1 and 2 must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.

- (2) In considering whether to grant an exemption under section 220 of the Act, WorkSafe must have regard to—
- (a) the quantity and location of the relevant hazardous substance, and any other hazardous substance located at the place at a workplace; and
  - (b) the capacity of any fire-fighting facilities at that place; and
  - (c) the fire-resistance rating of any structure (for example, walls, floors, ceilings, and doors) that contains the hazardous substance; and
  - (d) for a hazardous substance in an above ground stationary tank, whether the design and construction of the tank will protect the tank from fire.

#### Subpart 4—Additional controls for LPG, propane, butane, and isobutane

##### **11.41 Restrictions on delivery of LPG, propane, butane, or isobutane**

- (1) A PCBU must not deliver LPG, propane, butane, or isobutane to a hazardous substance location if, after delivery of that substance or those substances, more than 100 kg of those substances will be present at that hazardous substance location unless the hazardous substance location—
- (a) has a current location compliance certificate; or
  - (b) has passed a compliance check in accordance with regulation 11.43; or
  - (c) complies with any applicable requirements under the HSNO Act.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

##### **11.42 Maximum quantities of LPG, propane, butane, or isobutane for indoor storage and use**

- (1) Despite regulations 11.6(1) and 11.20(1), a PCBU with management or control of a workplace where LPG, propane, butane, or isobutane is located must ensure that the amount stored or used indoors does not exceed the quantity specified in table 10 in Schedule 12.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

*Procedures for LPG delivery***11.43 Compliance checking and validation of controls required for LPG, propane, butane, or isobutane at hazardous substance location**

- (1) The purpose of this regulation is to provide an alternative mechanism, referred to in regulation 10.35, for ongoing compliance checking and validation of the controls by a PCBU or worker who delivers LPG, propane, butane, or isobutane at a hazardous substance location where—
  - (a) the LPG, propane, butane, or isobutane is stored in cylinders; and
  - (b) the cylinders are located outside; and
  - (c) the total quantity of LPG, propane, butane, or isobutane is more than 100 kg and less than 300 kg.
- (2) A PCBU who delivers LPG, propane, butane, or isobutane to a hazardous substance location must verify—
  - (a) before the first delivery of the substance to the location, that the hazardous substance location has a current compliance certificate issued in accordance with regulation 10.34; and
  - (b) before a subsequent delivery of the substance to the location, that the hazardous substance location has a current compliance certificate issued in accordance with regulation 10.34 or has a valid compliance plaque.
- (3) The PCBU must—
  - (a) establish that the hazardous substance location meets the minimum standards described in subclause (4); and
  - (b) within 60 days of the first delivery of the substance to the location, fix in a permanent and prominent location a unique numbered compliance plaque confirming compliance with this regulation and an expiry date.
- (4) The minimum standards are that—
  - (a) the total quantity of LPG, propane, butane, or isobutane in cylinders is more than 100 kg and less than 300 kg;
  - (b) the environment around the location of cylinders is unchanged;
  - (c) cylinders are installed on a stable, non-combustible base raised above the surrounding area and must shed water;
  - (d) cylinders are restrained (for example, chained) against earthquake movement;
  - (e) the fire-resistant material remains unchanged and undamaged if there is any wall within 2 m of the cylinders;
  - (f) in relation to exchange cylinders,—

- (i) no openings to buildings are located within 2 m measured horizontally from the cylinders or within 150 mm above the cylinders; and
    - (ii) no openings to drains are located within 1 m of the cylinders; and
    - (iii) no electrical equipment or ignition sources are located within the hazardous area for the cylinders:
  - (g) in relation to on-site fill cylinders,—
    - (i) no openings to buildings are located within 2 m measured horizontally from the cylinders or within 500 mm above the cylinders; and
    - (ii) no openings to drains are located within 1 m of the cylinders; and
    - (iii) no electrical equipment or ignition sources are located within the hazardous area for the cylinders:
  - (h) signage with emergency instructions and product identification is provided and legible on all sites with more than 250 kg storage:
  - (i) the cylinders at the location remain secured or have enhanced security (for example, the site has a fenced perimeter, the cylinders are located in a cage, or a tool is required to disconnect the cylinders, or an equivalent security arrangement is in place):
  - (j) no handling of LPG, propane, butane, or isobutane occurs on-site other than by the worker who delivers and connects exchange cylinders and on-site fill cylinders:
  - (k) if the location is a workplace, then at least one 2 kg dry chemical extinguisher is provided and is located within 30 m of the cylinders.
- (5) For each subsequent delivery of LPG, propane, butane, or isobutane to the hazardous substance location, a worker who delivers and connects exchange cylinders and on-site fill cylinders must—
- (a) be satisfied that the hazardous substance location continues to meet the minimum standards described in subclause (4); and
  - (b) check that—
    - (i) the compliance plaque is within its expiry date; or
    - (ii) a current compliance certificate issued in accordance with regulation 10.34 is available for the hazardous substance location.
- (6) The PCBU must, on or before the expiry date of each compliance plaque, complete and sign a record confirming that the location continues to meet the minimum standards described in subclause (4) to enable deliveries of the substance to continue.
- (7) The PCBU must retain a copy of the record and ensure that it is available for inspection.

- (8) The PCBU must ensure that the requirements of subclause (6) are satisfied before the PCBU fits a new compliance plaque with an extended expiry date to a hazardous substance location.
- (9) The PCBU must ensure that compliance plaques have an expiry date no longer than 36 months from the date of issue.
- (10) A PCBU who contravenes subclause (2), (3), (8), or (9) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (11) A PCBU who contravenes subclause (6) or (7) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.
- (12) A worker who contravenes subclause (5) commits an offence and is liable on conviction to a fine not exceeding \$2,000.

## Part 12

### Class 5 substances

#### 12.1 Interpretation

In this Part, unless the context otherwise requires,—

**compatible**, in relation to a class 5.1.1 or 5.1.2 substance and its relationship with any other substance or material, means that—

- (a) the other substance or material is chemically inert in relation to the class 5.1.1 or 5.1.2 substance for the range of temperatures and pressures at which it is brought into contact with the class 5.1.1 or 5.1.2 substance; or
- (b) if the other substance or material does react chemically with the class 5.1.1 or 5.1.2 substance, it does so in a way that does not cause or contribute to combustion or the expulsion of steam and hot vapours or generate an explosion or generate a class 6, 8, or 9 substance

**decomposition temperature** means the temperature at which a class 5.1.1 or 5.1.2 substance will spontaneously decompose, possibly with explosive force, releasing heat and, usually, combustible by-products

**incompatible**, in relation to a class 5.1.1 or 5.1.2 substance,—

- (a) means a substance or material that is not compatible with the class 5.1.1 or 5.1.2 substance; and
- (b) includes—

- (i) a substance that is not a class 5.1.1 or 5.1.2 substance but that is classified in class 5.2, or in any of classes 1, 2, 3, 4, 6.1A, 6.1B, 6.1C, or 8:
- (ii) any organic matter, or substance that contains carbon, in a form that will combust with the class 5.1.1 or 5.1.2 substance:
- (iii) zinc or magnesium in any form, and any other metal in powdered form:
- (iv) any substance or material that will combust with air, or will combust with or catalyse the decomposition of a class 5.1.1 or 5.1.2 substance

**use** includes removing a hazardous substance from, or putting it into, a package or container.

Compare: SR 2001/116 r 87

### Subpart 1—Controls on class 5.1.1 and 5.1.2 substances

#### **12.2 General limits on class 5.1.1 and 5.1.2 substances**

- (1) A PCBU with management or control of a class 5.1.1 or 5.1.2 substance must ensure that it is held at a hazardous substance location or at a transit depot, if the class 5.1.1 or 5.1.2 substance is present at a place within a workplace in an amount that exceeds the quantity specified for that substance in table 1 or 2 in Schedule 10 for more than—
  - (a) 24 hours, in the case of a substance that is not subject to the tracking provisions of Part 19:
  - (b) 24 hours, for oxygen in a discrete cylinder or tank:
  - (c) 2 hours, in the case of a substance that is subject to the tracking provisions of Part 19.
- (2) A PCBU with management or control of work using a class 5.1.1 or 5.1.2 substance must ensure that at all times the substance remains in a package or container of a type that—
  - (a) prevents the substance or any gas, vapour, or particulate matter emitted from the substance from coming into contact with any incompatible substance or ignition source; and
  - (b) enables the requirements of regulation 12.5 to be met.
- (3) For the purposes of subclause (2)(a), nitric acid with a 65–70% aqueous solution, HSNO approval number HSR100763, is compatible with class 8 substances.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 88

### **12.3 Substances that must be secured**

- (1) A PCBU with management or control of a class 5.1.1 or 5.1.2 substance in a quantity specified in table 6 in Schedule 10 must ensure that that substance, if left unattended, is secured from access by persons who are not permitted by the PCBU to access the substance.
- (2) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

### **12.4 Methods by which certain requirements may be met**

If a class 5.1.1 or 5.1.2 substance is present at a hazardous substance location or transit depot in circumstances where these regulations require a wall with a fire-resistance rating of 120/120/120 minutes, a reinforced concrete wall 100 mm thick is a means of meeting that requirement.

Compare: SR 2001/116 r 90

### **12.5 Requirements to reduce likelihood of unintended combustion or explosion of class 5.1.1 or 5.1.2 substance**

- (1) A PCBU with management or control of a class 5.1.1 or 5.1.2 substance, including any class 5.1.1 or 5.1.2 substance in the form of a gas, vapour, or particulate matter, must ensure that the substance—
  - (a) is kept separate from any other substance or material with which it is incompatible; and
  - (b) does not come into contact with any ignition source; and
  - (c) is stored in a sealed package or container; and
  - (d) can be secured from access by persons who are not permitted by the PCBU to access the substance.
- (2) For the purposes of subclause (1)(a), nitric acid with a 65–70% aqueous solution, HSNO approval number 100763, is compatible with class 8 substances.
- (3) Subclause (1)(b) does not apply to nitric acid with a 65–70% aqueous solution, HSNO approval number 100763.
- (4) Subclause (1) does not apply if contact with the incompatible substance, material, or ignition source is intended, in which case the PCBU must manage the effects of that contact to minimise risks to health and safety.
- (5) The PCBU must ensure that the temperature of a class 5.1.1 or 5.1.2 substance does not exceed the lesser of—
  - (a) 15°C less than the substance’s decomposition temperature; and

(b) 50°C,—

unless a higher temperature is intended, in which case the effects of this higher temperature must be managed by the PCBU with management or control of the substance to prevent combustion or explosion.

(6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—

(a) for an individual, to a fine not exceeding \$10,000:

(b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 91

## **12.6 Duty of PCBU to ensure personal protective equipment used**

(1) A PCBU with management or control of work using a class 5.1.1 or 5.1.2 substance must ensure that any personal protective equipment that is directly used to handle the substance is designed, constructed, and operated in such a way that the substance—

(a) does not make direct contact with any incompatible substance or material; and

(b) does not accumulate in, or on, the personal protective equipment beyond any accumulation that is directly associated with its intended design and use, as indicated in the documentation provided under subclause (4)(b); and

(c) is not exposed to sufficient energy to cause combustion.

(2) For the purposes of subclause (1)(a), nitric acid with a 65–70% aqueous solution, HSNO approval number 100763, is compatible with class 8 substances.

(3) Subclause (1) does not apply if contact or exposure is intended or anticipated, in which case the PCBU must comply with the requirements of regulation 12.11.

(4) The personal protective equipment must—

(a) be designed and constructed of materials that, in the circumstances in which the substance is being used or handled,—

(i) cannot be degraded, attacked, or combusted by the class 5.1.1 or 5.1.2 substance; or

(ii) are resistant to such degradation, attack, or combustion for the time specified by the supplier of the equipment; and

(b) be accompanied by documentation that gives sufficient instruction on the use and maintenance of the equipment to enable it to be maintained and used in a manner that meets the requirements of this regulation.

(5) The circumstances described in subclause (4)(a) include the range of temperatures and pressures and the presence of other substances likely to be encoun-



tered when used as described in the documentation provided under subclause (4)(b).

- (6) The documentation referred to in subclause (4)(b) must be—
  - (a) readily accessible to a worker handling a class 5.1.1 or 5.1.2 substance; and
  - (b) readily understandable by a fully trained worker required to be given access to it.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 92

#### **12.7 Requirements to control adverse effects of spills or failure of containers**

- (1) A PCBU with management or control of a class 5.1.1 substance must ensure that any spill or leak of the substance when in a solid or liquid form is immediately—
  - (a) absorbed or diluted using compatible absorbents or diluents; or
  - (b) otherwise recovered.
- (2) The PCBU must ensure that any absorbed, diluted, or otherwise recovered substance is—
  - (a) disposed of according to the requirements for the disposal of class 5.1.1 substances specified in the Hazardous Substances (Disposal) Notice 2017; or
  - (b) analytically tested and recorded as being free of any incompatible substance.
- (3) For the purposes of subclause (2)(b), nitric acid with a 65–70% aqueous solution, HSNO approval number HSR100763, is compatible with class 8 substances.
- (4) The PCBU must ensure that any absorbents or personal protective equipment used to recover the class 5.1.1 substance are also disposed of according to the requirements for their disposal specified in the Hazardous Substances (Disposal) Notice 2017, if the class 5.1.1 substance has not been removed from the absorbents or the equipment.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 93

Subpart 2—Controls on workplace where class 5.1.1 and 5.1.2  
substances present

**12.8 Duty of PCBU to establish hazardous substance location where class 5.1.1 and 5.1.2 substances present**

- (1) A PCBU with management or control of a place within in a workplace where any class 5.1.1 or 5.1.2 substances are present must establish in that place 1 or more hazardous substance locations where such substances are to be situated, or to be manufactured or used, if—
  - (a) the substances are to be present for a period exceeding—
    - (i) 24 hours, in the case of a substance that is not subject to the tracking provisions of Part 19;
    - (ii) 24 hours, for oxygen in a discrete cylinder or tank;
    - (iii) 2 hours, in the case of a substance that is subject to the tracking provisions of Part 19; and
  - (b) the substances are to be present in amounts exceeding the quantities specified for the relevant classifications in—
    - (i) table 1 in Schedule 10, in cases where the packages containing the substances are kept closed at all times; or
    - (ii) table 2 in Schedule 10, in cases where the substances are being manufactured or used.
- (2) The PCBU must ensure that separate hazardous substance locations are established for—
  - (a) places where class 5.1.1 or 5.1.2 substances are to be kept in packages that are closed at all times; and
  - (b) places where class 5.1.1 or 5.1.2 substances are to be manufactured or used.
- (3) The PCBU with management or control of a hazardous substance location must ensure that the requirements of regulation 12.3 are met.
- (4) The PCBU with management or control of a hazardous substance location must notify WorkSafe of the following information at least 30 working days before the commissioning of the location as an area for accommodating class 5.1.1 or 5.1.2 substances:
  - (a) the street address of the workplace where the hazardous substance location is situated; and
  - (b) the maximum quantity and hazard classification of class 5.1.1 or 5.1.2 substance that the hazardous substance location is designed or constructed to accommodate; and
  - (c) any manufacturing or use involving class 5.1.1 or 5.1.2 substances that may occur at the location.

- (5) The PCBU with management or control of a hazardous substance location must also ensure that,—
- (a) if a compliance certificate is required under regulation 12.17, a certificate is obtained that certifies that the requirements of that regulation are met; and
  - (b) a site plan is available for inspection showing, in relation to the legal boundary of the site where the hazardous substance location is situated, the physical location of—
    - (i) all hazardous substance locations within the workplace that contain class 5.1.1 or 5.1.2 substances; and
    - (ii) all controlled zones within the workplace; and
  - (c) all persons handling a class 5.1.1 or 5.1.2 substance are provided with the information, instruction, and training required by regulation 4.5.
- (6) This regulation does not apply to nitric acid with a 65–70% aqueous solution, HSNO approval number HSR100763.
- (7) A PCBU who contravenes subclause (1), (2), (3), or (5) commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (8) A PCBU who contravenes subclause (4) commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/116 r 94

### **12.9 Duty of PCBU to reduce likelihood of unintended ignition where class 5.1.1 and 5.1.2 substances present at hazardous substance location**

- (1) A PCBU with management or control of a hazardous substance location required to be established under regulation 12.8 must ensure that—
- (a) the temperature of the immediate area around the class 5.1.1 and 5.1.2 substances complies with the relevant requirements of regulation 12.5(5); and
  - (b) the area around the class 5.1.1 and 5.1.2 substances is free of incompatible substances and—
    - (i) is separated from them by a wall—
      - (A) that has a fire-resistance rating of 120/120/120 minutes; and
      - (B) that is constructed to prevent a fire on one side of the wall from coming into contact with any such substances on the other side of the wall; or

- (ii) is separated from them by the applicable distance specified in table 3 in Schedule 10, or, where the amount of the substance is less than the amount specified in the relevant table, not less than 3 m; or
    - (iii) complies with arrangements set out in a relevant safe work instrument that are equivalent to the requirements of subclause (b)(i) or (ii) and regulation 12.12; and
  - (c) the class 5.1.1 or 5.1.2 substance is separated from ignition sources (other than electrical equipment) by the appropriate distance specified in table 4 in Schedule 10 or by a wall as described in paragraph (b)(i); and
  - (d) any area where particulate matter or vapour from a substance in class 5.1.1 or a gas in class 5.1.2A is likely to form (including any ventilation outlet or aperture) is separated from any ignition source to the degree provided in paragraph (c); and
  - (e) arrangements are in place so that—
    - (i) every person entering the location is free of any incompatible material; and
    - (ii) direct contact by any person at the location with a class 5.1.1 or 5.1.2 substance is prevented; and
    - (iii) accumulation of a class 5.1.1 or 5.1.2 substance on personal protective equipment inside the location is prevented, unless—
      - (A) the personal protective equipment complies with regulation 12.6 or 12.11; and
      - (B) any material that has accumulated is collected and removed from the location immediately; and
      - (C) the requirements of regulation 12.7(2) and (4) are met; and
    - (iv) the accumulation of incompatible substances at the location is prevented; and
  - (f) the location is designed and managed so that any moisture, gas, particulate matter, or vapour of class 5.1.1 or 5.1.2 substances does not present a hazard in respect of electrical equipment that may be present.
- (2) Except as regulation 12.10(1)(a) otherwise allows, every package or container containing a class 5.1.1 or 5.1.2 substance within a hazardous substance location must be kept closed at all times (except for any permanently open vent in the package or container).
  - (3) This regulation does not apply to nitric acid with a 65–70% aqueous solution, HSNO approval number HSR100763.
  - (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
    - (a) for an individual, to a fine not exceeding \$10,000:

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 95

**12.10 Additional duties of PCBU relating to hazardous substance location where class 5.1.1 or 5.1.2 substance are manufactured or used**

- (1) A PCBU with management or control of a hazardous substance location where class 5.1.1 or 5.1.2 substances are manufactured or used must ensure that, in addition to the requirements of regulation 12.9, the following requirements are met in relation to the location:
  - (a) at the location, every package or container that contains a class 5.1.1 or 5.1.2 substance must be kept closed except when—
    - (i) the substance is being taken from or put into its package or container;
    - (ii) the package or container is being connected to a system designed specifically for the use of the substance contained in the package or container, where the system has control over the release of the contents;
  - (b) no person is exposed to a class 5.1.1 or 5.1.2 substance unless protected by personal protective equipment that meets the requirements of regulation 12.11;
  - (c) arrangements are in place that will ensure that every person leaving the hazardous substance location is free of such substances.
- (2) The PCBU with management or control of a hazardous substance location where class 5.1.1 or 5.1.2 substances are manufactured or used must ensure that it is separated from any other such hazardous substance location by—
  - (a) a distance of not less than that specified in table 4 in Schedule 10; or
  - (b) a wall—
    - (i) that has a fire-resistance rating of 120/120/120 minutes; and
    - (ii) that is constructed to prevent a fire on one side of the wall from coming into contact with any such substances on the other side of the wall.
- (3) This regulation does not apply to nitric acid with a 65–70% aqueous solution, HSNO approval number HSR100763.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 96

**12.11 Requirements where combustion intended or contact with incompatible substances, ignition sources, or exposure to temperature anticipated**

- (1) A PCBU with management or control of work using a class 5.1.1 or 5.1.2 substance, where contact or exposure is intended or anticipated, must ensure that a worker uses personal protective equipment at any time when—
  - (a) a class 5.1.1 or 5.1.2 substance comes into contact with an ignition source or an incompatible substance or material or may be exposed to a greater temperature than the limit set in regulation 12.5(5); or
  - (b) it is reasonable to expect that such contact or exposure might accidentally occur.
- (2) The PCBU must ensure that the personal protective equipment—
  - (a) is designed, constructed, and operated so as to prevent the substance making direct contact with the wearer or user; and
  - (b) meets the requirements of regulation 12.6(4), (5), and (6).
- (3) This regulation does not apply to nitric acid with a 65–70% aqueous solution, HSNO approval number HSR100763.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**12.12 Duty of PCBU to control adverse effects of unintended combustion or explosion**

- (1) A PCBU with management or control of a hazardous substance location where class 5.1.1 or 5.1.2 substances are present must establish a controlled zone around the location such that—
  - (a) any person not personally permitted to be at the location by the PCBU is excluded from the zone; and
  - (b) one of the following requirements or sets of requirements is met:
    - (i) the requirements of regulation 12.9(1)(b)(i) and (c); or
    - (ii) the requirements of regulation 12.9(1)(b)(ii) and (c).
- (2) The PCBU with management or control of the hazardous substance location must also ensure that, within the controlled zone, the requirements of regulation 12.9(1)(d), (e), and (f), and (if applicable) regulation 12.10, are met.
- (3) The PCBU with management or control of the hazardous substance location must ensure that the interior of any proximate building that is a place of regular habitation and not dedicated to the use or manufacture of the hazardous substance, or any place where a person may legally be that would otherwise be within the controlled zone, must be separated from the hazardous substance location by—

- (a) a wall that offers the same protection as that required by regulation 12.9(1)(b)(i); or
  - (b) a distance that corresponds to the distance from incompatible substances described in regulation 12.9(1)(b)(ii).
- (4) This regulation does not apply to nitric acid with a 65–70% aqueous solution, HSNO approval number HSR100763.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 97

*Secondary containment for class 5.1.1 pooling substances*

**12.13 Requirement to have secondary containment system for pooling substances**

- (1) This regulation applies to a place within a workplace if—
  - (a) an aggregate quantity of class 5.1.1 hazardous substances more than the quantity specified in table 5 in Schedule 10 is held, or is reasonably likely to be held, at the place at any time; and
  - (b) the place is not a port, or part of a port facility, that is used to store hazardous substances for 72 hours or less.
- (2) The PCBU with management or control of the place must ensure that a secondary containment system is in place that complies with regulation 12.14, 12.15, 12.16, 17.100, or 17.101, depending on the capacities of the container or containers in which the substances are held.
- (3) If 2 or more containers of different capacities (as described in regulations 12.14, 12.15, and 12.16) are held at 1 place, the PCBU with management or control of the place must ensure that the secondary containment system has a capacity of at least the sum of each container category.
- (4) The PCBU with management or control of the place must ensure, in relation to a secondary containment system, that there are controls or controls are capable of being instituted that,—
  - (a) if oxidising substances must be contained, exclude any energy source capable of igniting them or causing them to decompose thermally;
  - (b) prevent the substances retained from being contaminated by incompatible substances and materials.
- (5) For the purposes of this regulation and regulations 12.14, 12.15, 12.16, 17.100, and 17.101, where a class 5.1.1 substance is contained in pipework that is installed and operated so as to manage any loss of containment in the pipework, the substance—

- (a) must not be taken into account in determining whether a place is required to have a secondary containment system; and
  - (b) is not required to be located in a secondary containment system.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **12.14 Requirements for surface containers of up to 60 L**

If pooling substances are held in a place above ground within a workplace in containers each of which has a capacity of 60 L or less,—

- (a) if the place's total pooling potential is less than 5 000 L, the secondary containment system has a capacity of at least 50% of that total pooling potential:
- (b) if the place's total pooling potential is 5 000 L or more, the secondary containment system has a capacity that is the greater of—
  - (i) 2 500 L; and
  - (ii) 25% of that total pooling potential.

#### **12.15 Requirements for surface containers of more than 60 L and up to 450 L**

- (1) If pooling substances are held in a place above ground within a workplace in containers 1 or more of which have a capacity of more than 60 L but none of which has a capacity of more than 450 L,—
  - (a) if the place's total pooling potential is less than 5 000 L, the secondary containment system has a capacity of at least that total pooling potential:
  - (b) if the place's total pooling potential is 5 000 L or more, the secondary containment system has a capacity that is the greater of—
    - (i) 5 000 L; and
    - (ii) 50% of that total pooling potential.
- (2) This regulation does not apply to a stationary container to which regulation 17.100 applies.

#### **12.16 Requirements for surface containers of more than 450 L**

- (1) If the pooling substances held in a place above ground within a workplace are in containers 1 or more of which have a capacity of more than 450 L,—
  - (a) if the place's total pooling potential is less than 5 000 L, the secondary containment system must have a capacity of at least that total pooling potential:
  - (b) if the place's total pooling potential is 5 000 L or more, the secondary containment system must have a capacity of the greater of—



- (i) 5 000 L; and
  - (ii) 50% of that total pooling potential.
- (2) This regulation does not apply to a stationary container to which regulation 17.100 applies.

*Compliance certificate requirements*

**12.17 Requirement to have compliance certificate for hazardous substance location**

- (1) A PCBU with management or control of a hazardous substance location where more than the following quantities of a substance in the following hazard classifications are present must ensure that the location has a current compliance certificate that certifies compliance with the requirements specified in regulation 12.18 and, where applicable, regulation 12.19:
  - (a) 50 kg or 50 L of a class 5.1.1A substance; or
  - (b) 500 kg or 500 L of a class 5.1.1B substance; or
  - (c) 1 000 kg or 1 000 L of a class 5.1.1C substance; or
  - (d) 3 000 kg or 3 000 L of a class 5.1.1C substance, if stored at a farm of not less than 4 ha; or
  - (e) 100 kg (if a non-permanent gas), 150 kg (if chlorine), or 200 m<sup>3</sup> (if a permanent gas) of a class 5.1.2A substance.
- (2) This regulation does not apply to nitric acid with a 65–70% aqueous solution, HSNO approval number HSR100763.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 98

**12.18 Matters to be certified for hazardous substance location where containers kept closed at all times or containers designed to be vented**

If a compliance certificate is required for a hazardous substance location under regulation 12.17, the certificate must certify that, for the hazardous substance location,—

- (a) the notification requirements of regulation 12.8(4) are complied with, and the maximum quantities as notified are not exceeded; and
- (b) the substances can be secured from access by persons who are not permitted by the PCBU to access the substances; and
- (c) all workers handling a class 5.1.1 or 5.1.2 substance have received information, instruction, and training in accordance with regulation 4.5; and

- (d) the requirements of regulation 12.8(5) are complied with; and
- (e) the requirements of regulation 12.9(1)(a) to (d) and (f) and (2) are complied with; and
- (f) the requirements of regulation 12.12 are complied with; and
- (g) any fixed structure or installed equipment within the location is constructed from compatible material and is not an ignition source; and
- (h) any personal protective equipment complies with the requirements of regulation 12.6 or 12.11; and
- (i) there are documented procedures to ensure that the requirements of regulation 12.9(1)(e) are complied with; and
- (j) the location has signage in place as required by regulations 2.5 and 2.6; and
- (k) if the quantity of hazardous substance requires it, the requirements for secondary containment specified in regulation 12.13 are met; and
- (l) if the quantity of hazardous substances requires it, the requirements for emergency management specified in Part 5 are met.

Compare: SR 2001/116 r 99

#### **12.19 Matters to be certified for hazardous substance location where class 5.1.1 or 5.1.2 substances manufactured or used**

If a compliance certificate is required for a hazardous substance location under regulation 12.17 and that hazardous substance location or any part of that location is one where class 5.1.1 or 5.1.2 substances are manufactured or used, the compliance certificate must, in addition to certifying the matters specified in regulation 12.18, also certify that there are documented procedures to ensure that every person leaving the location is free of any class 5.1.1 or 5.1.2 substance.

Compare: SR 2001/116 r 100

#### *Controls on transit depots where class 5.1.1 or 5.1.2 substances present*

#### **12.20 Duty of PCBU relating to transit depot where class 5.1.1 or 5.1.2 substances present**

- (1) At any transit depot where the quantity of a class 5.1.1 or 5.1.2 substance exceeds that specified for the relevant substance in table 1 in Schedule 10, a PCBU with management or control of the transit depot must—
  - (a) notify WorkSafe of the following information at least 30 working days before the commissioning of the depot as a place for accommodating class 5.1.1 or 5.1.2 substances:
    - (i) the street address of the transit depot; and

- (ii) the maximum quantity and the hazard classification of each class 5.1.1 and 5.1.2 substance that the depot is designed or constructed to accommodate; and
  - (b) ensure that all class 5.1.1 and 5.1.2 substances remain within their closed containers; and
  - (c) ensure that any worker at the transit depot who handles a class 5.1.1 or 5.1.2 substance has received information, instruction, and training in accordance with regulation 4.5; and
  - (d) ensure that the requirements of regulation 12.3 are met; and
  - (e) ensure that any road vehicle loaded with containers of class 5.1.1 or 5.1.2 substances is—
    - (i) not less than 3 m from any other vehicle that is loaded with compatible substances; and
    - (ii) not less than 5 m from any other vehicle that is loaded with incompatible substances; and
    - (iii) not less than 3 m from any place where containers of compatible substances that are not on a vehicle are located; and
    - (iv) not less than 5 m from any place where containers of incompatible substances that are not on a vehicle are located; and
  - (f) ensure that packages and intermediate bulk containers containing class 5.1.1 or 5.1.2 substances held in the transit depot but not loaded onto a vehicle are—
    - (i) not less than 3 m from containers of incompatible substances, if the substances are being consolidated at a loading dock in readiness to be transported;
    - (ii) not less than 5 m from containers of incompatible substances, in all other circumstances; and
  - (g) ensure that any electrical wiring or equipment within the depot is designed and installed—
    - (i) so as to prevent moisture or combustible gas, particulate matter, or vapour from getting into any such wiring or equipment; and
    - (ii) so that, in the event of failure of the electrical equipment, no resulting ignition source will contact either the substance or its container or packaging; and
  - (h) designate and clearly identify, with signs, areas for containment, pending disposal, of any leaked or spilled material or damaged packages.
- (2) Subclause (1)(f) does not apply to a PCBU with management or control of a port if the PCBU complies with the requirements for shipboard separation prescribed in the International Maritime Dangerous Goods Code.

- (3) This regulation does not apply to nitric acid with a 65–70% aqueous solution, HSNO approval number HSR100763.
- (4) A PCBU who contravenes subclause (1)(a) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other PCBU, to a fine not exceeding \$30,000.
- (5) A PCBU who contravenes subclause (1)(b) to (h) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other PCBU, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 101

### Subpart 3—Controls on class 5.2 substances

#### 12.21 Overview of subpart 3

The controls on class 5.2 substances comprise—

- (a) the general controls on class 5.2 substances, as set out in regulations 12.23 to 12.33; and
- (b) the controls on places within workplaces where class 5.2 substances may be present, as set out in regulations 12.34 to 12.46.

Compare: SR 2001/116 r 104

#### 12.22 Interpretation

In this subpart, unless the context otherwise requires,—

**compatible**, in relation to any class 5.2 substance and its relationship with any other substance or material, means that the other substance or material—

- (a) is chemically inert in relation to the class 5.2 substance for the range of temperatures and pressures at which it is brought into contact with the class 5.2 substance; or
- (b) if it does react chemically with a class 5.2 substance, it does so in a way that does not cause or contribute to combustion or the expulsion of steam and hot vapours, or generate an explosion or a class 6, 8, or 9 substance

**decomposition temperature** means the temperature at which a class 5.2 substance will spontaneously decompose, possibly with explosive force, releasing heat and, usually, combustible by-products

**incompatible**, in relation to a class 5.2 substance,—

- (a) means another substance or material that is not compatible with the class 5.2 substance; and
- (b) includes—

- (i) a substance that is not a class 5.2 substance but that is classified in any of classes 1, 2, 3, 4, 5.1.1, 5.1.2, 6.1A, 6.1B, 6.1C, and 8:
- (ii) zinc or magnesium in any form, and any other metal in powdered form:
- (iii) any substance or material that will combust with air or will combust with, or catalyse, the decomposition of the class 5.2 substance.

Compare: SR 2001/116 r 105

### 12.23 General limits on class 5.2 substances

- (1) A PCBU with management or control of a class 5.2 substance must ensure that it is held at a hazardous substance location or at a transit depot if the substance is present at a place in an amount that exceeds the quantity specified for the substance in table 1 in Schedule 11 for more than—
  - (a) 24 hours, in the case of a substance that is not subject to the tracking provisions of Part 19; and
  - (b) 2 hours, in the case of a substance that is subject to the tracking provisions of Part 19.
- (2) Unless the circumstances of regulation 12.36 apply, a PCBU with management or control of work using a class 5.2 substance must ensure that at all times the substance remains in a package or container of a type that—
  - (a) prevents the substance or any gas, vapour, or particulate matter emitted from the substance from coming into contact with any incompatible substance or ignition source; and
  - (b) enables the requirements of regulations 12.26, 12.27, and 12.28 and, (if applicable) regulation 12.32 or 12.33, to be met.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 106

### 12.24 Substances that must be secured

- (1) A PCBU with management or control of a class 5.2 substance in a quantity specified in table 8 in Schedule 11 must ensure that the substance, if left unattended, is secured in accordance with the requirements at regulation 12.45.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

## **12.25 Methods by which certain requirements may be met**

If a class 5.2 substance is at a hazardous substance location or transit depot—

- (a) in circumstances where these regulations require a wall with a fire-resistance rating of 120/120/120 minutes, a reinforced concrete wall 100 mm thick is a means of meeting this requirement; and
- (b) in circumstances where these regulations require a wall with a fire-resistance rating of 240/240/240 minutes, a reinforced concrete wall 150 mm thick is a means of meeting this requirement.

Compare: SR 2001/116 r 108

### *General controls on class 5.2 substances*

## **12.26 Requirements to reduce likelihood of unintended combustion or explosion of class 5.2 substances**

- (1) A PCBU with management or control of a class 5.2 substance, including any class 5.2 substance in the form of a gas, particulate matter, or vapour, must ensure that it—
  - (a) is kept separate from any other substance or material with which it is incompatible; and
  - (b) does not come into contact with any ignition source; and
  - (c) is not subject to an impact or pressure shock that exceeds the limits prescribed in regulation 12.28; and
  - (d) is kept secured as required in regulation 12.45.
- (2) Subclause (1) does not apply if the contact or subjection to impact or pressure shock is intended.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 109

## **12.27 Limits on temperature**

- (1) A PCBU with management or control of a class 5.2 substance must ensure that its temperature does not exceed the lesser of 50°C and the control temperature prescribed according to the criteria in subclause (2) unless a higher temperature is intended or anticipated, in which case the requirements of subclause (3) apply.
- (2) The PCBU must ensure that the following substances have a control temperature calculated as specified in table 2 in Schedule 11:
  - (a) substances in class 5.2A, 5.2B, or 5.2C that have an SADT of 50°C or less:

- (b) substances in class 5.2D that have—
  - (i) an SADT of 50°C or less and that show a medium effect when heated under confinement as specified in Test Series E of the UN Manual of Tests and Criteria; or
  - (ii) an SADT of 45°C or less and that show a low or no effect when heated under confinement as specified in Test Series E of the UN Manual of Tests and Criteria:
- (c) substances in class 5.2E or 5.2F that have an SADT of 45°C or less.
- (3) If a class 5.2 substance is subject to the requirements of subclause (2), the PCBU must ensure that there is a temperature control plan and system in place that—
  - (a) monitors and controls the temperature of the space in which the substance is located; and
  - (b) for the case where the control temperature is exceeded, describes the steps, and provides the equipment necessary, to restore the ambient temperature of the air surrounding the package or container that contains the substance to below the control temperature in less than the time it would take for the substance to reach the emergency temperature determined as specified in table 2 in Schedule 11.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 110

#### **12.28 Limits on impact or pressure shock**

- (1) A PCBU with management or control of a class 5.2 substance must ensure that it is not subject to any impact or pressure shock that could result in an explosion or a fire.
- (2) Subclause (1) does not apply if the ignition of the substance is intended.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 111

#### **12.29 Duty of PCBU to ensure personal protective equipment used**

- (1) A PCBU with management or control of work using a class 5.2 substance must ensure that any personal protective equipment that is directly used to handle the substance is designed, constructed, and operated in such a way that the substance—

- (a) does not make direct contact with any incompatible substance or material; and
  - (b) does not accumulate in or on the personal protective equipment beyond any accumulation that is directly associated with its intended design and use, as indicated in the documentation provided under subclause (3)(b); and
  - (c) is not exposed to sufficient energy to cause it to combust or chemically decompose.
- (2) Subclause (1) does not apply if contact with, or exposure to, the class 5.2 substance is intended or anticipated, in which case the PCBU must comply with regulation 12.30.
- (3) The PCBU must ensure that the personal protective equipment is—
  - (a) designed and constructed of materials that, in the circumstances in which the substance is being used or handled,—
    - (i) cannot be degraded, attacked, or combusted by the class 5.2 substance; or
    - (ii) are resistant to such degradation, attack, or combustion for the time specified by the supplier of the equipment; and
  - (b) accompanied by documentation that gives sufficient instruction on the use and maintenance of the personal protective equipment to enable the equipment to be maintained and operated in a manner that meets the requirements of this regulation.
- (4) The circumstances described in subclause (3)(a) include the range of temperatures and pressures and the presence of other substances that are likely to be encountered when the personal protective equipment is used as described in the documentation provided under subclause (3)(b).
- (5) The PCBU must ensure that the documentation referred to in subclause (3)(b) is—
  - (a) readily accessible to a worker handling a class 5.2 substance; and
  - (b) readily understandable by a fully trained worker required to be given access to it.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 112



**12.30 Requirements where contact with incompatible substances or ignition, impact, or pressure shock sources intended or anticipated**

- (1) A PCBU with management or control of work using a class 5.2 substance where contact or exposure with the substance is intended or anticipated must ensure that a worker uses personal protective equipment at any time when—
  - (a) a class 5.2 substance comes into contact with an ignition source or an incompatible substance or material, or may be exposed to a temperature, impact, or pressure shock that exceeds the limits specified in regulations 12.27 and 12.28; or
  - (b) it is reasonable to expect that such contact or exposure might accidentally occur.
- (2) The PCBU must ensure that the personal protective equipment—
  - (a) is designed, constructed, and operated so as to prevent—
    - (i) the substance making direct contact with the wearer or user; and
    - (ii) the wearer or user being exposed to a blast overpressure of more than 9 kPa; and
  - (b) meets the requirements of regulation 12.29(3), (4), and (5).
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**12.31 Requirement to control adverse effects of spillage or failure of containers**

- (1) A PCBU with management or control of a class 5.2 substance must ensure that any spill or leak of the substance is immediately—
  - (a) absorbed or diluted using compatible absorbents or diluents; or
  - (b) otherwise recovered.
- (2) The PCBU must ensure that any absorbed, diluted, or otherwise recovered substance is—
  - (a) disposed of according to the requirements for the disposal of class 5.2 substances specified in the Hazardous Substances (Disposal) Notice 2017; or
  - (b) analytically tested and recorded as being free of any incompatible substance.
- (3) The PCBU must ensure that any absorbents or personal protective equipment used in the recovery of a class 5.2 substance are also disposed of according to the requirements for their disposal specified in the Hazardous Substances (Disposal) Notice 2017, if the class 5.2 substance has not been removed from the absorbents or the equipment.

- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 113

*Requirements to reduce likelihood of unintended combustion or explosion of  
specific class 5.2 substances*

**12.32 Controls on class 5.2A substances**

- (1) A PCBU with management or control of a class 5.2A substance must ensure that it is not transported, or offered for transport, on any public road or railway.
- (2) The PCBU must ensure that the class 5.2A substance is not kept in a container that exceeds 0.5 kg or 0.5 L capacity unless the PCBU with management or control of work using the substance—
- (a) records the capacity and type of container to be used; and
  - (b) obtains test result data for a modified SADT for that quantity and type of container and keeps that data available for inspection; and
  - (c) ensures that the temperature of the air surrounding the container does not exceed 20°C below the modified SADT; and
  - (d) ensures that the container complies in all other respects with the limits on containers prescribed in regulation 12.33(1)(a) and (b).
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 114

**12.33 Controls on class 5.2B, 5.2C, 5.2D, 5.2E, or 5.2F substances**

- (1) A PCBU with management or control of a class 5.2B, 5.2C, 5.2D, 5.2E, or 5.2F substance must ensure that it is kept in a container that—
- (a) is of a capacity and design that cannot cause or contribute to combustion or an explosion; and
  - (b) meets the requirements of Packaging Instruction P520 and paragraph 4.1.7 of chapter 4.1 of the UN Model Regulations.
- (2) If the substance is to be held in a container that is not to be used for transportation on a public road or railway, that container may hold a quantity of the substance that is more than the amount specified in table 3 in Schedule 11 for the relevant category of substance if the PCBU with management or control of the substance—

- (a) records the capacity and type of container to be used; and
  - (b) obtains test result data for a modified SADT for that quantity and type of container and keeps that data available for inspection; and
  - (c) ensures that the temperature of the air surrounding the container does not exceed 20°C below the modified SADT; and
  - (d) ensures that the container complies in all other respects with the limits on containers prescribed in this regulation.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 115

*Controls on hazardous substance locations where class 5.2 substances present*

**12.34 Duty of PCBU to establish hazardous substance location where class 5.2 substance present**

- (1) A PCBU with management or control of a place within a workplace where any class 5.2 substances are present must establish in that place 1 or more hazardous substance locations where the class 5.2 substances are to be situated, or are to be manufactured or used, if—
  - (a) those substances are to be present for a period exceeding—
    - (i) 2 hours, in the case of a substance that is subject to the tracking provisions of Part 19; and
    - (ii) 24 hours, in the case of a substance that is not subject to the tracking provisions of Part 19; and
  - (b) those substances are to be present in amounts exceeding the quantities specified for the relevant classifications in table 1 in Schedule 11.
- (2) The PCBU must ensure that separate hazardous substance locations are established for—
  - (a) places where class 5.2 substances are to be kept in packages that are closed at all times; and
  - (b) places where class 5.2 substances are to be manufactured or used.
- (3) The PCBU with management or control of a hazardous substance location must ensure that the requirements of regulation 12.24 are met.
- (4) The PCBU with management or control of a hazardous substance location must notify WorkSafe of the following information at least 30 working days before the commissioning of the location as an area for accommodating class 5.2 substances:

- (a) the street address of the workplace in which the hazardous substance location is situated; and
  - (b) the maximum quantity and hazard classification of each class 5.2 substance that the hazardous substance location is designed or constructed to accommodate; and
  - (c) any manufacturing or use involving class 5.2 substances that may occur at the location.
- (5) The PCBU with management or control of a hazardous substance location must ensure that—
  - (a) if a compliance certificate is required under regulation 12.42, a compliance certificate is obtained that certifies that the requirements of that regulation are met; and
  - (b) a site plan is available for inspection showing, in relation to the legal boundary of the site where the hazardous substance location is situated, the physical position of—
    - (i) all hazardous substance locations within the workplace that contain class 5.2 substances; and
    - (ii) all controlled zones within the workplace; and
  - (c) all persons handling a class 5.2 substance are provided with the information, instruction, and training required by regulation 4.5.
- (6) A PCBU who contravenes subclause (1), (2), (3), or (5) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (7) A PCBU who contravenes subclause (4) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/116 r 116

**12.35 Duty of PCBU to reduce likelihood of unintended combustion or explosion where class 5.2 substance present at hazardous substance location**

- (1) A PCBU with management or control of a hazardous substance location required to be established under regulation 12.34 must ensure that—
  - (a) the temperature of the immediate area around the class 5.2 substances complies with the relevant requirements of regulation 12.27 and that any source of impact or pressure shock complies with the requirements of regulation 12.28; and
  - (b) the area around the class 5.2 substance is free of incompatible substances or materials and is separated from them,—

- (i) where the hazardous substance location site boundary abuts a public place, by a wall—
  - (A) that has a fire-resistance rating of 120/120/120 minutes; and
  - (B) that is constructed to prevent a fire on one side of the wall from coming into contact with any such substances or materials on the other side of the wall; or
- (ii) where the hazardous substance location site boundary abuts a protected place, by a wall—
  - (A) with a fire-resistance rating of 240/240/240 minutes; and
  - (B) that is constructed to prevent a fire on one side of the wall from coming into contact with any such substances on the other side of the wall; or
- (iii) for class 5.2A or 5.2B substances, by the applicable distance as specified in table 4 in Schedule 11 or, where the quantity of substance is less than that specified, not less than 5 m; or
- (iv) for class 5.2C, 5.2D, 5.2E, or 5.2F substances, by the applicable distance as specified in table 5 in Schedule 11 or, where the quantity of substance is less than that specified, not less than 3 m; or
- (v) by arrangements set out in a relevant safe work instrument that are equivalent to the requirements of subparagraph (i) or (ii) and regulations 12.26, 12.27, 12.28, and 12.37; and
- (c) the substance is separated from ignition sources by the appropriate distance specified in table 6 in Schedule 11 or by a wall as described in paragraph (b)(i) or (ii); and
- (d) any area where particulate matter or vapour from a class 5.2 substance is likely to form (including any ventilation outlet or aperture) is separated from any ignition source to the degree provided in paragraph (c); and
- (e) arrangements for managing the location are in place so that—
  - (i) every person entering the location is free of any incompatible material; and
  - (ii) direct contact by any person inside the location with a class 5.2 substance is prevented; and
  - (iii) accumulation of a class 5.2 substance on personal protective equipment at the location is prevented unless—
    - (A) the personal protective equipment complies with regulations 12.29 and 12.30; and
    - (B) any material that has accumulated is collected and removed from the location immediately; and
    - (C) the requirements of regulation 12.31(2) and (3) are met; and

- (iv) the accumulation of incompatible substances at the location is prevented; and
- (f) the location is designed and managed so that any moisture, gas, particulate matter, or vapour of class 5.2 substances does not present a hazard in respect of electrical equipment that may be present.
- (2) Except as regulation 12.36(1)(a) otherwise allows, a PCBU with management or control of a package or container that contains a class 5.2 substance that is within a hazardous substance location must ensure that the package or container is kept closed at all times (except for any permanently open vent in the package or container).
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 117

**12.36 Additional duties of PCBU relating to hazardous substance location where class 5.2 substances are manufactured or used**

- (1) A PCBU with management or control of a hazardous substance location where class 5.2 substances are manufactured or used must ensure that, in addition to the requirements of regulation 12.35, the following requirements are met in relation to the location:
  - (a) within the location, every package or container that contains a class 5.2 substance must be kept closed except when the substance is being taken from or put into its package or container; and
  - (b) no person is exposed to a class 5.2 substance unless protected by personal protective equipment suitable for handling class 5.2 substances; and
  - (c) arrangements are in place that will ensure that every person leaving the hazardous substance location is free of such substances.
- (2) The PCBU with management or control of a hazardous substance location where class 5.2 substances are manufactured or used must ensure that it is separated from any other such hazardous substance location by—
  - (a) a distance of not less than that specified for incompatible substances or materials in tables 4 and 5 in Schedule 11; or
  - (b) a wall—
    - (i) that has a fire-resistance rating of 120/120/120 minutes; and
    - (ii) that is constructed to prevent a fire on one side of the wall from coming into contact with any such substances on the other side of the wall.

- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 118

**12.37 Duty of PCBU to control adverse effects of unintended combustion or explosion**

- (1) The PCBU with management or control of a hazardous substance location where class 5.2 substances are present must establish a controlled zone around the location such that—
- (a) any person not personally permitted to be there by the PCBU is excluded from the zone; and
  - (b) one of the following requirements or sets of requirements is met:
    - (i) the requirements of regulation 12.35(1)(b)(i) and (c); or
    - (ii) the requirements of regulation 12.35(1)(b)(ii) and (c); or
    - (iii) the requirements of regulation 12.35(1)(b)(iii) and (c); or
    - (iv) the requirements of regulation 12.35(1)(b)(iv) and (c).
- (2) The PCBU with management or control of the hazardous substance location must also ensure that, within the controlled zone, the requirements of regulation 12.35(1)(a), (b), (e), and (f), and (if applicable) regulation 12.36, are met.
- (3) The PCBU with management or control of the hazardous substance location must ensure that the interior of any proximate building that is a place of regular habitation and not dedicated to the use or manufacture of the hazardous substance, or any place where a person may legally be that would otherwise be within the controlled zone, is separated from the hazardous substance location by—
- (a) a wall that offers the same protection as that required in regulation 12.35(1)(b)(i), (ii), or (v), and (c); or
  - (b) a distance that corresponds to the distance from incompatible substances described in regulation 12.35(1)(b)(iii) or (iv) and (c).
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 119

*Secondary containment for class 5.2 pooling substances*

**12.38 Requirement to have secondary containment system for pooling substances**

- (1) This regulation applies to a place within a workplace if—
  - (a) an aggregate quantity of class 5.2 hazardous substances more than the quantity specified in table 7 in Schedule 11 is held, or is reasonably likely to be held, at the place at any time; and
  - (b) the place is not a port, or part of a port facility, that is used to store hazardous substances for 72 hours or less.
- (2) The PCBU with management or control of the place must ensure that a system is in place that complies with regulation 12.39, 12.40, 12.41, 17.100, or 17.101, depending on the capacities of the container or containers in which the substances are held.
- (3) If 2 or more containers of different capacities (as described in regulations 12.39, 12.40, and 12.41) are held at 1 place, the PCBU with management or control of the place must ensure that the secondary containment system has a capacity of at least the sum of each container category.
- (4) The PCBU with management or control of the place must ensure, in relation to a secondary containment system at that place, that the following controls can be instituted in or in respect of that system:
  - (a) if organic peroxides must be contained, exclude any energy source capable of igniting them or causing them to decompose thermally;
  - (b) controls that prevent the substances retained from being contaminated by incompatible substances and materials.
- (5) For the purposes of this regulation and regulations 12.39, 12.40, 12.41, 17.100, and 17.101, where a class 5.2 substance is contained in pipework that is installed and operated so as to manage any loss of containment in the pipework, the substance—
  - (a) must not be taken into account in determining whether a place is required to have a secondary containment system; and
  - (b) is not required to be located in a secondary containment system.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**12.39 Requirements for surface containers of up to 60 L**

If the pooling substances held in a place above ground within a workplace are in containers each of which has a capacity of 60 L or less,—



- (a) if the place's total pooling potential is less than 5 000 L, the secondary containment system must have a capacity of at least 50% of that total pooling potential:
- (b) if the place's total pooling potential is 5 000 L or more, the secondary containment system must have a capacity that is the greater of—
  - (i) 2 500 L; and
  - (ii) 25% of that total pooling potential.

**12.40 Requirements for surface containers of more than 60 L and up to 450 L**

- (1) If the pooling substances held in a place above ground within a workplace are in containers 1 or more of which have a capacity of more than 60 L but none of which has a capacity of more than 450 L,—
  - (a) if the place's total pooling potential is less than 5 000 L, the secondary containment system must have a capacity of at least that total pooling potential:
  - (b) if the place's total pooling potential is 5 000 L or more, the secondary containment system must have a capacity the greater of—
    - (i) 5 000 L; and
    - (ii) 50% of that total pooling potential.
- (2) This regulation does not apply to a stationary container to which regulation 17.100 applies.

**12.41 Requirements for surface containers of more than 450 L**

- (1) If the pooling substances held in a place above ground within a workplace are in containers 1 or more of which have a capacity of more than 450 L,—
  - (a) if the place's total pooling potential is less than 5 000 L, the secondary containment system must have a capacity of at least that total pooling potential:
  - (b) if the place's total pooling potential is 5 000 L or more, the secondary containment system must have a capacity of the greater of—
    - (i) 5 000 L; and
    - (ii) 50% of that total pooling potential.
- (2) Despite the requirements of subclause (1), if the pooling substances are contained in a tank wagon, the secondary containment system must have a capacity of at least 110% of the capacity of the largest compartment of the tank wagon.
- (3) This regulation does not apply to a stationary container to which regulation 17.100 applies.

*Compliance certificate requirements*

**12.42 Requirement to have compliance certificate for hazardous substance location**

- (1) A PCBU with management or control of a hazardous substance location where more than the following quantities of substance in the following hazard classifications are present must ensure that the PCBU has a current compliance certificate that certifies compliance with the requirements of regulation 12.43 or, where applicable, regulation 12.44:
  - (a) 10 kg of a class 5.2A or 5.2B substance; or
  - (b) 25 kg of a class 5.2C or 5.2D substance; or
  - (c) 100 kg of a class 5.2E or 5.2F substance.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 120

**12.43 Matters to be certified for hazardous substance location where containers kept closed at all times or containers designed to be vented**

If a compliance certificate is required for a hazardous substance location under regulation 12.42, the certificate must certify that, for the hazardous substance location,—

- (a) the notification requirements of regulation 12.34(4) are complied with and the maximum quantities as notified are not exceeded; and
- (b) the substances can be secured as described in regulation 12.45; and
- (c) all workers handling a class 5.2 substance have received information, instruction, and training in accordance with regulation 4.5; and
- (d) the requirements of regulation 12.34(5) are complied with; and
- (e) the requirements of regulation 12.35(1)(a) to (d) and (f) and (2) are complied with; and
- (f) the requirements of regulation 12.37 are complied with; and
- (g) any fixed structure or installed equipment within the location is constructed from compatible material and is not an ignition source; and
- (h) any personal protective equipment present complies with the requirements of regulations 12.29 and 12.30; and
- (i) there are documented procedures to ensure that the requirements of regulation 12.35(1)(e) are complied with; and
- (j) the location has signage in place that complies with regulations 2.5 and 2.6; and

- (k) if the quantity of hazardous substance requires it, the requirements for secondary containment specified in regulation 12.38 are met; and
- (l) if the quantity of hazardous substances requires it, the requirements for emergency management specified in Part 5 are met.

Compare: SR 2001/116 r 121

#### **12.44 Matters to be certified for hazardous substance location where class 5.2 substances manufactured or used**

If a compliance certificate is required for a hazardous substance location under regulation 12.42 and that location or any part of that hazardous substance location is one where class 5.2 substances are manufactured or used, the compliance certificate must, in addition to certifying the matters specified in regulation 12.43, also certify that the requirements in regulation 12.36 are met, except that—

- (a) there are documented procedures to ensure that every person leaving the location is free of any class 5.2 substance; and
- (b) a site plan shows that regulation 12.36(2) is complied with.

Compare: SR 2001/116 r 122

#### **12.45 Requirements for securing class 5.2 substance**

- (1) For the purposes of regulation 12.43(b), if a class 5.2A, 5.2B, 5.2C, or 5.2D substance is required to be secured, the PCBU with management or control of the substance must ensure that it is secured in a container (but not packaging) that conforms to—
  - (a) the appropriate construction requirements for containers set out in section 3 of AS 2714—2008; or
  - (b) requirements, concerning containers in which such a substance must be secured, in a relevant safe work instrument.
- (2) If a class 5.2E or 5.2F substance is required to be secured, the PCBU with management or control of the substance must ensure that it is secured from access by persons who are not permitted by the PCBU to access the substance.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (4) In this regulation,—

**AS 2714—2008** means the Australian Standard on The storage and handling of organic peroxides.

Compare: SR 2001/116 r 123

*Controls on transit depots where class 5.2 substances located*

**12.46 Requirements for transit depot**

- (1) At any transit depot where the quantity of class 5.2 substances present exceeds that specified for the relevant substances in table 1 in Schedule 11, the PCBU with management or control of the transit depot must,—
  - (a) at least 30 working days before the commissioning of the transit depot as a place for accommodating class 5.2 substances, notify WorkSafe of—
    - (i) the street address of the transit depot; and
    - (ii) the maximum quantity and the hazard classification of each class 5.2 substance that the depot is designed or constructed to accommodate; and
  - (b) ensure that all class 5.2 substances remain within their containers; and
  - (c) ensure that any worker at the transit depot who handles a class 5.2 substance has received information, instruction, and training in accordance with regulation 4.5; and
  - (d) ensure that any road vehicle loaded with containers of class 5.2 substances is—
    - (i) not less than 3 m from any other vehicle that is loaded with compatible substances; and
    - (ii) not less than 5 m from any other vehicle that is loaded with incompatible substances; and
    - (iii) not less than 3 m from any place where containers of compatible substances not on a vehicle are located; and
    - (iv) not less than 5 m from any place where containers of incompatible substances not on a vehicle are located; and
  - (e) ensure that the requirements of regulation 12.24 are met; and
  - (f) ensure that packages and intermediate bulk containers of class 5.2 substances held in the transit depot but not loaded onto a vehicle are—
    - (i) not less than 3 m from containers of incompatible substances, if the substances are being consolidated at a loading dock in readiness to be transported;
    - (ii) not less than 5 m from containers of incompatible substances, in all other circumstances; and
  - (g) ensure that any electrical wiring or equipment within the depot is designed and installed so that in the event of failure of the electrical equipment no resulting ignition source will contact the substance or its container or packaging; and

- (h) designate, and clearly identify with signs, areas for the containment pending their disposal of any leaked or spilled material or damaged packages.
- (2) Subclause (1)(f) does not apply to a PCBU with management or control of a port if the PCBU complies with the requirements for shipboard separation prescribed in the International Maritime Dangerous Goods Code.
- (3) A PCBU who contravenes subclause (1)(a) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.
- (4) A PCBU who contravenes subclause (1)(b) to (h) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/116 r 124

## Part 13

### Class 6 and 8 substances

#### 13.1 Interpretation

In this Part, unless the context otherwise requires,—

**aerial application**, in relation to a hazardous substance, means the application of the substance from an aircraft

**application**, in relation to a hazardous substance, means dropping, spreading, spraying, laying as bait, dusting, sprinkling, wiping, placing, discharging, or pouring the substance on the ground, vegetation, water, or any other thing, and **apply** has a corresponding meaning

**application area**, in relation to an area to which a hazardous substance is or is intended to be applied, means—

- (a) the land that the person applying the substance owns or occupies; or
- (b) the above-ground water within the boundaries of, or air above, the land owned or occupied by the person applying the substance for the period of time that the water or air remains within the boundaries of the land; or
- (c) any land, air, or water within an area that a person is authorised, under any enactment, to apply the substance to; or
- (d) an indoor area that the person applying the substance—
  - (i) owns or occupies; or
  - (ii) is authorised, under any enactment, to apply the substance to

**application plot** means the part of the application area where the substance is, or is intended to be, directly applied

**AS/NZS 4452:1997** means the Australian/New Zealand Standard on The storage and handling of toxic substances

**biocidal action**, in relation to a hazardous substance, means mortality, inhibited growth, or inhibited reproduction in an organism that the substance can cause

**compatible**, in relation to a class 6 or 8 substance, means—

- (a) that the substance is chemically inert in relation to another class 2, 3, 4, 5, 6, or 8 substance at the range of temperatures and pressures at which the substances are brought into contact; or
- (b) if the substance reacts with a substance of another class, it does so in a way—
  - (i) that does not cause or contribute to a fire or an explosion; or
  - (ii) that does not generate flammable, corrosive, or toxic vapours or gases; or
  - (iii) that does not involve a reaction with an incompatible substance (as described in Schedule 15)

**pesticide**—

- (a) means a class 6 substance used for pest management to eradicate, modify, or control organisms—
  - (i) in agricultural, horticultural, or forestry activities; or
  - (ii) in any place that may be lawfully accessed by the public (with or without payment of a charge); but
- (b) does not include—
  - (i) veterinary medicines, fertilisers, anti-fouling paints, timber treatment chemicals, and antistain chemicals; or
  - (ii) disinfectants or cleaning products other than when used for the treatment of microorganisms on horticultural crops

**public drinking water supply** includes drinking water supply reservoirs, treatment plants, and storage facilities

**sensitive area**—

- (a) means a place that may be adversely affected by the application of a substance; and
- (b) includes the following:
  - (i) places where members of the public are likely to be present and are unable to readily evacuate, for example, a school, playground, early childhood centre, prison, hospital, or long-term care facility:

- (ii) water bodies, including public water supply catchments and intakes:
- (iii) sensitive habitats, such as wetlands, indigenous vegetation habitat areas, or reserves:
- (iv) public roads, public places, and amenity areas

**year** means a calendar year.

Compare: SR 2001/117 rr 3, 52

### *Exemption from Part 13*

## **13.2 Exemption of anhydrous ammonia**

This Part does not apply to anhydrous ammonia contained in any plant in which anhydrous ammonia is used as a refrigerant.

### Subpart 1—General duties

## **13.3 Duty of PCBU to keep record of application of certain class 6 and 8 substances**

- (1) A PCBU with management or control of a class 6.1A, 6.1B, 6.1C, 6.6A, 6.7A, 8.2A, or 8.2B substance applied for the purpose of causing biocidal action must ensure that a written record of each application of the substance is kept in accordance with regulation 13.4, if the application is in a place within a work-place—
  - (a) where members of the public may lawfully be present; or
  - (b) where the substance is likely to enter air or water and leave the place.
- (2) A PCBU with management or control of an organophosphate or carbamate plant protection insecticide applied for plant protection purposes must ensure that a written record of each application of the substance is kept in accordance with regulation 13.4.
- (3) The PCBU must ensure that the written record is kept for at least 3 years after the date on which the substance that the record relates to is applied.
- (4) This regulation does not apply to the application of a hazardous substance—
  - (a) for the disinfection of a public drinking water supply; or
  - (b) for the treatment of tertiary effluent at a wastewater plant.
- (5) This regulation does not apply to—
  - (a) a veterinary medicine that is, or is to be, administered to or dispensed for an animal; or
  - (b) a substance that has a class 1 classification; or
  - (c) a fumigant.

- (6) A PCBU who contravenes subclause (1), (2), or (3) commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

Compare: SR 2001/117 r 5(1)

#### **13.4 Matters to be included in record kept by PCBU**

- (1) A record required to be kept under regulation 13.3 or 14.18 by a PCBU must include the following information and any additional information specified in a relevant safe work instrument:
- (a) the product or chemical name of the substance;
  - (b) the date and time of each application of the substance;
  - (c) the amount of the substance applied;
  - (d) the location where the substance was applied;
  - (e) if the substance is applied to air, a description of the wind speed and direction when the substance was applied;
  - (f) the name of the worker using the substance and the physical address of the worker's workplace;
  - (g) in relation to an organophosphate or carbamate plant protection insecticide, details of measures taken to ensure there are no adverse effects beyond the boundary of the subject property into an adjoining property or into a sensitive area;
  - (h) in relation to aircraft carrying out aerial application of a substance, electronic data files that indicate locations of where the substance has been dispensed and aircraft secondary positional information (for example, geographic information system original shape files, based on Global Navigation Satellite System data).
- (2) A relevant safe work instrument may specify additional information to be kept for—
- (a) a specified substance or class of substance;
  - (b) a specified purpose of application of the substance;
  - (c) a specified place of application of the substance.

Compare: SR 2001/117 r 6

#### **13.5 Additional recording and notification requirements when sodium fluoroacetate present**

- (1) If, at any time in a year, sodium fluoroacetate is present in a workplace, the PCBU with management or control of the workplace must provide WorkSafe with the following information for that year:
- (a) the name and address of the workplace; and



- (b) the name and position of the individual in charge at the workplace; and
  - (c) the quantity or quantities of sodium fluoroacetate present in the workplace; and
  - (d) for any quantity not manufactured at the workplace, the supplier's name; and
  - (e) the purpose or purposes for which the sodium fluoroacetate was obtained or manufactured; and
  - (f) if any quantity of sodium fluoroacetate was transferred to another place,—
    - (i) how much was transferred; and
    - (ii) the address of the place to which it was transferred; and
    - (iii) the identity of and position held by the person assuming responsibility for it at that place; and
    - (iv) the date on which the transfer occurred; and
  - (g) if any quantity was disposed of,—
    - (i) the quantity disposed of; and
    - (ii) how, where, and the date on which it was disposed of.
- (2) The information must be provided in writing no later than 31 March of the following year.
- (3) To avoid doubt, subclause (1) applies even if the sodium fluoroacetate present in the workplace was obtained or manufactured in a previous year.
- (4) A PCBU who contravenes subclause (1) or (2) commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/117 r 53

### **13.6 Importation of sodium fluoroacetate**

- (1) This regulation applies to a PCBU who imports sodium fluoroacetate.
- (2) Before the sodium fluoroacetate is collected, the PCBU must—
- (a) give WorkSafe written notice of—
    - (i) the supplier's name; and
    - (ii) the quantity to be collected; and
    - (iii) the name of the person collecting it; and
  - (b) obtain a certificate from WorkSafe confirming that the PCBU has complied with paragraph (a); and

- (c) provide a copy of the certificate to the New Zealand Customs Service together with written notice of the date on which and place from where the sodium fluoroacetate will be collected.
- (3) A PCBU who contravenes subclause (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: LI 2015/46 r 54

### *Equipment*

#### **13.7 Duty of PCBU to ensure equipment is appropriate**

- (1) A PCBU with management or control of work using a class 6 or 8 substance must ensure that equipment used to handle the substance—
  - (a) retains the substance, without leakage, at all of the temperatures and pressures at which the equipment is to be used; and
  - (b) dispenses or applies the substance, without leakage, at a rate and in a manner that the equipment is designed for.
- (2) The PCBU must ensure that the equipment is accompanied by documentation about the use and maintenance of the equipment to enable the equipment to be used and maintained in a manner that complies with subclause (1).
- (3) The PCBU must ensure that the documentation is—
  - (a) readily available to any worker handling the substance; and
  - (b) readily understandable by any fully trained worker required to access it.
- (4) A PCBU with management or control of work involving the application of a class 6 substance must ensure that the substance is applied using the equipment specified for the substance in a relevant safe work instrument (if applicable).
- (5) A PCBU with management or control of a workplace at which a class 6 substance is applied must ensure that the workplace has the facilities specified for the application of the substance in a relevant safe work instrument (if applicable).
- (6) This regulation does not apply to work involving a solid veterinary medicine (including a cream, capsule, or implant) when the medicine is being administered to or dispensed for an animal unless the medicine is—
  - (a) a powder, granule, or other finely divided material; or
  - (b) dissolved before being administered to an animal.
- (7) A PCBU who contravenes subclause (1), (4), or (5) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

- (8) A PCBU who contravenes subclause (2) or (3) commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

Compare: SR 2001/117 r 7(1), (2)

### **13.8 Use of personal protective equipment when working with class 6 or 8 substances**

- (1) For the purposes of regulations 15 to 20 of the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016, personal protective equipment is to be used to minimise risks to the health and safety of workers when carrying out work using a class 6.1A, 6.1B, 6.1C, 6.1D, 6.3A, 6.5A, 6.5B, 6.6A, 6.6B, 6.7A, 6.7B, 6.8A, 6.8B, 6.8C, 6.9A, 6.9B, 8.2A, 8.2B, 8.2C, or 8.3A substance.
- (2) This regulation and regulations 15 to 20 of the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016 do not apply—
- (a) to a solid veterinary medicine (including a cream, capsule, or implant) when it is being administered to or dispensed for an animal unless the medicine is—
    - (i) a powder, granule, or other finely divided material; or
    - (ii) dissolved before being administered to an animal;
  - (b) in relation to a hazardous substance in a closed package that complies with the Hazardous Substances (Packaging) Notice 2017.

Compare: SR 2001/117 r 8

#### *Certified handler certification and controlled substance licences*

### **13.9 Certain substances to be under personal control of certified handler or secured**

- (1) A PCBU with management or control of work using a class 6.1A or 6.1B substance or any class 6.1 substance that requires a controlled substance licence must ensure that the substance is—
- (a) under the personal control of a certified handler; or
  - (b) appropriately secured from access by persons other than a certified handler or a person who may handle the substance under subclause (2).
- (2) However, a substance referred to in subclause (1) may be handled by a person who is not a certified handler—
- (a) if a certified handler—
    - (i) is present at the place where the substance is being handled; and
    - (ii) has provided guidance to the person in respect of the handling; and

- (iii) is available at all times to provide assistance, as necessary, to the person while the substance is being handled by the person:
  - (b) in relation to an aerial application of the substance, if the person carrying out the application has a current aerial topdressing rating, aerial spraying rating, or aerial vertebrate toxic agent rating issued under Part 61 of the Civil Aviation Rules:
  - (c) if the person does not require a compliance certificate as a certified handler as provided in regulation 4.4.
- (3) This regulation does not apply to a fumigant.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000:
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/117 r 9

### **13.10 Substances not requiring a certified handler to be secured**

- (1) This regulation applies to a PCBU with management or control of a class 6 or 8 substance—
- (a) in a quantity equal to or more than that specified in Schedule 14 for the substance; and
  - (b) to which regulation 13.9 does not apply.
- (2) The PCBU must ensure that the substance, if left unattended, is appropriately secured from access by persons other than those permitted by the PCBU to access the substance.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000:
  - (b) for any other person, to a fine not exceeding \$30,000.

### **13.11 Exception for transportation of packaged substances**

- (1) The certified handler requirements specified in regulation 13.9 must be treated as having been complied with if,—
- (a) for a substance being transported on land,—
    - (i) the substance is being transported by rail and the person who drives the train that is transporting the substance is fully trained in accordance with a safety system that is referred to in an approved safety case under the Railways Act 2005; and
    - (ii) in any other situation, the person who drives, loads, and unloads the vehicle that is transporting the substance—

- (A) for hire or reward, or in quantities exceeding those set out in Schedule 1 of the Land Transport Rule: Dangerous Goods 2005, has a current dangerous goods endorsement on his or her driver licence;
  - (B) in any other case, complies with the Land Transport Rule: Dangerous Goods 2005:
- (b) for a substance being transported by sea, one of the following is complied with:
  - (i) Part 24A of the Maritime Rules (carriage of cargoes—dangerous goods); or
  - (ii) the International Maritime Dangerous Goods Code:
- (c) for a substance being transported by air,—
  - (i) pilots, aircrew, and airline ground personnel loading and handling the hazardous substance within an aerodrome comply with the Civil Aviation Rules;
  - (ii) pilots engaged in the aerial application of hazardous substances comply with the Civil Aviation Rules.
- (2) Subclause (1)(a) does not apply to a tank wagon or transportable container to which Part 16 applies.

### **13.12 Licence required for possession of certain class 6 substances**

- (1) This regulation applies to the following substances:
  - (a) a class 6.1A or 6.1B vertebrate toxic agent;
  - (b) a class 6.1 substance listed in Schedule 13;
  - (c) a class 6 substance specified in a relevant safe work instrument.
- (2) A person must not possess a substance unless the person holds a controlled substance licence authorising possession of the substance.
- (3) Despite subclause (2), a person who does not have a controlled substance licence may possess the substance if—
  - (a) the person is under the immediate supervision of a person who holds a controlled substance licence; or
  - (b) the person is treated by regulation 13.11 as having complied with regulation 13.9; or
  - (c) the person does not require a controlled substance licence as provided in regulation 7.9.
- (4) This regulation does not apply to a fumigant.
- (5) A person who contravenes subclause (2) commits an offence and is liable on conviction to a fine not exceeding \$2,000.

**13.13 Licences required for supply and acquisition of certain class 6 substances**

- (1) This regulation applies to the following substances:
  - (a) a class 6.1A or 6.1B vertebrate toxic agent;
  - (b) a class 6.1 substance listed in Schedule 13;
  - (c) a class 6 substance specified in a relevant safe work instrument.
- (2) A PCBU must ensure that no worker supplies a substance to any person unless the worker holds a controlled substance licence.
- (3) A PCBU must ensure that no person acquires a substance from the PCBU unless that person holds a controlled substance licence.
- (4) Despite subclause (3), a person who does not have a controlled substance licence may acquire a substance for the purpose of transporting it if the person has a current dangerous goods endorsement on his or her driver licence.
- (5) A PCBU who contravenes subclause (2) or (3) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

*Transport restrictions*

**13.14 Carriage of certain class 6 and 8 substances on passenger service vehicles**

- (1) A person must not carry a class 6.1B, 6.1C, 6.5A, 6.5B, 8.2B, or 8.2C substance on a passenger service vehicle unless—
  - (a) the substance is in sealed packaging; and
  - (b) in relation to a class 6.1B substance, the amount of the substance in the package does not exceed—
    - (i) 120 ml aggregate water capacity, if the substance is a gas; or
    - (ii) 100 ml, if the substance is a liquid; or
    - (iii) 500 g, if the substance is a solid; and
  - (c) in relation to a class 6.1C, 6.5A, 6.5B, 8.2B, or 8.2C substance, the amount of the substance in the package does not exceed—
    - (i) 120 ml aggregate water capacity, if the substance is a gas; or
    - (ii) 1 L, if the substance is a liquid; or
    - (iii) 3 kg, if the substance is a solid.
- (2) A person must not carry any quantity of a class 6.1A or 8.2A substance on a passenger service vehicle.
- (3) Despite subclause (1), a person must not carry on a passenger service vehicle microencapsulated zinc phosphide containing a quantity equal to or more than 275 g/kg zinc phosphide.

- (4) A person who contravenes subclause (1), (2), or (3) commits an offence and is liable on conviction to a fine not exceeding \$2,000.

Compare: SR 2001/117 r 10

#### **13.15 Additional restrictions relating to transport of pesticide**

- (1) A person who transports pesticide in a vehicle must ensure that the pesticide is contained in—
- (a) a sealed, unopened sachet; or
  - (b) an airtight container.
- (2) In subclause (1), **pesticide** means—
- (a) a DDVP-impregnated device, HSNO approval number HSR000126; or
  - (b) a class 6.1 pesticide specified in a relevant safe work instrument.
- (3) A person who contravenes subclause (2) commits an offence and is liable on conviction to a fine not exceeding \$2,000.

#### **13.16 Additional restrictions relating to transport of certain vertebrate toxic agents and fumigants**

- (1) A person who transports a vertebrate toxic agent or fumigant that has the potential to release a toxic gas when in contact with water or water vapour must ensure that the substance is transported in—
- (a) an external vehicular compartment; or
  - (b) an internal compartment that does not share an internal air supply with any compartments of the vehicle containing passengers at the time; or
  - (c) the luggage compartment of a vehicle, but only if—
    - (i) the substance (and any associated packaging, or contaminated clothing or equipment) is sealed in an airtight, secondary container before being placed in the vehicle; and
    - (ii) the airtight, secondary container is labelled to indicate the need to restrict access by children or companion animals.
- (2) A person who contravenes subclause (1) commits an offence and is liable on conviction to a fine not exceeding \$2,000.

#### *Exposure standards and limits*

#### **13.17 Prohibition on use of class 6 substance in excess of tolerable exposure limit**

- (1) A PCBU with management or control of work using a class 6 substance must ensure that it is not used in a manner that results in a concentration of the substance in an environmental medium that exceeds the tolerable exposure limit set for the medium.
- (2) This regulation does not apply to—

- (a) a substance that has a class 1 classification:
  - (b) methyl bromide that is applied in accordance with regulation 14.39 or 14.43.
- (3) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/117 r 27(1)

### **13.18 Duty of PCBU to ensure prescribed exposure standards for class 6 substances not exceeded**

- (1) A PCBU with management or control of a workplace must ensure that a person at the workplace is not exposed to a concentration of a class 6 substance that exceeds the prescribed exposure standard (if any) for that substance in accordance with regulation 29 of the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016.
- (2) This regulation and regulation 29 of the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016 do not apply to a class 1 substance.
- (3) A relevant safe work instrument may prescribe a prescribed exposure standard for a class 6 substance.

Compare: SR 2001/117 r 29

#### *Application of certain class 6 substances*

### **13.19 Signage requirements for vertebrate toxic agents**

- (1) This regulation applies to—
  - (a) a class 6.1A, 6.1B, or 6.1C vertebrate toxic agent that is applied or laid anywhere outdoors by a person lawfully allowed to do so, as part of bait to inhibit reproduction, inhibit growth, or cause the death of terrestrial vertebrates; and
  - (b) any other class 6 vertebrate toxic agent that is applied or laid outdoors in a place (within a workplace) to which members of the public ordinarily have access, by a person lawfully allowed to do so, as part of bait to inhibit reproduction, inhibit growth, or cause the death of terrestrial vertebrates.
- (2) A PCBU with management or control of work involving the substance must ensure that signs that comply with subclause (3) are erected at every normal point of entry to the place where the substance is to be applied or laid.
- (3) The signs must—



- (a) identify the job title of the person controlling the application or laying the substance, and provide sufficient information to enable that person to be contacted during normal business hours; and
  - (b) identify the substance and state that it is toxic to humans and ecotoxic to non-human vertebrates; and
  - (c) state the date on which the substance will first be applied or laid; and
  - (d) comply with the requirements for comprehensibility and clarity listed in regulation 2.5(2)(c)(i) to (iv), with the modification described in subclause (4).
- (4) The modification is that regulation 2.5(2)(c)(iv) applies as if, in relation to the information required to be included on the signs by subclause (3)(a) and (c), the distance referred to in regulation 2.5(2)(c)(iv) were not less than 2 m.
- (5) WorkSafe may specify—
  - (a) a period of time for which the signs are to remain in place;
  - (b) different time periods for signs for different substances.
- (6) The PCBU must ensure that the signs remain until—
  - (a) a period of time specified by WorkSafe for the substance has elapsed; or
  - (b) the substance has been retrieved from the place concerned; or
  - (c) the substance is no longer toxic.
- (7) Regulation 13.9 does not apply to a substance after it has been applied or laid in accordance with this regulation.
- (8) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/117 r 28

### **13.20 Requirements for aircraft carrying out aerial application of vertebrate toxic agents**

- (1) A PCBU with management or control of an aerial application of a vertebrate toxic agent must ensure that every person flying an aircraft that is carrying out the aerial application does not, when flying to or from the area where the hazardous substance is applied, fly over—
  - (a) any place, within a workplace, specified in a permission granted by the EPA under section 95A of the HSNO Act in relation to the substance as being a place over which such an aircraft must not fly; or
  - (b) a public drinking water supply; or

- (c) a waterway that is less than 100 m upstream of a point of extraction from a water source for a drinking water supply (not being a water supply exclusively for stock).
- (2) The PCBU must ensure that every aircraft that has carried out the aerial application, and all equipment used in connection with the aerial application, is decontaminated before the aircraft or equipment is—
  - (a) used for another purpose; or
  - (b) removed from a place from which the application operation has been carried out.
- (3) The PCBU must ensure that when the aerial application has ceased for that day, the loading area, and any area where the substance is stored in preparation for loading the substance onto or into the aircraft, is—
  - (a) decontaminated; or
  - (b) fenced so that—
    - (i) people do not inadvertently enter the area; and
    - (ii) stock cannot gain access to the area.
- (4) The PCBU responsible for ensuring that an area is fenced must ensure that—
  - (a) signs are erected at the perimeter of the fence; and
  - (b) those signs and fence remain in place until the area is decontaminated.
- (5) The signs must—
  - (a) state that people and stock must stay out of the area until the signs, and the fence around the area, have been removed; and
  - (b) identify the person responsible for the place and provide sufficient information to enable the person to be contacted during normal business hours; and
  - (c) identify the substance and state that it is toxic to humans and ecotoxic to non-human vertebrates; and
  - (d) comply with the requirements for comprehensibility and clarity listed in regulation 2.5(2)(c)(i) to (iv), subject to the modification in subclause (6).
- (6) The modification is that regulation 2.5(2)(c)(iv) applies as if, in relation to the information required to be included on the signs by subclause (5)(a) and (b), the distance referred to in regulation 2.5(2)(c)(iv) were not less than 2 m.
- (7) A PCBU who contravenes subclause (1) or (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

- (8) A PCBU who contravenes subclause (3), (4), or (5) commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

**13.21 Restricted access to vicinity in which certain vertebrate toxic agents applied**

- (1) A person who is not lawfully assisting in the application or use of a vertebrate toxic agent containing an active ingredient listed in subclause (2) must not remain in the vicinity of the application or use of the substance.
- (2) The active ingredients are—
- (a) 3-chloro-p-toluidine hydrochloride;
  - (b) potassium cyanide;
  - (c) sodium cyanide;
  - (d) yellow phosphorus;
  - (e) sodium fluoroacetate;
  - (f) microencapsulated zinc phosphide;
  - (g) any other active ingredient described in a relevant safe work instrument.
- (3) A person who contravenes subclause (1) commits an offence and is liable on conviction to a fine not exceeding \$2,000.

**13.22 Duties of PCBU with management or control of work using antifouling paints**

- (1) In this regulation, a controlled work area is a designated area in which antifouling paints are applied, using a method and located in a way that unintended deposits of the substance, including onto bystanders, is avoided so far as is reasonably practicable to prevent this occurrence.
- (2) A PCBU with management or control of work using antifouling paints must ensure that the application of those paints is carried out in a controlled work area.
- (3) The PCBU must avoid unintended deposits of the substance onto persons—
- (a) within the controlled work area; and
  - (b) outside of, but within the immediate vicinity of, the controlled work area.
- (4) The PCBU must ensure that signs are erected at every point of entry to the controlled work area, from the start of the application of the antifouling paints and until the end of that application.
- (5) The signs must—

- (a) warn that an application is being carried out using a substance that is toxic to humans; and
  - (b) identify the PCBU; and
  - (c) state that no person is permitted to enter the controlled work area unless the person is wearing personal protective equipment; and
  - (d) comply with the requirements for comprehensibility, clarity, and durability listed in regulation 2.5(2)(c).
- (6) A PCBU who contravenes subclause (2) or (3) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (7) A PCBU who contravenes subclause (4) or (5) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

### **13.23 WorkSafe may set restricted entry intervals for pesticide**

WorkSafe may set restricted entry intervals for a pesticide to protect persons from the toxic effects of that substance if—

- (a) the human exposure to the substance is primarily through inhalation or contact with skin; and
- (b) scientific data available for the substance is sufficiently reliable to enable a restricted entry interval to be set.

### **13.24 Duty of PCBU to ensure restricted entry intervals complied with**

- (1) This regulation applies to the following areas:
  - (a) an application plot where a pesticide has been applied;
  - (b) an area specified in a relevant safe work instrument.
- (2) A PCBU with management or control of the area must ensure that no person is present in or enters the area until the end of the restricted entry interval set in accordance with regulation 13.23 for the substance.
- (3) Despite subclause (2), a person may be present in or enter the area before the end of the restricted entry interval—
  - (a) if the person is wearing personal protective equipment in accordance with regulation 13.8; or
  - (b) in accordance with a relevant safe work instrument.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;

- (b) for any other person, to a fine not exceeding \$50,000.

### **13.25 Duty of PCBU relating to signage for pesticide applied in indoor environment**

- (1) This regulation applies to the following indoor areas:
  - (a) an application plot where a pesticide has been applied;
  - (b) an area specified in a relevant safe work instrument.
- (2) A PCBU with management or control of an indoor area for which a restricted entry interval has been set must ensure that signs that comply with subclause (3) are erected outside the area, at every routine point of entry into the area from the start of the application until the end of the application or the end of the restricted entry interval, whichever is the later.
- (3) The signs must—
  - (a) state that an application is being carried out using a substance that is toxic to humans; and
  - (b) state that entry into the area is not permitted unless personal protective equipment is worn; and
  - (c) identify the PCBU with management or control of the area; and
  - (d) state the day on which the application commenced; and
  - (e) state the time and date of the end of the restricted entry interval; and
  - (f) comply with the requirements for comprehensibility, clarity, and durability listed in regulation 2.5(2)(c).
- (4) The PCBU must ensure that the signs are removed within 72 hours of the end of the application or restricted entry interval, whichever is the later.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

### *Storage of certain class 6 or 8 substances not located at hazardous substance location*

### **13.26 Storage of certain class 6 and 8 substances not located at hazardous substance location**

- (1) This regulation applies to the storage of a class 6.1A, 6.1B, 6.1C, 8.2A, or 8.2B substance at a place within a workplace if the PCBU with management or control of the place is not required to establish a hazardous substance location in accordance with regulation 13.34.
- (2) The PCBU must ensure that—

- (a) the place can be appropriately secured from access by persons other than those permitted by the PCBU to access the place; and
  - (b) a supply of water is available at a nearby location for personal hygiene; and
  - (c) adequate ventilation is provided for all storage and handling areas; and
  - (d) the substance is not kept near hazardous substances with which it is incompatible or with which it may react dangerously; and
  - (e) containers of the substance are kept away from sources of heat, are securely closed while not in use, and are kept in such a manner as to avoid spillage; and
  - (f) appropriate spillage retention measures are provided at the place if containers of the substance are likely to be opened or their contents are likely to be transferred.
- (3) This regulation does not apply to a farm of not less than 4 ha.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

**13.27 Requirements applicable to farms**

- (1) This regulation applies to the storage of a class 6.1A, 6.1B, 6.1C, 8.2A, or 8.2B substance at a farm of not less than 4 ha in respect of which a PCBU is not required to establish a hazardous substance location in accordance with regulation 13.34.
- (2) The PCBU with management or control of the farm must ensure that—
  - (a) the storage area is situated not less than 10 m from any protected place; and
  - (b) the ground around the storage area is kept clear of combustible vegetation or refuse for a distance of 3 m; and
  - (c) the storage area is located, or secondary containment is used, so that any spillage of the hazardous substance will not reach any protected place, watercourse, or property boundary; and
  - (d) any storage area is separated from the boundary of the property by at least 15 m.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

*Transit depot storage***13.28 Controls on transit depots where class 6 or 8 substances present**

- (1) A PCBU with management or control of a transit depot where the quantity of any class 6.1A, 6.1B, 6.1C, 8.2A, or 8.2B substance exceeds that specified for the relevant substance in regulation 13.38(1) must—
  - (a) notify WorkSafe of the following information at least 30 working days before the commissioning of the transit depot as a place for accommodating a class 6.1A, 6.1B, 6.1C, 8.2A, or 8.2B substance:
    - (i) the street address of the transit depot; and
    - (ii) the maximum quantity and the hazard classification of each of the class 6.1A, 6.1B, 6.1C, 8.2A, or 8.2B substances that the transit depot is designed or constructed to accommodate; and
  - (b) ensure that all class 6.1A, 6.1B, 6.1C, 8.2A, or 8.2B substances remain within their closed containers; and
  - (c) ensure that the requirements of regulation 13.10 (if applicable) are met; and
  - (d) ensure that all workers handling a class 6.1A, 6.1B, 6.1C, 8.2A, or 8.2B substance have received information, instruction, and training in accordance with regulation 4.5; and
  - (e) ensure that any road vehicle loaded with containers of class 6.1A, 6.1B, 6.1C, 8.2A, or 8.2B substances is—
    - (i) not less than 3 m from any other vehicle that is loaded with compatible substances; and
    - (ii) not less than 5 m from any other vehicle that is loaded with incompatible substances; and
    - (iii) not less than 3 m from any place where containers of compatible substances not on a vehicle are located; and
    - (iv) not less than 5 m from any place where containers of incompatible substances not on a vehicle are located; and
  - (f) ensure that any containers of class 6.1A, 6.1B, 6.1C, 8.2A, or 8.2B substances held in the transit depot but not loaded onto a vehicle are not less than 5 m from containers of incompatible substances; and
  - (g) designate, and clearly identify with signs, areas for containment, pending disposal, of any leaked or spilled material or damaged packages; and
  - (h) except when stored in transportable containers, ensure that stacks of packages and intermediate bulk containers in the transit depot containing class 6.1A, 6.1B, 6.1C, 8.2A, or 8.2B substances—
    - (i) do not exceed 25 tonnes; and
    - (ii) are accessible from all sides; and

- (iii) are segregated from each other by at least 5 m; and
- (i) ensure that transportable containers containing packaged or bulk class 6 or 8 substances in the transit depot are—
  - (i) not stacked more than 2 containers high and 2 containers deep; and
  - (ii) where stacked 2 containers deep, arranged so as to provide access to both sides of each stack; and
  - (iii) separated from containers of incompatible substances by at least 5 m.
- (2) Subclause (1)(f) and (i) does not apply to a PCBU with management or control of a port while the PCBU complies with the requirements for shipboard separation prescribed in the International Maritime Dangerous Goods Code.
- (3) Subclause (1) does not apply to the storage in a transit depot of a class 6.1A, 6.1B, or 6.1C vertebrate toxic agent associated with the imminent start of a pest control operation, provided that—
  - (a) the requirements of regulation 13.26 are complied with; and
  - (b) the PCBU notifies WorkSafe of the place where the substance will be stored at least 24 hours before the commissioning of the place; and
  - (c) the holder of a controlled substance licence for the vertebrate toxic agent is present at the place.
- (4) A PCBU who contravenes subclause (1)(a) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.
- (5) A PCBU who contravenes subclause (1)(b) to (i) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

*Segregation requirements for class 6 and 8 substances*

**13.29 Duty of PCBU relating to segregation of class 6 and 8 substances**

- (1) Except where the mixing of a substance with another substance with which it is incompatible is intended, the PCBU with management or control of the place within a workplace where the substance is located must ensure that—
  - (a) the substance is not in contact with any substance or material with which it is incompatible; and
  - (b) containers of incompatible substances are stored separately.



- (2) For the purposes of this regulation, substances or materials specified in Schedule 15 are incompatible with class 6.1A, 6.1B, 6.1C, 8.2A, 8.2B, and 8.2C substances.
- (3) Compliance with clause 1.9.2 of AS/NZS 4452:1997 for class 6 substances and clause 4.3.3 of AS 3780—2008 for class 8 substances is a means of complying with subclause (1).
- (4) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

*Secondary containment requirements for class 6 and 8 pooling substances*

**13.30 Requirement to have secondary containment system for pooling substances**

- (1) This regulation applies to a place within a workplace if—
  - (a) there is held in it, or reasonably likely to be held in it on occasion, an aggregate quantity of class 6 or 8 substances more than the quantity specified in Schedule 16; and
  - (b) it is not a port, or part of a port facility, that is used to store hazardous substances for 72 hours or less.
- (2) The PCBU with management or control of the place must ensure that the place has a secondary containment system that complies with regulation 13.31, 13.32, 13.33, 17.100, or 17.101, depending on the capacities of the above ground container or containers in which the substances are held.
- (3) If 2 or more containers of different capacities (as described in regulations 13.31, 13.32, and 13.33) are held at one place, the PCBU with management or control of the place must ensure that the secondary containment system has a capacity of at least the sum of each container category.
- (4) The PCBU with management or control of the place must ensure, in relation to a secondary containment system, that there are controls, or controls are capable of being instituted, that—
  - (a) prevent people from being directly exposed to any toxic or biological corrosive substances contained in the system;
  - (b) prevent any of the substances contained in the system from being contaminated by incompatible substances and materials.
- (5) For the purposes of this regulation and regulations 13.31, 13.32, 13.33, 17.100, and 17.101, if a class 6 or 8 substance is contained in pipework that is installed and operated so as to manage any loss of containment in the pipework, the substance—

- (a) is not to be taken into account in determining whether a place is required to have a secondary containment system; and
  - (b) is not required to be located in a secondary containment system.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**13.31 Requirements for surface containers of up to 60 L**

- (1) If the pooling substances are held in a place within a workplace above ground in containers each of which has a capacity of 60 L or less,—
  - (a) if the place's total pooling potential is less than 5 000 L, the secondary containment system must have a capacity of at least 50% of that total pooling potential;
  - (b) if the place's total pooling potential is 5 000 L or more, the secondary containment system must have a capacity of the greater of—
    - (i) 2 500 L; and
    - (ii) 25% of that total pooling potential.
- (2) Despite subclause (1), if pooling substances that do not have class 1 to 5 hazard classifications are held in a place above ground in containers, each of which has a capacity of 60 L or less,—
  - (a) if the place's total pooling potential is less than 20 000 L, the secondary containment system must have a capacity of at least 25% of that total pooling potential;
  - (b) if the place's total pooling potential is 20 000 L or more, the secondary containment system must have a capacity of the greater of—
    - (i) 5% of the total pooling potential; or
    - (ii) 5 000 L.

**13.32 Requirements for surface containers of more than 60 L and up to 450 L**

- (1) If pooling substances are held in a place within a workplace above ground in containers 1 or more of which have a capacity of more than 60 L but none of which has a capacity of more than 450 L,—
  - (a) if the place's total pooling potential is less than 5 000 L, the secondary containment system must have a capacity of at least that total pooling potential;
  - (b) if the place's total pooling potential is 5 000 L or more, the secondary containment system must have a capacity of the greater of—
    - (i) 5 000 L; and
    - (ii) 50% of that total pooling potential.

- (2) Despite subclause (1), if pooling substances that do not have class 1 to 5 hazard classifications are held in a place above ground in containers 1 or more of which have a capacity of more than 60 L but none of which has a capacity of more than 450 L,—
  - (a) if the place's total pooling potential is less than 20 000 L, the secondary containment system must have a capacity of the greater of—
    - (i) 25% of the total pooling potential; or
    - (ii) 110% of the capacity of the largest container.
  - (b) if the place's total pooling potential is 20 000 L or more, the secondary containment system must have a capacity of the greater of—
    - (i) 5% of the total pooling potential; or
    - (ii) 5 000 L.
- (3) This regulation does not apply to a stationary tank to which regulation 17.100 applies.

### **13.33 Requirements for surface containers of more than 450 L**

- (1) If the pooling substances held in a place within a workplace above ground are in containers 1 or more of which has a capacity of more than 450 L,—
  - (a) if the place's total pooling potential is less than 5 000 L, the secondary containment system must have a capacity of at least that total pooling potential;
  - (b) if the places's total pooling potential is 5 000 L or more, the secondary containment system must have a capacity of the greater of—
    - (i) 5 000 L; and
    - (ii) 50% of that total pooling potential.
- (2) Despite the requirements of subclause (1), if the pooling substances are contained in a tank wagon, the secondary containment system must have a capacity of at least 110% of the capacity of the largest compartment of the tank wagon.
- (3) This regulation does not apply to a stationary tank to which regulation 17.100 applies.

#### *Storage of class 6 or 8 substances at hazardous substance location*

### **13.34 Duty of PCBU to establish hazardous substance location where certain class 6 or 8 substances present**

- (1) This regulation applies to 1 or more of the following substances:
  - (a) a class 6.1A substance:
  - (b) a class 6.1B substance:
  - (c) a class 6.1C substance:

- (d) a class 8.2A substance:
  - (e) a class 8.2B substance:
  - (f) a class 6 or 8 substance specified in a relevant safe work instrument.
- (2) A PCBU with control or management of a place within a workplace where 1 or more of the substances are present must establish in that place 1 or more hazardous substance locations where such substances are to be situated if—
- (a) the substances are to be present for a period exceeding—
    - (i) 2 hours, in the case of a substance subject to the tracking requirements of Part 19:
    - (ii) 24 hours, in the case of a substance that is not subject to the tracking requirements of Part 19; and
  - (b) the substances are to be present in amounts exceeding the quantities specified for the relevant classifications in regulation 13.38.
- (3) The PCBU with management or control of the hazardous substance location must ensure that the hazardous substance location complies with,—
- (a) for a store for class 6 or 8 substances other than an indoor storage cabinet, regulation 13.35; or
  - (b) for an indoor storage cabinet for class 6 substances, regulation 13.36; or
  - (c) for an indoor storage cabinet for class 8 substances, regulation 13.37.
- (4) The PCBU with management or control of a hazardous substance location must notify WorkSafe of the following information at least 30 working days before the commissioning of the hazardous substance location as an area for accommodating a substance:
- (a) the street address of the hazardous substance location; and
  - (b) the maximum quantity and hazard classification of the substance that the hazardous substance location is designed or constructed to accommodate; and
  - (c) any manufacturing or use involving the substance that may occur at the location.
- (5) The PCBU with management or control of the hazardous substance location must also ensure that,—
- (a) where a compliance certificate is required under regulation 13.38, a compliance certificate is obtained that certifies that the requirements of that regulation are met; and
  - (b) a site plan is available for inspection showing, in relation to the legal boundary of the site in which the hazardous substance location is situated,—
    - (i) the physical location of all hazardous substance locations within the workplace that contain the substance; and

- (ii) all distances from the hazardous substance location to protected places, public places, and other hazardous substance locations within the boundary of the workplace; and
  - (c) the requirements of regulations 13.9, 13.10, 14.3, and 14.4 (if applicable) are met; and
  - (d) all workers handling the hazardous substance have received information, instruction, and training in accordance with regulation 4.5.
- (6) This regulation does not apply to the temporary storage (for example, in a vehicle, at a field bait handling area, or at an aircraft loading area) of a class 6.1A, 6.1B, or 6.1C substance associated with the imminent start of a pest control operation or pesticide application task, provided that—
- (a) the requirements of regulation 13.26 are complied with; and
  - (b) the PCBU notifies WorkSafe of the place where the substance will be stored at least 24 hours before the commissioning of the place.
- (7) A PCBU who contravenes subclause (2), (3), or (5) commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (8) A PCBU who contravenes subclause (4) commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

### **13.35 Requirements for stores other than indoor storage cabinets**

- (1) A hazardous substance location that is a store, other than an indoor storage cabinet, for a class 6 or 8 substance referred to in regulation 13.34(1) must comply with the following requirements:
- (a) unless otherwise approved by WorkSafe, the store must be located on a floor that has immediate access for emergency service workers; and
  - (b) the store can be appropriately secured from access by persons other than those permitted by the PCBU to access the store; and
  - (c) at least 2 means of access must be provided to a store that has a floor area exceeding 25 m<sup>2</sup>; and
  - (d) a store that was built or materially changed after the commencement of this regulation must have wall and roof sheeting and main structural members constructed from materials that are non-combustible and resistant to attack by the substances stored; and
  - (e) where a toxic substance is likely to present an inhalation hazard (of dusts, mists, or vapours) in a store, adequate natural or mechanical ventilation must be provided that is sufficient to—

- (i) maintain the ambient concentration of any dusts, mists, or vapours in the store as low as reasonably practicable; and
    - (ii) where applicable, maintain exposure levels in the store below prescribed exposure standards; and
  - (f) the store must have a means of either containing a spill or diverting it to a secondary containment system within the boundary of the premises that complies with regulation 13.30; and
  - (g) all areas used for decanting substances must have floors that are capable of containing a spill or of diverting it to a suitable secondary containment system within the boundary of the premises; and
  - (h) where provided, and except where they are designed as spill trays, any racks or shelves in the store must be designed and constructed in such a manner as to prevent the accumulation of pooling liquid; and
  - (i) containers of class 6 or 8 substances must be kept away from sources of heat, be securely closed while not in use, and be kept in such a manner as to avoid spillage; and
  - (j) containers of class 6 or 8 substances must not be kept near hazardous substances with which they are incompatible or with which they may react dangerously; and
  - (k) where containers are kept in stacks, the stacks must be arranged in a manner that minimises the possibility of stack collapse and prevents damage to containers in lower layers from loadings exerted by the upper layers; and
  - (l) in relation to a store where containers are opened, the following items must be provided:
    - (i) a safety shower;
    - (ii) eye-wash facilities;
    - (iii) water for hand-washing; and
  - (m) in relation to a store where containers remain closed at all times, water for hand-washing must be provided.
- (2) However, a relevant safe work instrument may modify the requirements of sub-clause (1) for a substance referred to in regulation 13.34(1)(f).

### **13.36 Requirements for indoor storage cabinets for class 6 substances**

- (1) A hazardous substance location that is an indoor storage cabinet for a class 6 substance referred to in regulation 13.34(1) must comply with the following requirements:
- (a) the cabinet must not be used for the storage of substances that are incompatible or that might react dangerously if stored together; and

- (b) the maximum quantity of toxic substances kept in a single cabinet must not exceed 250 kg or 250 L, of which not more than 25 kg or 25 L may be of class 6.1A and not more than 50 kg or 50 L may be of class 6.1B; and
  - (c) the cabinet must comply with—
    - (i) the design requirements set out in section 4.4.2.3 of AS/NZS 4452:1997; or
    - (ii) European Standard EN 14470:01 with fire resistance of 60 minutes; or
    - (iii) a standard in a relevant safe work instrument; and
  - (d) if mechanical ventilation of the cabinet is required, the cabinet must comply with the ventilation requirements set out in section 4.4.2.4 of AS/NZS 4452:1997 or a standard in a relevant safe work instrument; and
  - (e) the cabinet must be located so that it will not impede the escape of persons in the event of fire; and
  - (f) the cabinet must be located near a supply of water for hand-washing; and
  - (g) where there is more than 1 cabinet in any building or area,—
    - (i) the aggregate quantity of toxic substances kept in all those cabinets must not exceed the quantities specified in paragraph (b); or
    - (ii) the cabinets must be separated from each other by at least 3 m; and
  - (h) the cabinet must be marked with—
    - (i) the name and address of the manufacturer or, for imported cabinets, the distributor within New Zealand; and
    - (ii) the maximum storage capacity; and
    - (iii) a class 6.1 hazard pictogram.
- (2) However, a relevant safe work instrument may modify the requirements of sub-clause (1) for a substance referred to in regulation 13.34(1)(f).

### **13.37 Requirements for indoor storage cabinets for class 8 substances**

- (1) A hazardous substance location that is an indoor storage cabinet for a class 8 substance referred to in regulation 13.34(1) must comply with the following requirements:
- (a) the cabinet must not be used for the storage of substances that are incompatible or that might react dangerously if stored together; and
  - (b) the maximum quantity of class 8 substances kept in a single cabinet must not exceed 1 000 kg or 1 000 L, of which not more than 50 kg or 50 L may be of class 8.2A and not more than 250 kg or 250 L may be of class 8.2B; and

- (c) the cabinet must comply with the design requirements set out in sections 4.6.4 and 4.6.5 of AS 3780—2008 or a standard in a relevant safe work instrument; and
- (d) the cabinet must be located so that it will not impede the escape of persons in the event of fire; and
- (e) the cabinet must be located near a supply of water for hand-washing; and
- (f) where there is more than 1 cabinet in any building or area,—
  - (i) the aggregate quantity of class 8 substances kept in all those cabinets must not exceed the quantities specified in paragraph (b); or
  - (ii) the cabinets must be separated from each other by at least 5 m; and
- (g) the cabinet must be marked with—
  - (i) the name and address of the manufacturer or, for imported cabinets, the distributor within New Zealand; and
  - (ii) the maximum storage capacity; and
  - (iii) a class 8.2 hazard pictogram.
- (2) However, a relevant safe work instrument may modify the requirements of sub-clause (1) for a substance referred to in regulation 13.34(1)(f).

**13.38 Compliance certificate required for hazardous substance location**

- (1) A PCBU with management or control of a hazardous substance location where more than the following quantities of hazardous substance, in solid or liquid form in the following hazard classifications, are present must ensure that the location has a current compliance certificate that certifies compliance with the requirements specified in regulation 13.34:
  - (a) 50 kg or 50 L of class 6.1A:
  - (b) 250 kg or 250 L of class 6.1B:
  - (c) 1 000 kg or 1 000 L of class 6.1C:
  - (d) 50 kg or 50 L of class 8.2A:
  - (e) 250 kg or 250 L of class 8.2B:
  - (f) the quantity and the hazard classification of the substance specified in a relevant safe work instrument.
- (2) A PCBU must ensure that the compliance certificate is renewed at intervals not exceeding 36 months.
- (3) If there is a requirement to obtain more than 1 compliance certificate,—
  - (a) the compliance certifier may, at the request of the person or persons required to obtain the compliance certificates, examine at the same time any or all of those matters that require compliance certification for which the certifier is competent to certify; and



- (b) if more than 1 matter has been examined, the report provided by the certifier must indicate whether the respective requirements have been met and must give the reasons for any failure to meet those requirements; and
  - (c) a single compliance certificate may be issued for any or all of those matters if the requirements have been met.
- (4) In relation to a hazardous substance location situated on a farm of not less than 4 ha, subclause (1) applies if—
  - (a) the quantity of each class 6.1A substance present at the location exceeds 100 kg or 100 L; or
  - (b) the quantity of each class 6.1B substance present at the location exceeds 500 kg or 500 L; or
  - (c) the quantity of each class 6.1C substance present at the location exceeds 3 500 kg or 3 500 L; or
  - (d) the quantity of each class 8.2A substance present at the location exceeds 500 kg or 500 L; or
  - (e) the quantity of each class 8.2B substance present at the location exceeds 3 500 kg or 3 500 L; or
  - (f) the quantity of each substance specified in a relevant safe work instrument present at the location exceeds the quantity specified in the instrument.
- (5) Despite subclauses (1) and (4), a relevant safe work instrument may, for a hazardous substance location that contains a substance described in regulation 13.34(1)(f), provide that the location is not required to have a current compliance certificate.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

### **13.39 Matters to be certified for hazardous substance location where class 6 or 8 substances are present**

If a compliance certificate is required for a hazardous substance location under regulation 13.38, the certificate must certify that, for the hazardous substance location,—

- (a) the notification requirements of regulation 13.34(4) have been complied with, and the maximum quantities as notified are not exceeded; and
- (b) the requirements of regulations 13.9, 13.10, 14.3, and 14.4 (if applicable) are met; and

- (c) all workers handling the hazardous substance have received information, instruction, and training in accordance with regulation 4.5; and
- (d) unless modified by a relevant safe work instrument, the hazardous substance location complies with,—
  - (i) if it is a store for class 6 or 8 substances, other than an indoor storage cabinet, regulation 13.35; or
  - (ii) if it is an indoor storage cabinet for class 6 substances, regulation 13.36; or
  - (iii) if it is an indoor storage cabinet for class 8 substances, regulation 13.37; and
- (e) the separation requirements for protected places and public places specified in regulation 13.41, 13.42, 13.43, 17.28, or 17.29 (if applicable) are met; and
- (f) the requirements in regulations 13.29 and 13.34(6) are complied with; and
- (g) any fixed structure or installed equipment within the location is constructed from material that is compatible with the class 6 or 8 substances; and
- (h) any equipment used to handle the hazardous substance and any personal protective equipment used in carrying out work with the substance complies with the requirements of regulations 13.7 and 13.8; and
- (i) the location has signage in place that complies with regulations 2.5 and 2.6; and
- (j) if the quantity of hazardous substance requires it, the requirements for emergency management specified in Part 5 are complied with; and
- (k) the hazardous substance location has clean-up materials and equipment in accordance with regulation 13.45; and
- (l) if the quantity of hazardous substances requires it, the requirements for secondary containment specified in regulation 13.30 are met.

*Separation of hazardous substance locations holding class 6 and 8 substances*

**13.40 Measurement of separation distance**

For the purposes of regulations 13.41, 13.42, and 13.43 and Schedule 17, separation distances may be measured in a horizontal plane around an intervening screen wall, provided that,—

- (a) where the height of the store is equal to or more than that of the protected place or public place, the wall extends at least 1 m above the highest container in the store; and

- (b) where the height of the store is less than that of the protected place or public place, the wall extends at least 1 m above the place or extends as a roof above the store; and
- (c) the wall is marked to indicate the maximum permissible storage height; and
- (d) the wall and the roof, if any, have a fire-resistance rating of at least 120/120/120 minutes.

**13.41 Minimum separation between protected places and hazardous substance locations containing packaged class 6.1 substances**

- (1) A PCBU with management or control of a hazardous substance location containing class 6.1A, 6.1B, or 6.1C substances in quantities exceeding the quantities specified in regulation 13.38 must ensure that the substances are separated from protected places in accordance with table 1 or 2 in Schedule 17.
- (2) However, in any retail store to which the public has access and that holds class 6.1B or 6.1C substances for retail sale, the relevant minimum separation distance from and within the building is zero, but only while all packages containing the substances remain closed.
- (3) If a class 6.1A, 6.1B, or 6.1C substance also has a class 2.1.1, 2.1.2, or 3.1 classification,—
  - (a) this regulation does not apply to that substance; and
  - (b) the separation distances prescribed in Part 11 apply.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**13.42 Minimum separation between public places and hazardous substance locations containing packaged class 6.1 substances**

- (1) A PCBU with management or control of a hazardous substance location containing class 6.1A, 6.1B, or 6.1C substances in quantities exceeding the maximum quantities specified in regulation 13.38 must ensure that the substances are separated from public places in accordance with table 3 or 4 in Schedule 17.
- (2) However, in any retail store to which the public has access and that holds class 6.1B or 6.1C substances for retail sale, the relevant minimum separation distance from and within the building is zero, but only while all packages containing the substances remain closed.
- (3) If a class 6.1A, 6.1B, or 6.1C substance also has a class 2.1.1, 2.1.2, or 3.1 classification,—
  - (a) this regulation does not apply to that substance; and

- (b) the separation distances prescribed in Part 11 apply.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**13.43 Minimum separation between protected places and hazardous substance locations containing class 8.2A or 8.2B substances**

- (1) A PCBU with management or control of a hazardous substance location containing class 8.2A or 8.2B substances in quantities exceeding the maximum quantities specified in regulation 13.38 must ensure that the substances are separated from protected places in accordance with subclauses (2) and (3).
- (2) If the location is a store where containers are opened,—
  - (a) the minimum separation distance for class 8.2A substances is 10 m from a protected place;
  - (b) the minimum separation distance for class 8.2B substances is 5 m from a protected place.
- (3) If the location is a store where containers remain closed,—
  - (a) the minimum separation distance for class 8.2A substances is 5 m from a protected place;
  - (b) the minimum separation distance for class 8.2B substances is 3 m from a protected place.
- (4) However, in any retail store to which the public has access and that holds class 8.2A or 8.2B substances for retail sale, the relevant minimum separation distance from and within the building is zero, but only while all packages containing the substances remain closed.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**13.44 Application for exemption from certain requirements**

- (1) This regulation applies to 1 or more of the following requirements:
  - (a) secondary containment (regulations 13.30 to 13.33);
  - (b) storage at a hazardous substance location (regulations 13.34 to 13.37);
  - (c) compliance certification (regulations 13.38 and 13.39);
  - (d) separation distances (regulations 13.41 to 13.43).
- (2) An application for an exemption under section 220 of the Act from 1 or more of the requirements must—

- (a) be in the form required by WorkSafe (if any); and
- (b) be accompanied by the fee (if any) prescribed in Schedule 2.

**13.45 Additional emergency management requirements**

- (1) A PCBU with management or control of a workplace where class 6.1A, 6.1B, 6.1C, 8.2A, or 8.2B substances are present must ensure that either or both of following are readily available:
  - (a) equipment and materials suitable for dealing with leaks and spills (whether major or minor), and clean-up equipment:
  - (b) chemicals for neutralising or decontaminating spills and absorbent materials.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

*Additional and modified requirements in safe work instrument***13.46 Additional and modified requirements in safe work instrument**

- (1) This regulation applies to a class 6 or 8 substance if the Minister approves a safe work instrument in relation to the substance for the purposes of this regulation.
- (2) The Minister may approve a safe work instrument for the purposes of this regulation if satisfied that compliance with the provisions of these regulations that apply to a class 6 or 8 substance will not appropriately control risk associated with the substance.
- (3) In deciding whether to approve a safe work instrument for the purposes of this regulation, the Minister must have regard to the following matters:
  - (a) whether compliance with the provisions of these regulations being considered will eliminate or minimise relevant risk so far as is reasonably practicable:
  - (b) whether it is practicable for relevant duty holders to comply with those provisions:
  - (c) whether compliance with a modified form of those provisions, or with additional or alternative requirements, would be more practicable and no less effective in eliminating or minimising risk:
  - (d) whether a modified form of those provisions, or additional or alternative requirements, would be more appropriate to the nature of the hazards and risk being considered.
- (4) A safe work instrument approved for the purposes of this regulation may—
  - (a) set out any additional requirement that applies to the substance:

- (b) state which provisions of these regulations are to apply to the substance in a way that is modified by the instrument.
- (5) A provision of these regulations that is modified under subclause (4)(b) by a safe work instrument approved for the purposes of this regulation applies, and must be complied with, as modified.
- (6) A PCBU with management or control of a class 6 or 8 substance must ensure that the following additional requirements relating to the substance are complied with:
  - (a) notification requirements for the use, handling, transport, or storage of the substance:
  - (b) requirements as to which person is permitted to use, handle, transport, or store the substance:
  - (c) requirements for the training of and provision of information to workers for the use, handling, transport, or storage of the substance.
- (7) A PCBU with management or control of a class 6 or 8 substance must ensure that other additional requirements for the use, handling, transport, or storage of the substance are complied with.
- (8) A PCBU who conducts a business or undertaking that manufactures a class 6 or 8 substance must ensure that the following additional requirements relating to the substance are complied with:
  - (a) notification requirements for the manufacture of the substance:
  - (b) requirements as to which person is permitted to manufacture the substance:
  - (c) requirements for the training of and provision of information to workers for the manufacture of the substance:
  - (d) other requirements for the manufacture of the substance.
- (9) An individual in the workplace, other than a PCBU with a duty under subclause (6), (7), or (8), must comply with the additional requirements relating to the substance.
- (10) A PCBU who contravenes subclause (6)(a), (b), or (c) or (8)(a), (b), or (c) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000:
  - (b) for any other person, to a fine not exceeding \$30,000.
- (11) A PCBU who contravenes subclause (7) or (8)(d) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.
- (12) An individual who contravenes subclause (9) commits an offence and is liable on conviction to a fine not exceeding \$2,000.

(13) In this regulation,—

**additional requirement** means a new requirement set out in a safe work instrument approved for the purposes of this regulation

**appropriately control**, in relation to risk, means the risk is eliminated or minimised so far as is reasonably practicable

**modified**, in relation to a provision of these regulations, means the safe work instrument has the effect of—

- (a) varying, replacing, or deleting a requirement in the provision; or
- (b) providing an alternative means of complying with a requirement in the provision

## Part 14

### Fumigants

#### 14.1 Additional controls for fumigants

The controls in this Part are in addition to those in Part 13 and other provisions of these regulations that apply to fumigants.

#### 14.2 Interpretation

In this Part, unless the context otherwise requires,—

**application block**, in relation to an area of soil to which a fumigant is applied, means the area within the boundary defined by the outer extremity of all soil to which the fumigant has been applied in any 24-hour period, and includes any untreated areas within the boundary of the application block

**buffer zone**, except in subpart 6, means an area extending outward in all directions from the perimeter of each application block being fumigated to the relevant distance prescribed under regulation 14.22

**buffer zone period**, except in subpart 6, means the period starting when the fumigant is first applied to the soil within an application block and ending 48 hours after the application of the fumigant to the soil within the application block has ceased

**fumigation area** means any of the following places within a workplace where fumigation is, or is intended to be, carried out:

- (a) all or part of—
  - (i) a ship;
  - (ii) an aircraft;
  - (iii) a building;
  - (iv) a glasshouse;
  - (v) any other enclosed structure;

- (b) a fumigation cell:
- (c) a shipping container:
- (d) a silo:
- (e) a soil area:
- (f) a covered space:
- (g) any other area where a fumigant is, or is intended to be, released

**fumigation cell** means a sealed chamber, including a shipping container, used exclusively for fumigation

**fumigation under sheets**—

- (a) means fumigation carried out under sheets of plastic, tarpaulins, or other materials having a low mass transfer coefficient for the fumigant being used; but
- (b) does not include space fumigation

**highly retentive film** means any of the following types of plastic film:

- (a) virtually impermeable film:
- (b) totally impermeable film:
- (c) metallized film

**methyl bromide** means a gas containing 1 000 g/kg methyl bromide

**Ripper range (30–55% iodomethane and 45–70% chloropicrin)** means the Ripper range of fumigants containing between 30–55% iodomethane and 45–70% chloropicrin, HSNO approval number HSR100349

**risk area** means—

- (a) a fumigation area; or
- (b) any area (including a ship, aircraft, building, space, or structure) that, in the opinion of a certified handler, a fumigant may enter if released

**shipping container**—

- (a) includes a standardised device of a permanent character that is strong enough to be suitable for repeated use and is used to contain or hold goods while those goods are—
  - (i) being loaded or unloaded for transport by rail, road, or sea; or
  - (ii) transported by rail, road, or sea; but
- (b) does not include—
  - (i) a shipping container that is a fumigation cell; or
  - (ii) a vehicle, ordinary packing case, crate, box, or similar item used for packing

**silo** means a building or other structure used principally for the bulk storage of—



- (a) cereal or products of cereal:
- (b) animal feedstuffs:
- (c) other loose material

**space fumigation** means fumigation carried out in a building or other enclosed structure and—

- (a) includes the use of sheets of plastic, tarpaulins, or other materials having a low mass transfer coefficient for the fumigant being used, to isolate the fumigation area in a building or other enclosed structure; but
- (b) does not include—
  - (i) fumigation of a ship or an aircraft; or
  - (ii) fumigation in a fumigation cell or shipping container; or
  - (iii) fumigation under sheets

**Tri-Form 60** means Tri-Form 60, HSNO approval number HSR100563

**USDA Feel and Appearance method** means the method in the United States Department of Agriculture document, “Estimating Soil Moisture by Feel and Appearance,” Program Aid Number 1619, April 1998.

### Subpart 1—Certified handler and controlled substance licence requirements

#### 14.3 Fumigants under personal control of certified handler

- (1) This regulation applies to all fumigants except those to which regulation 14.4 applies.
- (2) A PCBU with management or control of work using a fumigant must ensure that the fumigant is—
  - (a) under the personal control of a certified handler; or
  - (b) appropriately secured from access by persons other than a certified handler or a person who may handle the fumigant under subclause (3).
- (3) Despite subclause (2)(a), a fumigant required to be under the personal control of a certified handler may be handled by a person who is not a certified handler if,—
  - (a) for substances that contain magnesium phosphide or aluminium phosphide, the aggregate quantity of the substances is 3 kg or less; or
  - (b) for any other fumigant,—
    - (i) a certified handler is present at the place within the workplace where the fumigant is being handled; and
    - (ii) a certified handler has provided guidance to the person in respect of the handling; and

- (iii) a certified handler is available at all times to provide assistance, as necessary, to the person, at any time while the fumigant is being handled by the person; and
  - (iv) in relation to a fumigant that is designed to be used to fumigate soil, the certified handler present at the place within the workplace where the fumigant is to be handled ensures that the person handling the fumigant has successfully completed a product-specific training course before the handling takes place; or
- (c) the person does not require a compliance certificate as a certified handler under regulation 4.4.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

**14.4 Additional fumigants under personal control of certified handler**

- (1) This regulation applies to the following fumigants:
  - (a) Ripper range (30–55% iodomethane and 45–70% chloropicrin);
  - (b) Tri-Form 60;
  - (c) a fumigant required by a relevant safe work instrument to comply with this regulation.
- (2) A PCBU with management or control of work using a fumigant must ensure that the fumigant is—
  - (a) under the personal control of a certified handler; or
  - (b) appropriately secured from access by persons other than a certified handler or a person who may handle the fumigant under subclause (5).
- (3) The PCBU must ensure that no person at the workplace handles a fumigant unless the person is a certified handler.
- (4) The PCBU must ensure that no person at the workplace slices or removes the plastic sheets used to cover soil treated with a fumigant within 14 days of the start of fumigation unless—
  - (a) the person doing the slicing or removal is a certified handler; and
  - (b) at least 1 other person is present when the slicing or removal takes place.
- (5) Despite subclauses (2)(a), (3), and (4), a fumigant may be handled, or the slicing or removal (or both) may be undertaken, by a person who is not a certified handler if,—
  - (a) for any fumigant,—

- (i) at the place within the workplace where the fumigant is being handled or the slicing or removal (or both) is being carried out, a certified handler is present; and
  - (ii) the certified handler has provided guidance to the person in respect of the handling or slicing or removal (or both); and
  - (iii) the certified handler is available at all times to provide assistance, if necessary, to the person at any time while the fumigant is being handled or while the slicing or removal (or both) is carried out by the person; and
  - (iv) the certified handler ensures that the person has successfully completed a product-specific training course before the person handles the product, or undertakes slicing or removal (or both), as the case requires; or
- (b) the person does not require a compliance certificate as a certified handler under regulation 4.4.
- (6) The restrictions under subclauses (2), (3) and (4) and the exceptions to this regulation under subclause (5) may be modified by a relevant safe work instrument for a substance referred to in subclause (1)(c).
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

#### **14.5 Exception for transportation of packaged fumigants**

- (1) Regulation 14.3 or 14.4 must be treated as having been complied with if,—
  - (a) for a fumigant being transported on land,—
    - (i) the fumigant is being transported by rail and the person who drives the train that is transporting the fumigant is fully trained in accordance with a safety system that is referred to in an approved safety case under the Railways Act 2005; and
    - (ii) in any other situation, the person who drives, loads, and unloads the vehicle that is transporting the fumigant—
      - (A) for hire or reward, or in quantities exceeding those set out in Schedule 1 of the Land Transport Rule: Dangerous Goods 2005 has a current dangerous goods endorsement on his or her driver licence;
      - (B) in any other case, complies with the Land Transport Rule: Dangerous Goods 2005;
  - (b) for a fumigant being transported by sea, one of the following is complied with:

- (i) Part 24A of the Maritime Rules (carriage of cargoes—dangerous goods); or
  - (ii) the International Maritime Dangerous Goods Code:
- (c) for a fumigant being transported by air, pilots, aircrew, and airline ground personnel loading and handling the fumigant within an aerodrome comply with the Civil Aviation Rules.
- (2) Subclause (1)(a) does not apply to a tank wagon or transportable container to which Part 16 applies.

#### **14.6 Licence required for possession of fumigant**

- (1) A person must not possess a fumigant unless the person holds a controlled substance licence authorising possession of the fumigant.
- (2) Despite subclause (1), a person who does not hold a controlled substance licence may possess the fumigant if,—
  - (a) for substances that contain magnesium phosphide or aluminium phosphide, the aggregate quantity of the substances is 3 kg or less; or
  - (b) a relevant safe work instrument states that the fumigant, or a quantity of the fumigant, may be possessed without a controlled substance licence; or
  - (c) a person who holds a controlled substance licence is present and available at all times to provide assistance to the person in possession of the fumigant; or
  - (d) the person is treated by regulation 14.5 as having complied with regulation 14.3 or 14.4; or
  - (e) the person does not require a controlled substance licence as provided in regulation 7.9.
- (3) A person who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

Compare: *Gazette* 2004, p 3471, Schedule 3 cl 1

### **Subpart 2—Notification and signage**

#### **14.7 Notification of intended fumigation**

- (1) A PCBU who intends to carry out fumigation, except fumigation of a type listed in the column 1 of table 1 in Schedule 18, must notify each person who may be affected by the fumigation of the PCBU's intention to carry out fumigation.

- (2) A PCBU who intends to carry out fumigation of a type listed in column 1 of table 1 in Schedule 18 must notify the following persons of the PCBU's intention to carry out the fumigation:
  - (a) each person listed in column 2 of table 1 in Schedule 18 in relation to that type of fumigation; and
  - (b) every other person who may be affected by the fumigation.
- (3) The requirement under subclause (2)(a) for a PCBU to notify the nearest communications centre of Fire and Emergency New Zealand is, in relation to 1 or more fumigations to be carried out in a fumigation cell, in a shipping container, or under sheets, to be treated as having been complied with if—
  - (a) the fumigations are carried out at an established location on a routine basis as part of regular work activities; and
  - (b) the location is secured against ready access by persons other than those permitted by the PCBU to access the location; and
  - (c) the PCBU with management or control of the fumigations notifies the nearest communications centre of Fire and Emergency New Zealand of the intention to carry out fumigations at the location before the first of the fumigations begins.
- (4) A relevant safe work instrument may modify the notification requirements for a fumigant referred to in the safe work instrument.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: *Gazette* 2004, p 3471, Schedule 3 cl 6

#### **14.8 Timing of notification of intended fumigation**

- (1) A PCBU who is required to give a notification under regulation 14.7(1) or (2) must ensure that it is given not less than 24 hours before the start of the fumigation.
- (2) Subclause (1) does not apply if—
  - (a) the fumigation is urgent for a reason relating to biosecurity or public health; or
  - (b) the fumigation is to be carried out—
    - (i) in a fumigation cell, in a shipping container, or under sheets; and
    - (ii) at an established location where such fumigations are routinely carried out.
- (3) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—

- (a) for an individual, to a fine not exceeding \$6,000;
- (b) for any other person, to a fine not exceeding \$30,000.

Compare: *Gazette* 2004, p 3471, Schedule 3 cl 6

#### **14.9 Application of regulation 14.10**

Regulation 14.10 applies to the following types of fumigation:

- (a) space fumigation:
- (b) fumigation of—
  - (i) a glasshouse; or
  - (ii) a ship; or
  - (iii) commodities on a ship; or
  - (iv) an aircraft; or
  - (v) a silo; or
  - (vi) grain or other loose material in small bins, or in bulk on the floor of a building or other structure:
- (c) fumigation in a fumigation cell:
- (d) fumigation in a shipping container:
- (e) fumigation under sheets:
- (f) fumigation of soil or compost in a glasshouse, building, or other enclosed structure:
- (g) fumigation of mammals underground undertaken on land where members of the public may lawfully be present:
- (h) soil fumigation outdoors if—
  - (i) the fumigation is undertaken on, or adjacent to, land that is close to or adjoins a private dwelling, school, playing field or reserve, or other amenity area, or an area where the public may lawfully be present; or
  - (ii) the risk area may encroach on any such land or area:
- (i) another type of fumigation specified in a relevant safe work instrument.

Compare: *Gazette* 2004, p 3471, Schedule 3 cl 7

#### **14.10 PCBU must erect signs**

- (1) A PCBU with management or control of fumigation must erect signs in accordance with the following:
  - (a) if the fumigation is of a type listed in regulation 14.9(a) to (f) or (i), signs must be erected at every point of access to the place within the workplace where fumigation will be carried out that—
    - (i) state that fumigation is being carried out; and

- (ii) identify the fumigant being used and state that it is toxic to humans; and
    - (iii) describe the general type of hazard associated with the fumigant; and
    - (iv) if the fumigant is flammable, describe the precautions necessary to prevent the unintended ignition of the fumigant;
  - (b) for fumigation of a type listed in regulation 14.9(a), (b)(ii) or (iii) or (iv), (e), (g), or (h), signs must be erected at the perimeter of the risk area that—
    - (i) can be readily seen by any person approaching the risk area; and
    - (ii) state that fumigation is being carried out; and
    - (iii) identify the fumigant being used and state that it is toxic to humans; and
    - (iv) describe the general type of hazard associated with the fumigant; and
    - (v) if the fumigant is flammable, describe the precautions necessary to prevent unintended ignition of the fumigant.
- (2) Signs erected in accordance with subclause (1)(a) must, if the fumigation is carried out in a room or compartment within a building or other enclosed space, be positioned at each entrance to the room or compartment.
- (3) A sign erected in accordance with subclause (1) must—
  - (a) comply with requirements for comprehensibility, clarity, and durability listed in regulation 2.5(2)(c); and
  - (b) identify the PCBU with management or control of the fumigation and provide sufficient information to enable the PCBU to be contacted during normal business hours; and
  - (c) state the day on which the fumigation is to start; and
  - (d) state the actions that must be taken in an emergency; and
  - (e) be illuminated during the hours of darkness (except for soil fumigations outdoors or the fumigation of mammals underground).
- (4) However, if a relevant safe work instrument prescribes modified signage requirements for a type of fumigation listed in regulation 14.9(i) or for a specified fumigant, the PCBU must ensure that the modified requirements are complied with.
- (5) The PCBU must ensure that, on the completion of fumigation in accordance with regulation 14.17(2),—
  - (a) signs are removed immediately; or

- (b) for fumigation using a fumigant specified in a relevant safe work instrument, signs are removed immediately or at the alternative time specified in the instrument.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000:
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: *Gazette* 2004, p 3471, Schedule 3 cl 7

### Subpart 3—Operational requirements

#### **14.11 Shipping container under fumigation must not be moved**

- (1) A PCBU with management or control of the moving or transporting of a shipping container that is being fumigated must ensure that the shipping container is not moved or transported by road or rail unless the fumigation is determined to be complete in accordance with regulation 14.17(2).
- (2) Despite subclause (1), a PCBU may allow a shipping container that is being fumigated to be moved—
  - (a) from a wharf to a ship that is berthed at the wharf; or
  - (b) from the ship to the wharf.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 3471, Schedule 3 cl 2

#### **14.12 Restriction on fumigation of shipping containers**

- (1) A PCBU with management or control of fumigation of a shipping container must ensure that the fumigation—
  - (a) is carried out only in a place within the workplace that is secured against ready access by persons other than those permitted by the PCBU to access the place; and
  - (b) is not carried out in an area where the public may lawfully be present.
- (2) However, if a relevant safe work instrument prescribes modified requirements to restrict the place within the workplace where fumigation of a shipping container is carried out using a specified fumigant, the PCBU must ensure that the modified requirements are complied with.
- (3) A PCBU who contravenes subclause (1) or (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:



- (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 3471, Schedule 3 cl 3

#### **14.13 Shipping container must not leak fumigants**

- (1) A PCBU with management or control of fumigation in a shipping container must ensure that the fumigant in the shipping container is not applied unless, at the time of application,—
  - (a) the container is in good repair and capable of being securely closed; and
  - (b) the container—
    - (i) can retain the fumigant without leakage; or
    - (ii) if it does leak, can be modified immediately so that it does not leak (for example, by covering and sealing it with 1 or more sheets having a low mass transfer coefficient for the fumigant being used).
- (2) However, if a relevant safe work instrument prescribes modified requirements for the application of a specified fumigant in a shipping container, the PCBU must ensure that the modified requirements are complied with.
- (3) A PCBU who contravenes subclause (1) or (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 3471, Schedule 3 cl 4

#### **14.14 Fumigation cells must not leak fumigants**

- (1) A PCBU with management or control of fumigation in a fumigation cell must ensure that the fumigant is not applied unless the cell is able to retain the fumigant without leakage at all of the temperatures and pressures at which the cell is to be used.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 3471, Schedule 3 cl 5

#### **14.15 Supervision of fumigation**

- (1) This regulation applies to the following types of fumigation:
  - (a) space fumigation;
  - (b) fumigation of—
    - (i) a ship; or
    - (ii) commodities on a ship; or

- (iii) an aircraft.
- (2) A PCBU with management or control of fumigation must ensure that, for the period commencing immediately before the application or release of the fumigant and ending at the completion of the fumigation as determined in accordance with regulation 14.17(2),—
  - (a) the fumigation is adequately supervised; and
  - (b) every point of access to the risk area is controlled to prevent unauthorised entry.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 3471, Schedule 3 cl 8

#### **14.16 Ventilation of fumigation area and safety of risk area**

- (1) This regulation applies to the following types of fumigation:
  - (a) space fumigation;
  - (b) fumigation of—
    - (i) a glasshouse; or
    - (ii) a ship; or
    - (iii) commodities on a ship; or
    - (iv) an aircraft; or
    - (v) a silo; or
    - (vi) grain or other loose material in small bins, or in bulk on the floor of a building or other structure;
  - (c) fumigation in a fumigation cell;
  - (d) fumigation in a shipping container;
  - (e) fumigation under sheets;
  - (f) fumigation of soil or compost in a glasshouse, building, or other enclosed structure.
- (2) A PCBU with management or control of fumigation must—
  - (a) ensure, so far as is reasonably practicable, that the fumigation area is properly ventilated so that, at the completion of fumigation,—
    - (i) in the opinion of a certified handler, the fumigant used to carry out the fumigation has dispersed from all parts of the fumigation area (including all confined spaces in the fumigation area); and

- (ii) the maximum concentration of the fumigant used in the fumigation that is in the risk area is reduced to the lower of the following:
    - (A) the maximum level of exposure permitted in the prescribed exposure standard set in relation to the fumigant or any component of it (if any);
    - (B) the lowest level practicable; and
  - (b) before allowing any person access to the risk area, ensure that the certified handler referred to in subclause (2)(a)(i) is satisfied that the risk area is safe for the person to enter.
- (3) However, if a relevant safe work instrument prescribes modified requirements for proper ventilation of the fumigation area or safety of the risk area (or both), the PCBU must ensure that the modified requirements are complied with.
- (4) A PCBU who contravenes subclause (2) or (3) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 3471, Schedule 3 cl 9

#### **14.17 Completion of fumigation and notice of completion**

- (1) When fumigation is complete, the PCBU with management or control of the fumigation must give notice that fumigation is complete to each person to whom notice was given in accordance with regulation 14.7.
- (2) For the purposes of this regulation, fumigation is complete when—
  - (a) the fumigation area has been ventilated (which must be carried out in accordance with regulation 14.16 if that regulation applies); and
  - (b) the residual level of the fumigant in the risk area is below the prescribed exposure standard (if any); and
  - (c) the certified handler referred to in regulation 14.16(2)(a)(i) (if that regulation applies) has stated that he or she is satisfied that the risk area for the fumigation is safe for persons to enter.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: *Gazette* 2004, p 3471, Schedule 3 cl 10

## Subpart 4—Record-keeping requirements

### 14.18 Requirement to keep record of application

- (1) A PCBU with management or control of work using a fumigant must ensure that a written record of each application of the fumigant is kept in accordance with regulation 13.4 and, if applicable, regulation 14.19, if the application of the fumigant occurs in a place within a workplace where—
  - (a) members of the public may lawfully be present; or
  - (b) the fumigant is likely to enter air or water and leave the place.
- (2) However, if a relevant safe work instrument prescribes modified information requirements to be contained in the written record or modified requirements as to the circumstances in which a written record is to be kept (or both) for the application of a specified fumigant, the PCBU must ensure that the modified requirements are complied with.
- (3) The PCBU must ensure that the written record is kept for at least 3 years after the date on which the fumigant that the record relates to is applied.
- (4) This regulation does not apply to quarantine and pre-shipment uses of methyl bromide.
- (5) A PCBU who contravenes subclause (1), (2), or (3) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

### 14.19 Additional matters to be included in record if certain fumigants from Ripper range are applied

Where a fumigant from the Ripper range (30–55% iodomethane and 45–70% chloropicrin) is applied, the written record referred to in regulation 14.18 must, in addition to the information referred to in regulation 14.18, contain the following information:

- (a) meteorological information including—
  - (i) the wind speed and direction when the fumigant was applied; and
  - (ii) surface temperature inversion conditions when the fumigant was applied; and
  - (iii) a summary of the consideration given to potential surface temperature inversion conditions for the 24-hour period after the fumigant ceased to be applied to the soil within the application block; and
  - (iv) the weather at the time of slicing or removal of the plastic sheets, including the local weather forecast and source of that forecast for the 48-hour period following slicing or removal of the plastic sheets:

- (b) the names of the people who have been notified of the intended fumigation:
- (c) the size of the buffer zone, the method by which the buffer zone was calculated, and the factors taken into account when determining the buffer zone (including identification of any neighbouring properties and buildings within the buffer zone):
- (d) any written permission obtained when setting a buffer zone.

#### Subpart 5—Additional requirements for application of specific fumigants to soil

##### 14.20 Size of application block

- (1) This regulation applies to fumigation using 1 or more of the following fumigants:
  - (a) Ripper range (30–55% iodomethane and 45–70% chloropicrin):
  - (b) Tri-Form 60:
  - (c) any other fumigant required by a relevant safe work instrument to comply with this regulation.
- (2) A PCBU with management or control of fumigation must ensure that an application block is not more than—
  - (a) 3 ha, if a fumigant from the Ripper range (30–55% iodomethane and 45–70% chloropicrin) is applied:
  - (b) 32 ha, if Tri-Form 60 is applied:
  - (c) the maximum area specified in a relevant safe work instrument, if a fumigant described in subclause (1)(c) is applied.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

##### 14.21 Entry restriction for application block

- (1) This regulation applies to a PCBU with management or control of fumigation using 1 or more of the following fumigants:
  - (a) Ripper range (30–55% iodomethane and 45–70% chloropicrin):
  - (b) Tri-Form 60:
  - (c) any other fumigant required by a relevant safe work instrument to comply with this regulation.
- (2) The PCBU must ensure that, from the start of the buffer zone period until the fumigation is complete, no person is present in or enters an application block unless—

- (a) the person has successfully completed a product-specific training course; and
- (b) the person is wearing personal protective equipment; and
- (c) the person's presence or entry is for the purpose of—
  - (i) handling of the fumigant; or
  - (ii) installing, inspecting, or repairing the plastic sheeting used in the fumigation, or the doing of 1 or more of those things, by a certified handler or a person under the supervision of a certified handler; or
  - (iii) carrying out flood prevention activities by a certified handler or a person under the supervision of a certified handler; or
  - (iv) determining whether fumigation is complete, and the person is a certified handler or is under the supervision of a certified handler.
- (3) Despite subclause (2), from the start of the buffer zone period until the fumigation is complete, a person may be present in or enter an application block if the person is wearing personal protective equipment and is—
  - (a) a member of the emergency services responding to an emergency situation; or
  - (b) an inspector.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **14.22 PCBU to set buffer zones**

- (1) This regulation applies to fumigation using 1 or more of the following fumigants:
  - (a) Ripper range (30–55% iodomethane and 45–70% chloropicrin);
  - (b) Tri-Form 60;
  - (c) any other fumigant required by a relevant safe work instrument to comply with this regulation.
- (2) A PCBU with management or control of fumigation must set a buffer zone around the perimeter of the application block for each fumigation.
- (3) The PCBU must, if a fumigant containing Ripper range (30–55% iodomethane and 45–70% chloropicrin) is to be used in the fumigation, ensure that the buffer zone extends at least to the relevant distance specified in table 2 in Schedule 18 unless reduced in accordance with subclause (4).
- (4) The distances in table 2 in Schedule 18 may be reduced by the PCBU by up to 10% for a particular buffer zone if highly retentive film is used.

- (5) The PCBU must, if a fumigant containing Tri-Form 60 is to be used in the fumigation, ensure that the buffer zone extends at least to the relevant distance specified in table 3 in Schedule 18 unless reduced in accordance with subclauses (6) and (7).
- (6) The distances in table 3 in Schedule 18 may be reduced up to a maximum reduction of 80% for a particular buffer zone, in accordance with table 5 in Schedule 18, if highly retentive film is used and the fumigant is applied to specific soil types.
- (7) Despite subclause (6), a buffer zone must in all cases be not less than 8 m.
- (8) The PCBU must, if a fumigant described in subclause (1)(c) is to be used in the fumigation, ensure that the size of the buffer zone complies with the requirements specified in the relevant safe work instrument.
- (9) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **14.23 Restrictions on application of fumigant to soil**

- (1) This regulation applies to fumigation using 1 or more of the following fumigants:
  - (a) Ripper range (30–55% iodomethane and 45–70% chloropicrin):
  - (b) Tri-Form 60:
  - (c) any other fumigant required by a relevant safe work instrument to comply with this regulation.
- (2) A PCBU with management or control of fumigation must ensure that a fumigant is not applied within 400 m of a place, within the workplace, where the public is likely to be present and unable to readily evacuate (for example, a school, a playground, a child care facility, a prison, a hospital, or a long-term care facility).
- (3) However, if a relevant safe work instrument referred to in subclause (1)(c) prescribes a distance from a place where the public is likely to be present and unable to readily evacuate, the PCBU must ensure that the fumigant is not applied within the distance prescribed in the instrument.
- (4) The PCBU must ensure that a fumigant is not applied in the following areas, buildings, and locations in the buffer zone:
  - (a) any part of the buffer zone of another application block:
  - (b) residential areas (including employee housing, private property, buildings, commercial, industrial, and other areas that people may occupy, and outdoor residential areas, for example, lawns, gardens, or play areas):

- (c) buildings used for storage (for example, sheds, barns, or garages) unless—
  - (i) persons will not be present in the storage buildings during the buffer zone period; and
  - (ii) the storage buildings do not share a common wall with a structure where persons will be present during the buffer zone period:
- (d) bus stops or other locations where persons wait for public transport:
- (e) agricultural areas owned or operated by persons other than the owner or operator of the application block unless—
  - (i) the PCBU ensures that the buffer zone does not overlap with a buffer zone from any adjacent property owned or operated by another person (an **affected agricultural area**); and
  - (ii) the owner or operator of an affected agricultural area provides a written assurance to the PCBU that the owner or operator of the affected agricultural area, and other persons legally in the affected agricultural area, will stay out of those parts of the buffer zone that are under the control of that owner or operator during the entire buffer zone period:
- (f) publicly owned or operated areas (for example, parks, rights of way, footpaths, walking paths, athletics fields) unless—
  - (i) the area is a road; or
  - (ii) members of the public will not be present in the area during the buffer zone period; or
  - (iii) the PCBU has taken all practicable steps to ensure that no members of the public enter the area during the buffer zone period.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **14.24 Entry restriction for buffer zone**

- (1) This regulation applies to fumigation using the following fumigants:
  - (a) Ripper range (30–55% iodomethane and 45–70% chloropicrin):
  - (b) Tri-Form 60:
  - (c) any other fumigant required by a relevant safe work instrument to comply with this regulation.
- (2) A PCBU with management or control of fumigation must, for the duration of the buffer zone period, ensure that the only persons within the buffer zone are—



- (a) persons permitted to enter the application block in accordance with regulation 14.21(2) or (3) and those persons are wearing personal protective equipment; or
  - (b) persons in transit through the buffer zone in vehicles (including bicycles) on roads, whose total transit time through the buffer zone within any 24-hour period is less than 15 minutes.
- (3) However, if a relevant safe work instrument referred to in subclause (1)(c) prescribes modified entry requirements for the duration of the buffer zone period, for persons permitted to enter the buffer zone, and for how long they may be in the buffer zone, the PCBU must ensure that the modified requirements are complied with.
- (4) A PCBU who contravenes subclause (1) or (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **14.25 Application timing and conditions**

- (1) This regulation applies to a PCBU with management or control of fumigation using any of the following fumigants:
  - (a) Ripper range (30–55% iodomethane and 45–70% chloropicrin);
  - (b) any other fumigant required by a relevant safe work instrument to comply with this regulation.
- (2) The PCBU must ensure that the fumigant is not applied to the soil—
  - (a) earlier than 30 minutes after sunrise; or
  - (b) later than 1 hour before sunset; or
  - (c) when the wind speed is less than 5 kph; or
  - (d) during surface temperature inversion conditions; or
  - (e) when the conditions in paragraph (c) or (d) are forecast for the 24-hour period following the completion of the last application of the fumigant within an application block.
- (3) However, if a relevant safe work instrument referred to in subclause (1)(b) prescribes 1 or more modified timing, atmospheric, or soil condition requirements for the specified fumigant, the PCBU must ensure that the modified requirements are complied with.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**14.26 Measures required to restrict fumigant emission from treated soil**

- (1) This regulation applies to a PCBU with management or control of fumigation using any of the following fumigants:
  - (a) Tri-Form 60;
  - (b) any other fumigant required by a relevant safe work instrument to comply with this regulation.
- (2) The PCBU must ensure at the beginning of the application that—
  - (a) the soil temperature at the depth of injection of Tri-Form 60 is a minimum of 10°C and does not exceed 27°C; and
  - (b) the moisture content of the soil is—
    - (i) equal to or more than 70% when measured with a tensiometer; or
    - (ii) between 75–100% as defined by the USDA Feel and Appearance method.
- (3) However, if a relevant safe work instrument referred to in subclause (1)(b) prescribes modified soil condition requirements, the PCBU must ensure that the modified requirements are complied with.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**14.27 Sealing soil after fumigation: Tri-Form 60 and new fumigants**

- (1) This regulation applies to a PCBU with management or control of fumigation using any of the following fumigants:
  - (a) Tri-Form 60;
  - (b) any other fumigant required by a relevant safe work instrument to comply with this regulation.
- (2) The PCBU must ensure that,—
  - (a) for broadacre treatment,—
    - (i) soil fumigated with the fumigant is sealed to prevent fumigant loss by using equipment that will uniformly mix the soil to a depth of 8 to 10 cm; and
    - (ii) the soil surface is compacted with a roller in combination with tillage equipment:
  - (b) for row treatment,—
    - (i) the beds at the time of application are formed so that the fumigant is at least 30 cm from the nearest soil and air interface; and

- (ii) the application beds are sealed by using equipment that disrupts the tyne trace:
- (c) if plastic sheets are used,—
  - (i) soil fumigated with the fumigant is covered immediately with plastic sheets appropriate for use in fumigation operations; and
  - (ii) the plastic sheets remain in place until the fumigation is complete; and
  - (iii) the plastic sheets are not sliced or removed until the fumigation is complete; and
  - (iv) despite paragraph (iii), the plastic sheets are not sliced or removed after the fumigation is complete if it is raining, or if rain is expected to fall within 48 hours; and
  - (v) if plastic sheets are sliced for removal, they are not removed within 24 hours of slicing.
- (3) However, if the relevant safe work instrument referred to in subclause (1)(b) prescribes modified requirements for sealing soil after application of a specified fumigant to the soil, the PCBU must ensure that the modified requirements are complied with.
- (4) A PCBU who contravenes subclause (2) or (3) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **14.28 Sealing soil after fumigation: Ripper range**

- (1) This regulation applies to a PCBU with management or control of fumigation using a fumigant from the Ripper range (30–55% iodomethane and 45–70% chloropicrin).
- (2) The PCBU must ensure that—
  - (a) soil fumigated with the fumigant is covered immediately with plastic sheeting appropriate for use in fumigation operations; and
  - (b) the plastic sheets remain in place until the fumigation is complete; and
  - (c) the plastic sheets are not sliced or removed until the fumigation is complete; and
  - (d) despite paragraph (c), the plastic sheets are not sliced or removed after the fumigation is complete if it is raining, or if rain is expected to fall within 48 hours; and
  - (e) if the plastic sheets are sliced for removal, they are not removed within 24 hours of slicing.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—

- (a) for an individual, to a fine not exceeding \$10,000:
- (b) for any other person, to a fine not exceeding \$50,000.

#### **14.29 Disposal of plastic sheets used for fumigation under sheets**

- (1) A PCBU with management or control of fumigation under sheets must ensure that any plastic sheets used for the fumigation are disposed of in a manner consistent with the disposal requirements for packages set out in the Hazardous Substances (Disposal) Notice 2017.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **14.30 Fumigation using CytecGas01**

- (1) This regulation applies to a PCBU with management or control of fumigation using CytecGas01, HSNO approval number HSR007629.
- (2) The PCBU must ensure that the fumigant is used in conjunction with on-site blending equipment that has been approved or manufactured by the manufacturer of CytecGas01.
- (3) The PCBU must ensure that, if the fumigant is combined with air, the fumigant is combined with air to a concentration of no more than 1% (v/v).
- (4) The PCBU must ensure that, if the fumigant is combined with carbon dioxide gas, the fumigant is combined with carbon dioxide gas to a concentration of no more than 3% (v/v).
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **14.31 PCBU to develop fumigation management plan**

- (1) A PCBU with management or control of fumigation using CytecGas01, HSNO approval number HSR007629, must ensure that a fumigation management plan is developed before fumigation occurs and is implemented during the fumigation operation.
- (2) The fumigation management plan must include a monitoring plan that enables the PCBU to determine whether nearby workers and bystanders are exposed to levels of the fumigant above the allowed limits during application, fumigation, and aeration.
- (3) The fumigation management plan must ensure that, when implemented, nearby residents will not be exposed to concentrations above the allowed limits.

- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

### Subpart 6—Further requirements for uses of methyl bromide

#### 14.32 Interpretation

In this subpart, unless the context otherwise requires,—

**1-hour exposure level** means the average exposure level for each 60-minute time period from the start of ventilation until the end of the buffer zone period

**24-hour exposure level** means the average exposure level for each 24-hour time period from the start of ventilation until the end of the buffer zone period

**annual exposure level** means the total of 24-hour exposure levels recorded over a calendar year and averaged over 365 days

**apply**, in relation to methyl bromide, includes to inject methyl bromide into an enclosed space, and **application** has a corresponding meaning

**buffer zone**, in relation to an area being fumigated, means an area extending outward in all directions from the perimeter of each enclosed space being fumigated to the relevant distance specified in table 4 in Schedule 18

**buffer zone period**, in relation to the application of methyl bromide, means the period starting when methyl bromide is first applied to an enclosed space and ending when the recording of data required by regulation 14.35 is no longer required in relation to that application

**container**, in relation to methyl bromide, means anything used to contain methyl bromide during fumigation, except a ship's hold or sheet

**discharge**, in relation to methyl bromide, means the unintentional release of methyl bromide into open air

**enclosed space** means a container, a ship's hold, or the space under a sheet

**exposure level**, in relation to methyl bromide, means the concentration of methyl bromide in the air recorded at the monitoring location

**fumigation**, in relation to methyl bromide, means the application, ventilation, or recapture of methyl bromide for the purpose of destruction of rodents, pests, other plant or animal organisms, or fungi

**location**, in relation to fumigation at any site, means the place on the site the fumigation is occurring (which may be recorded as either New Zealand Mapping Series grid references or on a map with a resolution of at least 1:10 000)

**medical officer of health** has the same meaning as in section 2(1) of the Health Act 1956

**monitoring location**, in relation to a buffer zone, means the point on land at the edge of the buffer zone that is in the most downwind direction from the enclosed space being ventilated

**recapture technology**, in relation to methyl bromide, means a system that mitigates methyl bromide emissions from fumigation enclosures

**sheet** means a heavy-duty polyethylene cover having a low mass transfer coefficient for the fumigant being used that is waterproof and non-permeable

**site**, in relation to the use of methyl bromide on land, means an area of land within a workplace where the methyl bromide is used and (regardless of whether the area is bisected by a road or right of way) that—

- (a) consists of—
  - (i) a single allotment or other legally defined parcel of land that is the smaller of—
    - (A) an allotment or parcel held in a single certificate of title:
    - (B) an allotment or parcel for which a separate certificate of title could be issued without the further consent of the relevant local authority; or
  - (ii) 2 or more adjoining legally defined parcels of land held together in 1 certificate of title in such a way that the lots cannot be dealt with separately without the further consent of the relevant local authority; or
  - (iii) 2 or more adjoining certificates of title that are—
    - (A) subject to a condition imposed under section 37 of the Building Act 2004 or section 240 of the Resource Management Act 1991; or
    - (B) held together in such a way that they cannot be dealt with separately without the further consent of the relevant local authority; and
- (b) contains—
  - (i) for land subdivided under the cross lease or company lease systems (other than strata titles),—
    - (A) a building or buildings used for residential or business purposes with any accessory building, plus any land exclusively restricted to the users of that building; or
    - (B) a remaining share or shares in the fee simple creating a vacant part of the whole for future cross lease or company lease purposes; and
  - (ii) for land subdivided under the Unit Titles Act 2010 (other than strata titles), a principal unit or proposed unit on a unit plan together with its accessory units, and includes—

- (A) for strata titles, an area of land comprised in underlying certificate of titles, immediately before subdivision; and
- (B) an activity that occupies more than 1 adjoining allotment, whether held in single legal title or multiple titles, and for the purpose of compliance with any rules that specify a level of effect at the boundary or that specify capacities or discharge quantities, the total area of land occupied by that activity, the boundary of which is the boundary around that area of land

**TELair value** means the tolerable exposure limit set by the EPA in accordance with the HSNO Act

**use**, in relation to methyl bromide, includes to apply, discharge, or ventilate methyl bromide

**ventilate**, in relation to methyl bromide, means the release of methyl bromide into the atmosphere, and **ventilation** has a corresponding meaning.

*Quarantine or pre-shipment uses of methyl bromide*

**14.33 Restriction on fumigation**

- (1) A PCBU with management or control of quarantine or pre-shipment fumigation using methyl bromide must ensure that methyl bromide is applied only into an enclosed space.
- (2) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**14.34 Requirement to secure place where fumigation carried out**

- (1) A PCBU with management or control of quarantine or pre-shipment fumigation using methyl bromide must ensure that fumigation is carried out in a place within a workplace that is secured against ready access by persons other than those permitted by the PCBU to access the place.
- (2) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**14.35 Requirement to keep records**

- (1) A PCBU with management or control of quarantine or pre-shipment fumigation using methyl bromide must ensure that accurate records are kept, for each application, of the data specified in this regulation.

- (2) If recapture technology is used in the fumigation, the data is—
  - (a) the date and time of each application and recapture; and
  - (b) the amount of methyl bromide applied and recaptured; and
  - (c) the location where methyl bromide was applied and recaptured; and
  - (d) the type of enclosed space into which methyl bromide was applied; and
  - (e) the capacity of the enclosed space; and
  - (f) the name of each worker using methyl bromide and the physical address of the worker's workplace.
- (3) If recapture technology is not used in the fumigation, the data is—
  - (a) the date and time of each application and ventilation; and
  - (b) the amount of methyl bromide applied; and
  - (c) the location where methyl bromide was applied and ventilated; and
  - (d) the wind speed and direction every 3 minutes at the location during ventilation; and
  - (e) the type of enclosed space into which methyl bromide was applied; and
  - (f) the capacity of the enclosed space; and
  - (g) the name of each worker using methyl bromide and the physical address of the worker's workplace; and
  - (h) for each monitoring location, exposure levels; and
  - (i) for each monitoring location, the type and location of the monitoring equipment used to record the exposure levels.
- (4) For each discharge of methyl bromide during fumigation, the data is—
  - (a) the date and time of each discharge; and
  - (b) the approximate amount of methyl bromide discharged; and
  - (c) the location where methyl bromide was discharged; and
  - (d) the approximate wind speed and direction at the location when the discharge occurred; and
  - (e) where the discharge occurred from; and
  - (f) the reason why the discharge occurred; and
  - (g) the capacity of the enclosed space; and
  - (h) the name of each worker using methyl bromide and the physical address of the worker's workplace.
- (5) The PCBU must ensure that the data required to be recorded by this regulation is recorded every 3 minutes from the start of ventilation until the exposure level is below 0.05 ppm for at least—
  - (a) 15 minutes, where 7 kg or more of methyl bromide is applied in a 1 hour period; or



- (b) 3 minutes, where less than 7 kg of methyl bromide is applied in a 1 hour period.
- (6) The PCBU must ensure that the records required by this regulation are—
  - (a) kept for not less than 7 years after the date of the fumigation to which they relate; and
  - (b) made available for inspection during that period.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

#### **14.36 Record of 1-hour and 24-hour exposure levels**

- (1) A PCBU with management or control of a site at which quarantine or pre-shipment fumigation occurs using methyl bromide must, for each monitoring location, keep a record for each ventilation of the—
  - (a) 1-hour exposure level; and
  - (b) 24-hour exposure level.
- (2) The PCBU must notify WorkSafe and the relevant medical officer of health as soon as practicable, but within 5 working days, if—
  - (a) the 1-hour exposure level exceeds the 1-hour TELair value for methyl bromide; or
  - (b) the 24-hour exposure level exceeds the 24-hour TELair value for methyl bromide.
- (3) The PCBU must ensure that the records required by subclause (1) are—
  - (a) kept for not less than 7 years after the date of the quarantine or pre-shipment fumigations to which they relate; and
  - (b) made available for inspection during that period.
- (4) A PCBU who contravenes subclause (1) or (3) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.
- (5) A PCBU who contravenes subclause (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

### **14.37 Annual monitoring report**

- (1) A PCBU with management or control of a site where more methyl bromide than the reporting threshold amount specified in subclause (2) is applied must produce an annual monitoring report in accordance with subclause (3).
- (2) The reporting threshold is 500 kg or more of methyl bromide applied in quarantine or pre-shipment fumigation in 1 calendar year at a site, excluding any methyl bromide that is recaptured using recapture technology.
- (3) The annual monitoring report must contain the following information for each calendar year:
  - (a) the number of quarantine or pre-shipment fumigations using methyl bromide carried out at the site; and
  - (b) the total amount of methyl bromide applied at the site; and
  - (c) the types of enclosed spaces to which methyl bromide has been applied; and
  - (d) the types of equipment used to carry out the monitoring of methyl bromide; and
  - (e) the annual exposure level at the site; and
  - (f) the approximate total quantity of methyl bromide discharged; and
  - (g) the number of notifications made in accordance with regulation 14.36(2), identified by each monitoring location; and
  - (h) the number of times the exposure levels exceeded the TELair value; and
  - (i) if a breach of a TELair value has occurred, an outline of what risk mitigation measures have been or are being taken; and
  - (j) any accidents or other issues related to non-compliance with any of the applicable requirements in these regulations.
- (4) The PCBU with management or control of the site must provide the annual monitoring report to WorkSafe and the relevant medical officer of health by 30 June of the year following the calendar year to which the report relates.
- (5) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.
- (6) A PCBU who contravenes subclause (4) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

**14.38 Minimum buffer zone**

- (1) A PCBU with management or control of quarantine or pre-shipment fumigation using methyl bromide must set a buffer zone for each fumigation that is equal to or more than the relevant distance in table 4 in Schedule 18.
- (2) The PCBU must ensure that no member of the public is in the buffer zone during the buffer zone period.
- (3) Despite subclause (2), if a buffer zone extends over water, the PCBU must ensure so far as reasonably practicable that—
  - (a) the buffer zone is kept under observation; and
  - (b) if a member of the public enters the buffer zone, the member of the public moves out of the buffer zone as soon as is reasonably practicable.
- (4) Despite subclause (1), the requirement to comply with the buffer zone distances referred to in that subclause does not apply to fumigation where recapture technology or a method specified in a relevant safe work instrument is used.
- (5) A person must not use methyl bromide within 25 m of any place where members of the public are likely to be present and are unable to readily evacuate (for example, a school, playground, child care facility, prison, hospital, or long-term care facility).
- (6) A person who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**14.39 Prohibition on use of methyl bromide in excess of tolerable exposure limit**

- (1) A PCBU with management or control of quarantine or pre-shipment fumigation using methyl bromide must ensure that it is not used in a manner that results in a concentration of the substance in the air at the boundary of the buffer zone that exceeds the tolerable exposure limit set for methyl bromide.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**14.40 Requirements for sheets**

- (1) A PCBU with management or control of quarantine or pre-shipment fumigation must ensure that methyl bromide is not applied under sheets in connection with the fumigation unless each sheet is—
  - (a) in good repair without tears, rips, or visible holes; and
  - (b) made secure against likely weather conditions at the site; and
  - (c) sealed.

- (2) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

*Soil fumigation for potato wart using methyl bromide*

**14.41 Application of methyl bromide by authorised person only**

- (1) A PCBU with management or control of soil fumigation for potato wart using methyl bromide must ensure the fumigant is applied only by a person who—
  - (a) holds a relevant appointment as an authorised person under the Bio-security Act 1993; or
  - (b) is working under the direct supervision of an authorised person under that Act.
- (2) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

**14.42 Duty of PCBU to use sheets for soil fumigation for potato wart**

- (1) A PCBU with management or control of soil fumigation for potato wart must apply methyl bromide only to soil that is covered by a sheet.
- (2) The PCBU must ensure that—
  - (a) the sheet remains in place for at least 24 hours after methyl bromide is applied; and
  - (b) where more than 1 sheet is used, the adjacent sheets must overlap by a minimum of 50 mm and be securely bonded; and
  - (c) the sheet is kept secure against likely weather conditions at the site; and
  - (d) the sheet is sealed with a border trench that is filled with heavy material; and
  - (e) the sheet is removed by slowly rolling it off the fumigated soil.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**14.43 Duty of PCBU in relation to evacuation and access to site fumigated for potato wart**

- (1) This regulation applies to every residential property that is within 25 m of a site to be fumigated for potato wart involving the use of methyl bromide.

- (2) A PCBU with management or control of soil fumigation for potato wart must ensure that no member of the public is at the residential property from the time that methyl bromide is applied until the later of the following:
- (a) 24 hours after the sheet is removed; or
  - (b) after the removal of the sheet, the time when the concentration of methyl bromide measured at 30 cm above the treated soil has been less than 0.05 ppm for a period of 15 minutes.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

## Part 15

### Gases under pressure

#### 15.1 Interpretation

In this Part, unless the context otherwise requires,—

**aerosol** means a substance packed under pressure and designed to be released as a solid, as liquid particles in suspension in a gas, as a foam, paste, or powder, or in a liquid state or a gaseous state

**aerosol dispenser** means a non-refillable gas container that is made of metal, glass, or plastic, or any combination of those things, and that—

- (a) contains a gas that is compressed, liquefied, or dissolved under pressure (with or without any accompanying liquid, paste, or powder); and
- (b) is fitted with a release device allowing the contents to be released—
  - (i) as a solid; or
  - (ii) as liquid particles in suspension in a gas; or
  - (iii) as a foam, paste, or powder; or
  - (iv) in a liquid state or a gaseous state

**AS 2030.2—1996** means the AS standard on The verification, filling, inspection, testing and maintenance of cylinders for the storage and transport of compressed gases—Cylinders for dissolved acetylene

**AS 2030.5—2009** means the AS standard on Gas cylinders—Filling, inspection and testing of refillable cylinders

**AS 2278.1—2008** means the AS standard on Aerosol containers—Metal aerosol dispensers of capacity 50 m L to 1000 m L inclusive

**AS 2337.1—2004** means the AS standard on Gas cylinder test stations—General requirements, inspection and tests—Gas cylinders

**AS 2337.3—2006** means the AS standard on Gas cylinder test stations—Transportable gas cylinders—Periodic inspection and testing of composite gas cylinders (ISO 11623:2002, MOD)

**AS 2473.1—2006** means the AS standard on Valves for compressed gas cylinders—Specifications, type testing, and manufacturing tests and inspections

**AS 2473.2—2015** means the AS standard on Valves for compressed gas cylinders—Outlet connections (threaded) and stem (inlet) threads

**AS 2473.3—2007** means the AS standard on Valves for compressed gas cylinders—Outlet connections for medical gases (including pin-indexed yoke connections)

**AS 3635—1990** means the AS standard on Unified (ISO inch) screw threads, associated gauges, and gauging practice

**AS 3840.1—1998** means the AS standard on Pressure regulators for use with medical gases—Pressure regulators and pressure regulators with flow-metering devices

**AS 4267—1995** means the AS standard on Pressure regulators for use with industrial compressed gas cylinders

**AS 4621—2004** means the AS standard on Regulators for use with liquefied petroleum—Vapour phase

**AS/NZS 1841.1—AS/NZS 1841.8** means the AS/NZS standard AS/NZS 1841 (which consists of Parts 1 to 8) on Portable Fire Extinguishers, published in 2007

**AS/NZS ISO/IEC 17065:2013** means the AS/NZS ISO/IEC standard on Conformity assessment—Requirements for bodies certifying products, processes and services

**BS 341** means the British standard on Transportable gas container valves

**BS 1552** means the British standard on Specification for open bottomed taper plug valves for 1st, 2nd, and 3rd family gases up to 200 mbar

**BS EN ISO 10297:2014** means the British/European/ISO standard on Gas cylinders—Cylinder valves—Specification and type testing

**BS EN ISO 12209:2013** means the British/European/ISO standard on Gas cylinders—Outlet connections for gas cylinder valves for compressed breathable air

**BS EN ISO 407:2004** means the British/European/ISO standard on Small medical gas cylinders—Pin-index yoke-type valve connections

**BS EN 16129:2013** means the British/European standard on Pressure regulators, automatic change-over devices, having a maximum regulated pressure of 4 bar, with a maximum capacity of 150 kg/h, associated safety devices and adaptors for butane, propane, and their mixtures

**BSP** means a British standard pipe

**CFR** means the Code of Federal Regulations of the United States of America, revised as at 1 October 2016

**CGA** means the Compressed Gas Association

**CGA V 1:2013** means the Compressed Gas Association standard for Compressed gas cylinder outlet and inlet connections, published 5 January 2013

**charge** means to load or fill a gas container

**critical temperature** means the temperature of a gas in its critical state, above which it cannot be liquefied by pressure alone

**cryogenic container** means a closed pressure container designed to maintain an internal temperature low enough to cause the gas inside it to revert to its liquid or partially liquid state

**CSA** means the CSA Group (formerly the Canadian Standards Association)

**design** means all specifications (including drawings) necessary to describe the attributes of a gas container

**DIN** means Deutsches Institut für Normung e.V. (German Institute for Standardization)

**DIN EN ISO 11363-1:2012-06** means the standard on Gas cylinders—17E and 25E taper threads for connection of valves to gas cylinders—Part 1: Specifications

**dry gas** means a gas having a dew point of less than  $-40^{\circ}\text{C}$  at a pressure of 101.3 kPa absolute

**empty weight**, in relation to a cylinder, means the weight of the cylinder complete with its valve and any other fittings or appurtenances that are normally on the cylinder before it is charged

**filling ratio**, in relation to a liquefied gas, means the ratio of the mass of gas charged into a gas container to the mass of water at  $15^{\circ}\text{C}$  that fills the gas container

**fire extinguisher registration number** means a fire extinguisher registration number issued by a product certification body in accordance with regulation 15.22

**fitting**, in relation to a gas container, includes a valve, adaptor, automatic changeover device, gauge, regulator, seal, hose, or other fitting that is connected to a gas container and that is used to—

- (a) charge the gas container with gas or empty it; or
- (b) seal a connection to a gas container with gas; or
- (c) connect the gas container directly to another item associated with the use of the gas; or
- (d) protect the gas container from overpressurising

**high-pressure fire extinguisher** means a fire extinguisher that is not a low-pressure fire extinguisher

**high-pressure liquefied gas** means a liquefied gas with a critical temperature above  $-50^{\circ}\text{C}$  but below or equal to  $+65^{\circ}\text{C}$

**ISO/IEC 17011:2004** means the ISO/IEC standard on Conformity assessment—General requirements for accreditation bodies accrediting conformity assessment bodies

**LC50** means the median lethal concentration, being a statistically derived concentration of a substance that can be expected to cause death in 50% or more of the organisms exposed to the substance for a specified time

**LH** means left hand

**low-pressure fire extinguisher** means a fire extinguisher with a test pressure of less than 7 000 kPa

**low-pressure liquefied gas** means a liquefied gas with a critical temperature above  $+65^{\circ}\text{C}$

**LPGITA** means the Liquefied Petroleum Gas Industry Technical Association (United Kingdom)

**maximum developed pressure** means the pressure developed by the contents of a gas container in equilibrium at the reference temperatures specified in table 1 in Schedule 20

**NGO** means the National Gas Outlet (America)

**NZS ISO/IEC 17025:2005** means the New Zealand standard on General requirements for the competence of testing and calibration laboratories

**product certification body** means a body accredited to AS/NZS ISO/IEC 17065:2013 by a national or New Zealand joint accreditation agency operating to ISO/IEC 17011:2004

**recognised inspection agency** means a person or organisation recognised by WorkSafe for the purposes of any of regulations 15.15, 15.16, 15.37, 15.40, or 15.80

**reference temperature**, in relation to a filling ratio, means the temperature at which the density of a liquid is to be evaluated for calculating the filling ratio

**RH** means right hand

**tare weight**, in relation to a cylinder, means the weight of the cylinder shell with all removable fittings removed

**test pressure** means the pressure the cylinder is designed and tested to withstand

**test station** means a PCBU who is authorised by WorkSafe under regulation 15.52 to inspect and test gas cylinders and issue test reports



**UL 125:2009** means the UL standard on Flow control valves for anhydrous ammonia and LP-Gas

**UL 144:2012** means the UL standard on LP-Gas regulators

**UL 252** means the UL standard on Compressed gas regulators

**UL 1769:2006** means the UL standard on Cylinder valves

**UL 2061** means the UL standard on Adapters and cylinder connection devices for portable LP-Gas cylinder assemblies

**UL 2227** means the UL standard on Overfilling prevention devices

**water capacity** means the volume of water at 15°C that fills a gas container that is fitted for use with any valve, dip tube, float, or other necessary fittings.

Compare: SR 2004/43 r 3

### **15.2 Application of this Part to certain pressure equipment**

- (1) This Part, except the provisions applied by subclause (2), does not apply to pressure equipment to which the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999 apply.
- (2) Subparts 1 and 8 apply, with the necessary modifications, to that equipment.

Compare: SR 2004/43 r 4

### **15.3 Application of this Part to UN Model Regulations cylinders**

- (1) Subparts 2 and 3 (which relate to the design, construction, and initial testing of cylinders, including certain fire extinguishers) do not apply to a cylinder that is marked, in accordance with clause 6.2.2.7 of chapter 6.2 of the UN Model Regulations, with markings that—
  - (a) are affixed by or on behalf of the Government of a country other than New Zealand; and
  - (b) certify that the cylinder has been designed and constructed, and has passed initial inspections and tests, in accordance with chapter 6.2 of the UN Model Regulations.
- (2) Regulations 15.40 to 15.43 (which relate to the marking of cylinders) do not apply to a cylinder that is marked in accordance with clause 6.2.2.7 of chapter 6.2 of the UN Model Regulations.
- (3) A compliance certifier may issue a compliance certificate for an imported cylinder that is referred to in subclauses (1) and (2) in accordance with Schedule 19.
- (4) If the compliance certifier issues the compliance certificate for the cylinder, the certifier must provide WorkSafe with a copy of the certificate.
- (5) If the cylinder is repaired in New Zealand, it must be repaired in accordance with regulation 15.80.

Compare: SR 2004/43 r 5A

## Subpart 1—Reference temperatures and compatibility

**15.4 Design to withstand maximum developed pressure**

- (1) A PCBU who designs, manufactures, imports, or supplies a gas container for the packaging, transport, or storage of a gas under pressure that is not intended for use outside of New Zealand must ensure that the container is of a design that is adequate to withstand the maximum developed pressure for the gas container as specified in the standard that applies to the design at the reference temperature for the size and type of gas container specified in table 1 in Schedule 20.
- (2) An application for alteration of a design to withstand maximum developed pressure must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 rr 6, 7

**15.5 Compatibility**

- (1) A PCBU who designs, manufactures, imports, or supplies a gas container must ensure that all parts of the gas container (including fittings, lubricants, and insulating material) that will or may come into contact with the contents (including any gas, solvent, expellable material, or porous material) are compatible with the contents.
- (2) In subclause (1), **compatible** means—
  - (a) one of the following:
    - (i) the gas container is chemically inert in relation to its intended contents for the range of operating temperatures and pressures specified in the design:
    - (ii) if any part of the gas container will chemically react with its intended contents, the reaction—
      - (A) will not cause or contribute to a fire or explosion; and
      - (B) will not generate a hazardous substance:
    - (iii) if any part of the gas container will chemically react with its intended contents, and the contents include a hazardous substance (the **original substance**), the reaction will not generate a new hazardous substance with a classification as provided (if applicable) in the Hazardous Substances (Classification) Notice 2017 relating to

the classification that is different from the classification for the original substance; and

- (b) the gas container will not be softened, weakened, susceptible to brittle fracture or stress corrosion cracking, or be otherwise affected by any intended contents of the gas container, in such a way that any part of the gas container will not meet any requirement to which it is subject under this Part.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 8

## Subpart 2—Refillable cylinders

### 15.6 Application of subpart 2

- (1) This subpart applies to—
- (a) refillable cylinders (including high-pressure fire extinguishers that are refillable cylinders); and
  - (b) any refillable or non-refillable gas container required by a relevant safe work instrument to comply with this subpart.
- (2) This subpart does not apply to any other non-refillable gas container or a non-refillable aerosol dispenser.

Compare: SR 2004/43 r 9

### 15.7 Use and supply of cylinders

- (1) A PCBU must not use or supply a cylinder in New Zealand unless the cylinder has,—
- (a) if it was manufactured in New Zealand,—
    - (i) a design verification certificate issued in accordance with regulation 15.13; and
    - (ii) a manufacturing certificate issued in accordance with regulation 15.15; and
    - (iii) if required, a pre-commissioning certificate issued in accordance with regulation 15.19 or an exemption under section 220 of the Act from the requirement to have a pre-commissioning certificate; or
  - (b) if it was manufactured outside New Zealand,—
    - (i) a compliance certificate issued in accordance with regulation 15.16; and

- (ii) if required, a pre-commissioning certificate issued in accordance with regulation 15.19 or an exemption under section 220 of the Act from the requirement to have a pre-commissioning certificate.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 9A

### **15.8 Design standards for cylinders**

- (1) A PCBU who designs, manufactures, imports, or supplies a cylinder, other than a fire extinguisher, must ensure that the design for the cylinder complies with—
  - (a) an applicable standard that is listed in Schedule 21; or
  - (b) a relevant safe work instrument that specifies design standards for cylinders.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 10

### **15.9 Design standards for refillable high-pressure fire extinguishers**

- (1) A PCBU who designs, manufactures, imports, or supplies a high-pressure fire extinguisher that is refillable must ensure that the design for the extinguisher complies with—
  - (a) an applicable standard that is listed in Schedule 21; or
  - (b) a relevant safe work instrument that specifies design standards relating to high-pressure fire extinguishers.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 11

### **15.10 Design standards for cylinder neck threads**

- (1) A PCBU who designs, manufactures, imports, or supplies a cylinder, other than a low-pressure fire extinguisher, must ensure that the cylinder neck thread complies with—
  - (a) the standard to which the cylinder is designed; or

- (b) if that standard does not specify requirements for the neck thread,—
    - (i) AS 2473.1—2006; or
    - (ii) AS 2473.2—2015; or
    - (iii) CGA V 1:2013; or
    - (iv) DIN EN ISO 11363-1:2012-06; or
    - (v) Unified Screw Thread (UNF) class 2B of AS 3635—1990; or
  - (c) a relevant safe work instrument that specifies design standards relating to cylinder neck threads.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 12

### 15.11 Materials used for cylinders

- (1) A PCBU who designs, manufactures, imports, or supplies a cylinder must ensure that materials used in the construction of the cylinder have properties that ensure that the cylinder will contain a gas under pressure for the following temperature range:
- (a) a low temperature not higher than—
    - (i) the temperature prescribed in the standard to which the cylinder was designed as the low temperature applying to the design of the cylinder; or
    - (ii) for a cryogenic container, the lowest temperature reached by the gas under pressure (liquefied or partially liquefied) that the cylinder is designed to hold:
  - (b) a high temperature not lower than the reference temperature specified in table 1 in Schedule 20 for the size and type of cylinder.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 13

### 15.12 Cylinders for gases held at cryogenic temperatures

- (1) A PCBU who designs, manufactures, imports, or supplies a cryogenic container must ensure that it is designed so that—
- (a) the surface of any part of the container designed to maintain the temperature of the gas is sufficiently insulated from the exterior surfaces of

- the cylinder so as to prevent injury to a person handling the container;  
and
  - (b) moisture cannot enter into the insulation space or insulation material;  
and
  - (c) if the design provides for a vacuum between the inner and outer shells,  
the outer shell is able to withstand an external pressure of at least  
200 kPa absolute without permanent deformation.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- Compare: SR 2004/43 r 14

#### **15.13 Design verification of cylinders**

- (1) A PCBU may apply to a compliance certifier for a design verification certificate for a cylinder.
- (2) The application must—
  - (a) include all relevant specifications, including technical drawings and calculations; and
  - (b) refer to a cylinder design referred to in regulation 15.8 or 15.9.
- (3) A compliance certifier may issue a design verification certificate for a cylinder design only if the compliance certifier is satisfied that the design meets the applicable requirements of this subpart.
- (4) A compliance certifier may specify any conditions relating to the design of the cylinder to which the certificate is subject.
- (5) A compliance certifier must, as soon as practicable after issuing a design verification certificate, provide to WorkSafe—
  - (a) a copy of the design verification certificate and any conditions relating to the certificate; and
  - (b) a copy of the application for the design verification certificate.
- (6) On receiving the information required under subclause (5), WorkSafe must—
  - (a) allocate a record number to the design verification certificate; and
  - (b) enter the details of the design verification certificate in the record kept under regulation 15.81.

Compare: SR 2004/43 r 15

#### **15.14 Cylinder not to be used beyond specified cylinder life**

- (1) A PCBU must not use a cylinder beyond the maximum life of the cylinder specified in the standard to which the cylinder was designed.

- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 51

### *Manufacture of cylinders*

#### **15.15 Requirements on manufacture of cylinders**

- (1) A PCBU who manufactures a cylinder must—
- (a) manufacture the cylinder to a design—
    - (i) for which a design verification certificate has been obtained under regulation 15.13; and
    - (ii) that complies with a cylinder design referred to in regulation 15.8 or 15.9; and
  - (b) obtain a manufacturing certificate for each batch of cylinders from a recognised inspection agency stating that the batch of cylinders has been manufactured in accordance with that design and meets the quality assurance requirements specified in the design; and
  - (c) provide copies of the manufacturing certificate to the purchaser of the batch to which the certificate relates.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 16

### *Importation of cylinders*

#### **15.16 Restrictions on, and compliance certificates for, imported cylinders**

- (1) A PCBU who imports a cylinder or a batch of cylinders must obtain a compliance certificate for each cylinder.
- (2) An importer to whom subclause (1) applies must not supply cylinders unless the importer has first obtained the compliance certificate.
- (3) An application for a compliance certificate must contain the following information:
- (a) a manufacturer's certificate endorsed by a recognised inspection agency;
  - (b) the number of cylinders in a batch;
  - (c) the cylinders' serial numbers (or batch numbers for fire extinguishers containing a substance other than a permanent or a liquefied gas):

- (d) information that specifies the gas or gases for which the cylinder or cylinders are intended to be used;
  - (e) the water capacity of each cylinder;
  - (f) the standard to which the cylinders were designed;
  - (g) the record number of the design verification certificate relating to the cylinders.
- (4) A compliance certifier may issue a compliance certificate for the cylinders to which the application relates only if satisfied that—
  - (a) the information referred to in subclause (3) has been received; and
  - (b) the markings on the cylinders comply with subpart 6; and
  - (c) any conditions on the cylinder design verification certificate relating to the cylinders have been satisfied; and
  - (d) the cylinders passed the tests and inspections referred to in regulation 15.19(2)(b); and
  - (e) on a visual inspection, there is no other damage to the cylinder.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 18

### *Pre-commissioning certificates*

#### **15.17 Requirement for pre-commissioning certificate**

- (1) A PCBU must not use or supply an imported or manufactured cylinder of a design that has not been previously imported into, or manufactured in, New Zealand unless the PCBU has first obtained a pre-commissioning certificate under regulation 15.19.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 20

#### **15.18 Prescribed requirements for exemption from requirement to obtain certain certificates**

- (1) This regulation prescribes requirements relating to exemptions, under section 220 of the Act, from compliance with—
  - (a) regulation 15.13 (design verification certificate);
  - (b) regulation 15.16 (compliance certificate for imported cylinder);



- (c) regulation 15.17 (pre-commissioning certificate).
- (2) An application for an exemption must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (3) In considering whether to grant an exemption, WorkSafe must have regard to—
  - (a) the types and quantities of cylinders to which the application relates; and
  - (b) the types and quantities of substances that are intended to be contained in those cylinders; and
  - (c) the compliance and quality control history of the manufacturer of the cylinders to which the application relates; and
  - (d) the similarity of the design and manufacture of the cylinders to the design and manufacture of other cylinders previously supplied by that manufacturer.
- (4) If WorkSafe grants an exemption, WorkSafe must—
  - (a) allocate a special record number to the design; and
  - (b) enter the details of the special record number in the record kept under regulation 15.82.

#### **15.19 Issue of pre-commissioning certificate**

- (1) A PCBU may apply to a compliance certifier for a pre-commissioning certificate for a cylinder design.
- (2) A compliance certifier may issue a pre-commissioning certificate for the cylinder design only if the certifier is satisfied that—
  - (a) the relevant batch of cylinders meets the requirements of regulation 15.16(3)(a) and (b); and
  - (b) samples of the cylinders to which the application relates have been taken, inspected, and tested in accordance with the design standard that relates to the cylinders and show,—
    - (i) on a visual inspection, that the overall construction, including valve protection and overpressure protection devices, surface finishing, and any joints shows no external indication of visible corrosion, stress cracking, or weld defects; and
    - (ii) that the dimensions of the neck of the cylinder conform, within any tolerances allowed, to the applicable standard (if any) and that there is no visible internal corrosion or stress cracking; and
    - (iii) on measurement of the tare weight, empty weight, and water capacity, that the cylinders conform, within any tolerances allowed, to the design standards to which the cylinders were manufactured; and

- (iv) on applying any other test that is considered necessary by the compliance certifier, the cylinders conform to the design to which the cylinders were manufactured.
- (3) A compliance certifier must, as soon as practicable after issuing a pre-commissioning certificate, provide to WorkSafe—
  - (a) a copy of the pre-commissioning certificate; and
  - (b) a copy of the compliance certifier's report on the design to which the pre-commissioning certificate relates.

Compare: SR 2004/43 r 22

### **15.20 Declining to issue pre-commissioning certificate**

If a compliance certifier declines to issue a pre-commissioning certificate for a cylinder design, the compliance certifier must—

- (a) either—
  - (i) allow all cylinders in that batch to be brought into compliance, where that is possible, and issue a pre-commissioning certificate; or
  - (ii) oversee the disposal of every cylinder by—
    - (A) ensuring that every cylinder is physically altered so that the cylinder cannot contain, or be returned to a state in which it could contain, gas under pressure; or
    - (B) being satisfied that every cylinder has been returned to the country of origin; and
- (b) provide a report to WorkSafe setting out how the requirements of this regulation have been met.

Compare: SR 2004/43 r 23

## **Subpart 3—Low-pressure fire extinguishers**

### **15.21 Application of subpart 3**

This subpart applies to low-pressure fire extinguishers.

Compare: SR 2004/43 r 23A

### **15.22 Fire extinguisher registration number**

- (1) A PCBU who manufactures, imports, or supplies a low-pressure fire extinguisher must ensure that it has a fire extinguisher registration number issued under subclause (2).
- (2) A product certification body may issue a fire extinguisher registration number for a low-pressure fire extinguisher if it is satisfied that the fire extinguisher—
  - (a) has been manufactured in accordance with this subpart; and

- (b) meets the quality assurance requirements specified in the fire extinguisher's design.
  - (3) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
    - (a) for an individual, to a fine not exceeding \$10,000;
    - (b) for any other person, to a fine not exceeding \$50,000.
- Compare: SR 2004/43 r 23B

### 15.23 Standards for low-pressure fire extinguishers

- (1) A PCBU who designs, imports, or supplies a low-pressure fire extinguisher must ensure that the design of the low-pressure fire extinguisher complies with—
    - (a) AS/NZS 1841.1–AS/NZS 1841.8; or
    - (b) an applicable standard that is listed in Schedule 21; or
    - (c) a relevant safe work instrument that specifies design standards relating to low-pressure fire extinguishers.
  - (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
    - (a) for an individual, to a fine not exceeding \$10,000;
    - (b) for any other person, to a fine not exceeding \$50,000.
- Compare: SR 2004/43 r 23C

### 15.24 Manufacture of low-pressure fire extinguishers

- (1) A PCBU who manufactures a low-pressure fire extinguisher must—
    - (a) manufacture the fire extinguisher to a design that complies with a design standard referred to in regulation 15.23; and
    - (b) ensure that the low-pressure fire extinguisher complies with subpart 6.
  - (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
    - (a) for an individual, to a fine not exceeding \$10,000;
    - (b) for any other person, to a fine not exceeding \$50,000.
- Compare: SR 2004/43 r 23D

## Subpart 4—Aerosol dispensers and other non-refillable gas containers

### 15.25 Restrictions on import, manufacture, and supply of aerosols

- (1) A PCBU must not import, manufacture, or supply an aerosol dispenser unless—
  - (a) the aerosol dispenser, at the time of manufacture, complies with—
    - (i) AS 2278.1—2008; or

- (ii) an applicable standard that is listed in Schedule 21; or
    - (iii) a relevant safe work instrument that specifies design standards relating to aerosol dispensers; and
  - (b) the liquid and solid contents of the aerosol dispenser when charged do not occupy more than 90% of the internal volume of the closed aerosol dispenser at 50°C; and
  - (c) the aerosol dispenser has been tested and examined for leakage, deformation, or other defects in accordance with the standard.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 24

**15.26 Restrictions on import, manufacture, and supply of non-refillable gas containers**

- (1) A PCBU must not import, manufacture, or supply a non-refillable gas container (other than an aerosol dispenser) unless—
- (a) the non-refillable gas container, at the time of manufacture, complies with—
    - (i) UL standard UL 147B:2016 on Nonrefillable (disposable) type metal container assemblies for butane; or
    - (ii) an applicable standard that is listed in Schedule 21; or
    - (iii) a standard relating to non-refillable gas containers that is specified in a relevant safe work instrument; and
  - (b) when the non-refillable gas container is charged with gas, the maximum developed pressure at 50°C is not more than that specified in the design to which the non-refillable gas container was manufactured; and
  - (c) the filled non-refillable gas container has been tested and examined for leakage, deformation, or other defects in accordance with the standard to which it was designed.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 25

### Subpart 5—Cylinder fittings

#### 15.27 Restriction on import, manufacture, or supply of cylinder fittings

- (1) A PCBU must not import, manufacture, or supply a cylinder fitting unless the fitting is manufactured and tested at the time of manufacture in accordance with this subpart.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 26

#### 15.28 Cylinder valves

- (1) A cylinder valve for an LPG cylinder that has water capacity of between 10 L and 27 L must be manufactured and tested at the time of manufacture in accordance with—
  - (a) AS 2473.1—2006; or
  - (b) AS 2473.2—2015; or
  - (c) BS 1552; or
  - (d) UL 125:2009; or
  - (e) UL 2061; or
  - (f) UL 1769:2006; or
  - (g) a relevant safe work instrument that specifies standards for cylinder valves.
- (2) A cylinder valve, other than a valve to which subclause (1) applies, must be manufactured and tested at the time of manufacture in accordance with—
  - (a) AS 2473.1—2006; or
  - (b) AS 2473.2—2015; or
  - (c) AS 2473.3—2007; or
  - (d) BS 341; or
  - (e) UL 2061; or
  - (f) BS EN ISO 10297:2014; or
  - (g) BS EN ISO 12209:2013; or
  - (h) BS EN ISO 407:2004; or
  - (i) a relevant safe work instrument that specifies standards for cylinder valves.

- (3) Despite subclauses (1) and (2), valve stem threads must comply with the requirements for cylinder neck threads in regulation 15.10.

Compare: SR 2004/43 r 27

#### **15.29 Outlet connection for cylinder valves**

- (1) The outlet connection for a cylinder valve, other than an outlet connection referred to in subclauses (2) and (3), must comply with—
- (a) section 5.1 of AS 2030.5—2009; or
  - (b) a relevant safe work instrument that specifies standards for cylinder valve outlet connections.
- (2) The outlet connection for an LPG cylinder valve, other than an outlet connection referred to in subclause (3), must comply with,—
- (a) for an LPG cylinder of less than 25 L water capacity,—
    - (i) UL 2061; or
    - (ii) 14 mm × 1.5 mm RH Internal (14 mm ISO metric); or
    - (iii) 3/8 BSP RH Internal; or
    - (iv) 3/8 BSP RH External; or
    - (v) 20 mm clip-on connector; or
    - (vi) 0.885–14 NGO LH Internal; or
  - (b) for an LPG cylinder of any other size, 0.885–14 NGO LH Internal; or
  - (c) a relevant safe work instrument that specifies standards for cylinder valve outlet connections.
- (3) The outlet connection for any cylinder valve for LPG cylinders that are part of the motive power of a forklift but are not permanently attached or integral to the forklift, must comply with—
- (a) 1 1/4 BSP RH External; or
  - (b) a relevant safe work instrument that specifies standards for cylinder valve outlet connections.
- (4) Any new connection into a valve outlet must be compatible with the valve.

Compare: SR 2004/43 r 28

#### **15.30 Cylinder valve design for particular gases**

- (1) A valve incorporated in a cylinder design for a flammable or class 6.1A to 6.1D gas must be protected in accordance with—
- (a) section 5.2 of AS 2030.5—2009; or
  - (b) a relevant safe work instrument that specifies standards for valve protection.
- (2) The valve incorporated in a cylinder design for a gas other than a flammable or class 6.1A to 6.1D gas, must comply with the impact tests in—

- (a) BS 341 and AS 2473.1—2006; or
- (b) BS 341 and AS 2473.2—2015; or
- (c) for fire extinguisher cylinder designs, standard AS/NZS 1841.1 on Portable fire extinguishers; or
- (d) a relevant safe work instrument that specifies standards for valve impact testing.

Compare: SR 2004/43 r 29

### **15.31 Cylinder overpressure protection for particular gases**

- (1) A cylinder design, other than for a cylinder designed to contain a class 6.1, 6.1A, 6.1B, or 6.1C toxic substance, must incorporate overpressure protection that complies with—
  - (a) section 5.3 of AS 2030.5—2009; or
  - (b) a relevant safe work instrument that specifies standards relating to overpressure protection.
- (2) A fire extinguisher cylinder design must, at pressures of more than 19 MPa, comply with—
  - (a) section 5.3 of AS 2030.5—2009; or
  - (b) a relevant safe work instrument that specifies standards relating to overpressure protection.

Compare: SR 2004/43 r 30

### **15.32 Gas regulators**

A gas regulator, other than an LPG regulator or an LPG automatic changeover device, must comply with—

- (a) AS 3840.1—1998; or
- (b) AS 4267—1995; or
- (c) a relevant safe work instrument that specifies standards for gas regulators.

Compare: SR 2004/43 r 31

### **15.33 LPG regulator or LPG automatic changeover device**

- (1) An LPG regulator or LPG automatic changeover device must comply with—
  - (a) AS 4621—2004; or
  - (b) UL 144:2012; or
  - (c) UL 252; or
  - (d) BS EN 16129:2013; or
  - (e) a relevant safe work instrument that specifies standards for LPG regulators or automatic changeover devices.

- (2) The valve inlet connection of an LPG regulator must comply with the dimension requirements of—
- (a) AS 2473.2—2015; or
  - (b) CGA V 1:2013; or
  - (c) BS EN 16129:2013; or
  - (d) a relevant safe work instrument that specifies standards for valve inlet connections of LPG regulators.

Compare: SR 2004/43 r 32

#### **15.34 Overfill protection device for LPG cylinders**

An LPG cylinder that has a nominal capacity of more than 4 kg and less than 11 kg must be fitted with an overfill protection device designed in accordance with—

- (a) UL 2227; or
- (b) a relevant safe work instrument that specifies standards for overfill protection devices.

Compare: SR 2004/43 r 33

#### **15.35 LPG valve outlet adaptors**

- (1) If an LPG cylinder valve is fitted with an adaptor on the valve outlet thread, the outlet connection of the adaptor must be treated as the outlet connection of the valve if—
- (a) the adaptor is permanently fitted to the valve according to the manufacturer's installation instructions; and
  - (b) the adaptor outlet connection complies with regulation 15.29(2), except that a clip-on adaptor is not to be connected to a quick coupling connection (QCC) valve; and
  - (c) the adaptor complies with—
    - (i) the (former) Department of Labour's standard for clip-on adaptors based on LPGITA Code of Practice No 15 Part 1:1992; or
    - (ii) a relevant safe work instrument that specifies standards for adaptor connection systems.
- (2) If the pressure and cycling tests are not specified in the standard to which the LPG cylinder was designed, samples of the LPG valve outlet adaptors must be taken and inspected and tested—
- (a) as follows:
    - (i) to a pressure test at 1.5 times the design operating pressure; and
    - (ii) if the adaptor is to have moving parts, by cycling tests for a number of cycles at least equivalent to those tests required in the standard for the valve to which the adaptor is to be attached; or



- (b) in accordance with the requirements specified in a relevant safe work instrument relating to adaptor safety.

Compare: SR 2004/43 r 34

### **15.36 Restrictions on imported and manufactured LPG fittings**

- (1) A PCBU must not import or manufacture any 1 or more fittings for an LPG cylinder, unless, in relation to the fittings—
  - (a) there is in force a compliance certificate issued under regulation 15.37; or
  - (b) an exemption has been granted under section 220 of the Act from the requirement for a compliance certificate and a special record number has been issued in accordance with regulation 15.39.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 35

### **15.37 Compliance certificate for imported and manufactured fittings**

- (1) A PCBU who imports or manufactures fittings for LPG cylinders must, before importation or manufacture, apply to a compliance certifier for a compliance certificate for that type of fitting.
- (2) However, subclause (1) does not apply if the PCBU has previously obtained a compliance certificate for fittings of the same design.
- (3) An application under subclause (1) must—
  - (a) include a copy of the test report on the fitting from a recognised inspection agency; and
  - (b) be accompanied by a sample of the LPG fittings to which the application relates.
- (4) The compliance certifier may issue a compliance certificate for the type of LPG fitting if satisfied that—
  - (a) the information referred to in subclause (3) has been received; and
  - (b) the information marked on the fittings complies with subpart 6; and
  - (c) the test report of the recognised inspection agency shows that the fittings meet the requirements set out in the design to which the fittings were manufactured; and
  - (d) the fittings meet the requirements in regulations 15.27 to 15.35 that apply to that type of fitting.
- (5) If the compliance certifier issues a compliance certificate for the type of fitting, the compliance certifier must provide to WorkSafe—

- (a) a copy of the compliance certificate; and
  - (b) a copy of the test report of the recognised inspection agency supplied under subclause (3)(a) in relation to the type of fitting.
- (6) On receiving the information required under subclause (5), WorkSafe must—
  - (a) allocate a record number to the type of cylinder fitting; and
  - (b) enter the details of the type of cylinder fitting in the record kept under regulation 15.83.

Compare: SR 2004/43 r 36

### **15.38 Duty of compliance certifier in relation to non-compliant fittings**

If a compliance certifier declines to issue a compliance certificate under regulation 15.37, the compliance certifier must—

- (a) either—
  - (i) allow all fittings in that batch to be brought into compliance with this Part, if the compliance certifier considers that is possible; or
  - (ii) oversee the disposal of every fitting by—
    - (A) ensuring that each fitting is physically altered so that the fitting cannot be used, or be returned to a state in which it could be used, with any cylinder containing a gas under pressure; or
    - (B) being satisfied that every fitting has been returned to the country of origin; and
- (b) provide a report to WorkSafe setting out how the requirements of this regulation have been met.

Compare: SR 2004/43 r 37

### **15.39 Prescribed requirements relating to exemption from compliance certificate for imported and manufactured fittings**

- (1) An application for an exemption under section 220 of the Act from the requirements of regulation 15.37 must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (2) In considering whether to grant the exemption, WorkSafe must have regard to—
  - (a) the types and quantities of fittings to which the application relates; and
  - (b) the compliance and quality control history of the importer or manufacturer of the fittings to which the application relates; and
  - (c) the similarity of the design and manufacture of the fittings to the design and manufacture of other fittings previously supplied by that importer or manufacturer.

- (3) If WorkSafe grants an exemption in relation to a design of a fitting, it must—
- (a) allocate a special record number to the design; and
  - (b) enter the details of the special record number in the record kept under regulation 15.84.

Compare: SR 2004/43 r 38

## Subpart 6—Labelling and marking

### *Marking of cylinders and fire extinguishers*

#### **15.40 Markings for cylinders and fire extinguishers**

- (1) A PCBU who manufactures, imports, or supplies a refillable cylinder or a fire extinguisher (whether refillable or not) must ensure that the cylinder or fire extinguisher is marked with the following information:
- (a) the special record number or the record number of the cylinder design to which the cylinder or fire extinguisher was manufactured;
  - (b) the manufacturer's serial or batch number for the cylinder or fire extinguisher.
- (2) A refillable cylinder must be marked with the following information:
- (a) the name or mark of the manufacturer of the cylinder;
  - (b) the specifications of the cylinder;
  - (c) the test pressure specified in the standard to which the cylinder was designed;
  - (d) if the cylinder will contain permanent gas, the charging pressure, at 15°C, of the cylinder;
  - (e) the water capacity of the cylinder;
  - (f) the tare weight of the cylinder;
  - (g) if the cylinder will contain a liquefied gas, the empty weight of the cylinder;
  - (h) the month and year in which the cylinder was manufactured;
  - (i) the mark of the recognised inspection agency that issued the manufacturing certificate under regulation 15.15 in respect of the cylinder;
  - (j) the month and year of any periodic test conducted in accordance with regulation 15.56;
  - (k) the mark of the test station at which each periodic test was conducted.
- (3) A PCBU who manufactures, imports, or supplies a low-pressure fire extinguisher must ensure that it is marked with a fire extinguisher registration number issued by a product certification body.

- (4) Subclause (1)(a) does not apply to a fire extinguisher unless the fire extinguisher contains a permanent gas or a liquefied gas.
  - (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
    - (a) for an individual, to a fine not exceeding \$6,000;
    - (b) for any other person, to a fine not exceeding \$30,000.
- Compare: SR 2004/43 r 39

#### **15.41 Additional markings for cylinders containing dry gas**

- (1) A PCBU who manufactures, imports, or supplies a cylinder that may or will be used to contain dry gas must ensure that it is marked with a 5-pointed star.
  - (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
    - (a) for an individual, to a fine not exceeding \$6,000;
    - (b) for any other person, to a fine not exceeding \$30,000.
- Compare: SR 2004/43 r 40

#### **15.42 Additional markings for cylinders containing toxic gas**

- (1) A PCBU who manufactures, imports, or supplies a cylinder that may or will be used to contain a toxic gas of class 6.1A or 6.1B must ensure that the cylinder is marked with a skull mark.
  - (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
    - (a) for an individual, to a fine not exceeding \$6,000;
    - (b) for any other person, to a fine not exceeding \$30,000.
- Compare: SR 2004/43 r 41

#### **15.43 Marking size requirements**

- (1) The minimum size of lettering, numbering, and symbols required to be marked under regulations 15.40 to 15.42 is—
    - (a) 5 mm for cylinders with a diameter equal to or more than 140 mm;
    - (b) 2.5 mm for cylinders with a diameter of less than 140 mm and for low pressure fire extinguishers.
  - (2) A PCBU must ensure that the information on a cylinder is permanently marked but does not weaken the design strength of the cylinder.
  - (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
    - (a) for an individual, to a fine not exceeding \$6,000;
    - (b) for any other person, to a fine not exceeding \$30,000.
- Compare: SR 2004/43 r 42

*Other markings***15.44 Tampering etc with markings on cylinder, cylinder fittings, or fire extinguisher**

- (1) A PCBU, a worker, and any other person must not—
  - (a) tamper with a mark on a cylinder, cylinder fitting, or fire extinguisher:
  - (b) add any mark to a cylinder, cylinder fitting, or fire extinguisher except as required by, and in accordance with, this Part.
- (2) A person who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000:
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2004/43 r 43

**15.45 Cylinder valve markings**

- (1) A PCBU who manufactures, imports, or supplies a cylinder valve must ensure that it has the following markings:
  - (a) the valve open and closed positions:
  - (b) the manufacturer's mark or identifier:
  - (c) the design standard to which the valve was manufactured:
  - (d) the manufacturer's batch number, the date of manufacture, or a code that indicates the date of manufacture:
  - (e) the operating pressure for the pressure relief device.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000:
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2004/43 r 44

**15.46 Cylinder regulator markings**

- (1) A PCBU who manufactures, imports, or supplies a regulator must ensure that it has the following markings:
  - (a) the manufacturer's mark or identifier:
  - (b) the design standard to which the regulator was manufactured:
  - (c) the manufacturer's batch number, the date of manufacture, or a code that indicates the date of manufacture:
  - (d) information that specifies the gas or gases for which the regulator is intended to be used:
  - (e) information that specifies the outlet delivery pressure.

- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000:
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2004/43 r 45

#### **15.47 Cylinder adaptor markings**

- (1) A PCBU who manufactures, imports, or supplies a cylinder adaptor must ensure that it has the following markings:
- (a) the manufacturer's mark or identifier:
  - (b) the manufacturer's batch number, the date of manufacture, or a code that indicates the date of manufacture:
  - (c) the connection compatibilities of the cylinder adaptor.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000:
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2004/43 r 46

#### **15.48 Markings for LPG automatic changeover devices**

- (1) A PCBU who manufactures, imports, or supplies an LPG automatic change-over device must ensure that it has the following markings:
- (a) the manufacturer's mark or identifier:
  - (b) the design standard to which the device was manufactured:
  - (c) the manufacturer's batch number, the date of manufacture, or a code that indicates the date of manufacture.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000:
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2004/43 r 47

#### **15.49 Marking of fittings**

- (1) A PCBU who manufactures, imports, or supplies any fittings to which regulations 15.45 to 15.48 apply must ensure that the marking on those fittings is legible, durable, and permanently attached throughout the life of the fitting.
- (2) The information on a fitting must be permanently marked but must not weaken the design strength of the fitting.

Compare: SR 2004/43 r 48

**15.50 Marking of aerosols**

- (1) A PCBU who manufactures, imports, or supplies an aerosol dispenser must ensure that it is—
  - (a) marked with a batch identifier; and
  - (b) able to be traced (through markings or documentation) to the manufacturer of the empty aerosol dispenser.
- (2) The PCBU must ensure that the aerosol dispenser is marked with the following information:
  - (a) a warning that the contents are under pressure;
  - (b) a warning not to expose the aerosol dispenser to heat or to pierce or burn it, even after use.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2004/43 r 49

**15.51 Marking of non-refillable gas containers**

- (1) A PCBU who manufactures, imports, or supplies a charged non-refillable gas container must ensure that it is—
  - (a) marked with a batch identifier; and
  - (b) able to be traced (through markings or documentation) to the manufacturer of the empty non-refillable gas container.
- (2) The PCBU must ensure that the charged non-refillable gas container is marked with the following information:
  - (a) a warning, for a container other than a non-refillable fire extinguisher, that the contents are under pressure;
  - (b) a warning not to expose the non-refillable gas container to heat or to pierce (other than intended piercing for use) or burn it, even after use.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2004/43 r 50

## Subpart 7—Testing of cylinders and fittings

### 15.52 Authorisation of test stations

- (1) WorkSafe may, on application by a PCBU, authorise that PCBU as a test station to inspect and test cylinders and to issue test reports, in accordance with regulations 15.56 and 15.59(2), if it is satisfied that—
  - (a) the PCBU operates in New Zealand; and
  - (b) the PCBU conducts tests in accordance with 1 of the following standards, as evidenced by accreditation of the PCBU under NZS ISO/IEC 17025:2005 or membership of a body that is recognised by WorkSafe:
    - (i) the standard to which the cylinder was designed:
    - (ii) AS 2030.2—1996:
    - (iii) AS 2337.1—2004:
    - (iv) AS 2337.3—2006:
    - (v) any other recognised industry standard that is specified in a relevant safe work instrument; and
  - (c) the PCBU is likely to ensure that the functions of a test station are performed in an impartial manner that promotes safety.
- (2) A application for authorisation as a test station must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (3) The accreditation body must disclose to WorkSafe any information that is necessary for WorkSafe to make its assessment under subclause (1), including new information as it arises.
- (4) An authorisation may be subject to any conditions that WorkSafe considers appropriate.
- (5) If WorkSafe approves the application, it must notify the applicant in writing of—
  - (a) the authorisation; and
  - (b) any conditions to which the authorisation is subject; and
  - (c) the term (if any) of the authorisation.
- (6) The applicant has a right of appeal to the District Court against a refusal by WorkSafe to authorise the applicant as a test station.

### 15.53 Register of test stations

- (1) WorkSafe must keep a register of authorised test stations that contains the following information about each test station:
  - (a) the date on which the authorisation was granted:



- (b) the test station's business name, address, and email address;
  - (c) any information relating to the functions of the test station for which the authorisation was granted;
  - (d) any conditions imposed on the authorisation;
  - (e) the date (if any) on which the authorisation ends;
  - (f) any other information relating to the authorisation that WorkSafe considers appropriate.
- (2) WorkSafe must ensure that the register is published on an Internet site that is maintained by or on behalf of WorkSafe.

#### **15.54 Suspension of test station authorisation**

- (1) WorkSafe may, by written notice to a test station, suspend an authorisation if WorkSafe reasonably suspects that,—
- (a) in an application for the authorisation, or in any statement made in respect of the application, the applicant—
    - (i) gave information that was false or misleading in a material particular; or
    - (ii) gave information that omitted a matter or thing without which the information was misleading; or
    - (iii) failed to give information that should have been given; or
  - (b) the test station is failing, or has failed, to perform its functions in an impartial manner that promotes safety.
- (2) On notice of the suspension of the authorisation, the authorisation ceases to have effect for the period of suspension.
- (3) The period of suspension must be no longer than is reasonably necessary to enable WorkSafe to—
- (a) investigate the accuracy of the information that has led to the suspension; and
  - (b) consider the matters referred to subclause (1).
- (4) On completion of WorkSafe's investigation and consideration, WorkSafe must, by written notice, either—
- (a) end the period of suspension, without conditions; or
  - (b) end the period of suspension and impose conditions on the authorisation; or
  - (c) cancel the authorisation; or
  - (d) vary the functions of the authorised test station, and amend the information contained in the register under regulation 15.53(1)(c).

### **15.55 Cancellation of test station authorisation**

- (1) WorkSafe may, by written notice, cancel the authorisation of a test station if satisfied that the test station—
  - (a) no longer operates in accordance with a standard set out in regulation 15.52(1)(b)(i) to (v); or
  - (b) is no longer accredited, or no longer a member of a body, in accordance with regulation 15.52(1)(b).
- (2) On notice of the cancellation of the authorisation, the test station must return the authorisation document to WorkSafe.

### **15.56 Periodic tests**

- (1) A PCBU with management and control of a workplace must ensure that no person charges a cylinder at the workplace unless the cylinder has passed the tests referred to in subclause (2), or the inspections and tests referred to in regulation 15.3(1)(b), at the intervals following its manufacture that are specified in—
  - (a) in Schedule 22 for the type of cylinder; or
  - (b) a relevant safe work instrument.
- (2) A test station must issue a document of certification for a cylinder if the cylinder passes the visual inspections and tests specified in—
  - (a) the standard to which the cylinder was designed; or
  - (b) AS 2337.1—2004; or
  - (c) for a composite or fibre-wrapped cylinder, AS 2337.3—2006; or
  - (d) for a cylinder that contains acetylene dissolved in solvent, AS 2030.2—1996; or
  - (e) a relevant safe work instrument.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2004/43 r 52

### **15.57 Other requirements of test stations**

- (1) A test station must—
  - (a) keep records for all testing in accordance with the requirements in AS 2337.1—2004 and retain those records for a period of not less than the relevant periodic inspection interval specified in regulation 15.56(1) plus 1 year; and

- (b) if a cylinder passes the inspections and tests specified in regulation 15.56(2), mark the cylinder in accordance with regulation 15.40(2)(j) and (k); and
  - (c) if a cylinder fails any of the inspections or tests specified in regulation 15.56(2), provide the owner of the cylinder with a copy of the test report stating the reasons for the failure.
- (2) If a cylinder fails an inspection or test specified in regulation 15.56(2) for reasons other than neck thread inserts, remachining or the obliteration of markings, the cylinder may be retested with the consent of WorkSafe and subject to any conditions that it may specify.
- (3) If a cylinder fails an inspection or test specified in regulation 15.56(2), the cylinder may be repaired and retested, but only if repair is provided for in the standard to which the cylinder was manufactured.
- (4) If a cylinder fails an inspection or test specified in regulation 15.56(2), a test station must not allow a PCBU or other person to remove the cylinder from the test station's premises except with the consent of WorkSafe.
- (5) Subclause (4) does not apply if the test station, with the owner's permission, or, without the owner's permission if 30 or more days have elapsed since the cylinder failed the inspection or test, alters or oversees the alteration of the cylinder so that it cannot—
  - (a) contain a gas under pressure; and
  - (b) be returned to a state in which it could contain a gas under pressure.
- (6) A PCBU who operates a test station who contravenes subclause (1) or (4) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

Compare: SR 2004/43 r 53

### **15.58 Consequences of test failure**

- (1) If a cylinder fails a periodic test due to a deficiency in the design, or in the manufacture to that design, WorkSafe may—
  - (a) suspend the design verification certificate and record number; and
  - (b) request a compliance certifier to review the relevant design verification certificate.
- (2) If a review under subclause (1)(b) finds that the design of the cylinder is not adequate to ensure that a cylinder manufactured to the design is safe during the expected lifetime of the cylinder, WorkSafe may—
  - (a) cancel the design verification certificate and record number for the design; and

- (b) require the recall of all cylinders manufactured to that design for destruction.

Compare: SR 2004/43 r 54

#### **15.59 Periodic testing of LPG valve and pressure relief device**

- (1) A PCBU must ensure that no person charges a cylinder with LPG at the workplace unless the valve and pressure relief device have passed the periodic tests referred to in this regulation.
- (2) A periodic test for an LPG valve and pressure relief device must be carried out by a test station, which must—
  - (a) inspect the valve for wear or damage; and
  - (b) inspect the pressure relief device for—
    - (i) wear and damage;
    - (ii) corrosion;
    - (iii) evidence of leakage;
    - (iv) evidence of blockage; and
  - (c) ensure that the pressure relief device is correctly fitted; and
  - (d) ensure that the valve does not leak.
- (3) A periodic test must be undertaken—
  - (a) within 10 years after the manufacture of the cylinder; and
  - (b) thereafter at intervals of not more than 10 years.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 55

#### **15.60 Test station may mark cylinder to make it compliant**

- (1) A test station may mark a refillable cylinder or a fire extinguisher under this regulation, if the test station is satisfied that—
  - (a) the design of the cylinder or fire extinguisher is the same as the design of another cylinder or fire extinguisher in respect of which WorkSafe has allocated a record number to a design verification certificate under regulation 15.13(6)(a); or
  - (b) WorkSafe has allocated a special record number under regulation 15.18(4)(a).
- (2) The information that may be marked is—
  - (a) the information required by regulation 15.40; and
  - (b) the test station's mark; and

- (c) the date of the marking.
- (3) The test station must notify WorkSafe about any cylinder or fire extinguisher marked under this regulation, including—
  - (a) the name of the owner of the cylinder:
  - (b) the information marked:
  - (c) the date of the marking:
  - (d) the serial number of the cylinder.

### Subpart 8—Charging gas containers and tank wagons, and cylinder repairs

#### 15.61 Restrictions on charging cylinders

- (1) A PCBU must ensure that no person charges a cylinder with gas at the workplace unless,—
  - (a) if the cylinder has a water capacity of less than 500 L, the cylinder is marked in accordance with,—
    - (i) for a cylinder referred to in regulation 15.3, clause 6.2.2.7 of chapter 6.2 of the UN Model Regulations; or
    - (ii) for every other cylinder, regulation 15.40; and
  - (b) the period since the last periodic inspection specified in regulation 15.56 relating to the type of cylinder has not expired; and
  - (c) the maximum life specified in the standard to which the cylinder was designed has not expired; and
  - (d) there is no evidence of damage or corrosion of the cylinder or valve that indicates that the cylinder may fail a periodic test or that the cylinder's associated fittings may leak; and
  - (e) an overpressure protection device fitted in accordance with regulation 15.31 is free of any sign of corrosion, has a clear discharge channel, and shows no sign of leakage.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 56

#### 15.62 Restriction on charging aerosol containers

- (1) A PCBU must ensure that no person at the workplace charges an aerosol container with a gas of class 6.1A or 6.1B to an LC50 that is less than or equal to 200 ppm.

- (2) Subclause (1) does not apply to aerosols with a brimful capacity of 100 ml or less and an internal gauge pressure at 20°C of less than 170 kPa.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 57

#### **15.63 Restriction on charging non-refillable gas containers with certain gases**

- (1) A PCBU must ensure that no person at the workplace charges a non-refillable gas container with a gas of class 6.1A or 6.1B to an LC50 that is less than or equal to 200 ppm.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 58

#### **15.64 Restriction on persons who may charge gas containers**

- (1) A PCBU with management or control of a workplace must ensure that no person at the workplace charges a gas container unless—
  - (a) the person is an approved filler; or
  - (b) the person—
    - (i) is undertaking a course of instruction or other training to become an approved filler; and
    - (ii) is supervised at all times by an approved filler while charging the container.
- (2) Subclause (1) does not apply to a person who charges—
  - (a) a portable resuscitation cylinder; or
  - (b) an LPG cylinder of less than 110 kg water capacity if the person charging the cylinder meets the requirements set out in a relevant safe work instrument.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2004/43 r 59

**15.65 Approved fillers**

- (1) A person must not carry out a duty of an approved filler under this subpart unless the person holds an approved filler certificate that is issued by a compliance certifier who is authorised to certify the competence of approved fillers.
- (2) An individual who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding \$2,000.

Compare: SR 2004/43 r 60

**15.66 Compliance certificate for approved fillers**

- (1) A compliance certifier must not issue an approved filler certificate to an individual unless satisfied that the individual—
  - (a) knows and can describe, in relation to the types of gases and containers that the certifier will be certified to charge, the following:
    - (i) the different forms of gases under pressure;
    - (ii) the factors that can trigger the failure of a gas container;
    - (iii) the potential adverse effects from the failure of a gas container associated with the different forms of gases under pressure, including asphyxiation;
    - (iv) the requirements of this Part and any relevant safe work instrument relating to the visual inspection and safe charging of gases under pressure into a gas container; and
  - (b) can demonstrate the procedures for the safe charging of gas containers.
- (2) A compliance certifier must issue a compliance certificate to an approved filler on receiving a written record that satisfies the certifier as to the matters in subclause (1), which record must—
  - (a) be signed by the provider of the course of instruction or the work supervisor; and
  - (b) describe the method used to assess the knowledge and practical skills of the individual seeking certification; and
  - (c) state the results of the assessment.
- (3) The certificate may specify its end date (no later than 5 years after issue).
- (4) An approved filler certificate must specify the forms and classes of gases and types of containers covered by the certificate.

Compare: SR 2004/43 r 60

**15.67 Maximum filling ratio for cylinders and stationary tanks**

- (1) A PCBU must ensure that the maximum filling ratio for a cylinder or a stationary tank to be charged with low-pressure liquefied gases is such that the liquid phase of gas in the cylinder or stationary tank—

- (a) will not exceed 97% of the water capacity of the cylinder or stationary tank under temperatures during storage; and
  - (b) will not charge the cylinder or stationary tank when the temperature is raised above a temperature specified in table 2 in Schedule 20.
- (2) A PCBU must ensure that the maximum filling ratio for cylinders and stationary tanks to be charged with high-pressure liquefied gases is such that—
  - (a) the liquid phase of the gas in the cylinder or stationary tank will not exceed 97% of the water capacity of the cylinder or stationary tank under reference temperatures during storage; and
  - (b) the pressure at a temperature specified in table 3 in Schedule 20 will not exceed the maximum developed pressure by more than 20%.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 61

#### **15.68 Air in self-contained breathing apparatus**

- (1) A PCBU must ensure that, if any worker at the workplace charges a self-contained breathing apparatus, including a self-contained underwater breathing apparatus (SCUBA), the cylinder is charged only with air that meets the requirements of—
  - (a) AS/NZS 2299.1:2015 on Occupational diving operations—Standard operational practice; or
  - (b) the standard referred to paragraph (a), except that—
    - (i) the moisture level of breathing air in the cylinder may contain not more than 100 mg/m<sup>3</sup> of water at 15°C and 100 kPa (130 ppm by volume); and
    - (ii) the frequency of the testing for air purity may be at intervals of 3 months or less; or
  - (c) AS 3848.2—1999 on Filling of portable gas cylinders—Filling of portable gas cylinders for self-contained underwater breathing apparatus (SCUBA) and non-underwater self-contained breathing apparatus (SCBA)—Safe procedures; or
  - (d) a relevant safe work instrument that prescribes requirements or standards relating to air in a self-contained breathing apparatus.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;



- (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 61A

### **15.69 Charging cylinders and stationary tanks with liquefied gases**

- (1) A PCBU who charges a cylinder or stationary tank must ensure that the provisions of this regulation are complied with.
- (2) The extent to which a cylinder or stationary tank is charged with a liquefied gas must be determined by the weight of gas to meet the applicable maximum filling ratio specified in regulation 15.67.
- (3) The weight of a charged cylinder or stationary tank must be checked after the cylinder or stationary tank is disconnected from the charging line.
- (4) Subclauses (2) and (3) do not apply to a stationary tank for LPG if the charging of the tank complies with the requirements of Appendix B of AS/NZS 1596—2014 on The storage and handling of LP Gas.
- (5) Subclauses (2) and (3) do not apply to any of the following cylinders if the cylinder is charged with LPG by ullage or contents gauges according to section 7.2.3 of AS 2030.5—2009:
  - (a) a cylinder that is permanently mounted on a vehicle, but not used for the vehicle's motive power:
  - (b) a cylinder that is clamped but not permanently mounted on a vehicle, and used for the vehicle's motive power:
  - (c) a cylinder that is charged on-site and provided with a filling connection that incorporates a 1 $\frac{3}{4}$  inch male Acme thread, and one of the following:
    - (i) a dual non-return valve and a fixed liquid level gauge that must indicate a maximum liquid level equivalent to 4 L less than the standard filling level for a cylinder of that size:
    - (ii) a non-return valve and an automatic fill limiter that stops the filling at 80% of the standard filling level (which must be appropriate for the orientation of the cylinder when being charged):
  - (d) a cylinder that meets the requirements of, and is charged in accordance with, regulations 15.70 to 15.72.
- (6) A cylinder of less than 4 kg nominal capacity that is not of a type specified in subclause (5) may be charged with LPG by decant pressure differential on scales using a dip tube or an ullage tube.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 62

**15.70 Cylinder charging for supply of LPG: connection requirements**

- (1) A PCBU who supplies LPG must ensure, when the filling connection of the on-site fill cylinder does not have a manual valve, that—
  - (a) a removable adaptor is attached to the cylinder filling connection; and
  - (b) the removable adaptor incorporates a non-return valve arranged to prevent the outward flow of LPG from the cylinder when the filling hose is removed; and
  - (c) the removable adaptor is not removed until it has been ascertained that the non-return valve of the cylinder has closed correctly after charging.
- (2) A PCBU who supplies LPG must ensure that the on-site fill cylinder is connected to pipework at the location of the cylinder's installation on-site.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**15.71 Cylinder location for supply of LPG**

- (1) A PCBU who supplies LPG to a hazardous substance location must verify, before the first on-site charge, that the location has a compliance certificate issued in accordance with regulation 10.34 or a compliance plaque in accordance with regulation 11.43 (as the case may be).
- (2) The PCBU or a worker who delivers LPG to a location other than a hazardous substance location must ensure that cylinders used for on-site charging comply with the following location requirements:
  - (a) the cylinders are located outside of any building;
  - (b) the cylinders are installed on a stable non-combustible base that is raised above the surrounding area and sheds water;
  - (c) the cylinders are restrained (for example, chained) against earthquake movement;
  - (d) any opening into a building is not located within 500 mm above the cylinders;
  - (e) any opening into a building or pit is not located—
    - (i) within 1 m measured horizontally from the cylinders holding 100 kg or less of LPG;
    - (ii) within 2 m measured horizontally from the cylinders holding more than 100 kg of LPG;
  - (f) any opening into a drain is not located with 1 m measured horizontally from the cylinders.

- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (4) A worker who contravenes subclause (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

### 15.72 Cylinder charging requirements

- (1) A PCBU or a worker who charges an LPG cylinder from a tank wagon must ensure that,—
  - (a) before charging any cylinder, the cylinder is checked to ensure that it is an approved LPG cylinder, in serviceable condition, and within the test period for the cylinder; and
  - (b) a check is carried out to determine whether there is any LPG in the cylinder to be charged; and
  - (c) on-site charging is undertaken only by connecting the fill hose directly onto the fill connection of the cylinder; and
  - (d) the pumping rate is appropriate to the size of the cylinder; and
  - (e) cylinder charging is not undertaken at night time or in poor light unless all essential gauges, connections, and valves are illuminated by fixed or temporary lighting; and
  - (f) the worker and cylinder are at the same electrical potential, before an LPG delivery hose is connected, by touching the cylinder with a bare hand while holding the nozzle of the hose delivering the LPG; and
  - (g) the delivery hose does not pass through any buildings or cross any carriageways, unless the building is an open carport or veranda; and
  - (h) the cylinder is checked for leakage after charging using a standard soapy water test; and
  - (i) where the requirements of regulations 15.70 and 15.71 cannot be met, the charging must not commence.
- (2) A PCBU who supplies LPG may carry out on-site cylinder charging with 1 worker only if—
  - (a) the worker undertaking the charging of the cylinders is an approved filler; and
  - (b) the worker can maintain surveillance of both the on-site charge cylinder and the tank wagon during the charging operation (for example, the cylinder and tank wagon must be in the worker's direct line of sight, with a deviation of no more than 1.5 m from the direct line of sight); and

- (c) there is direct unobstructed access between the tank wagon and the cylinder fill point; and
- (d) there is no more than 50 m of hose length between the tank wagon and the cylinder fill point; and
- (e) the worker has a remote shut-down device for the tank wagon, on their person at all times, when charging the cylinder, that—
  - (i) can close all tank valves, shut down the pump supplying liquid and pump bypass connections, and shut down the tank wagon engine; and
  - (ii) is of a fail-safe design; and
  - (iii) provides shut-down as quickly as possible, but within no more than 12 seconds; and
  - (iv) operates at a distance of not less than 50 m; and
  - (v) is maintained in a relevant safe working condition at all times.
- (3) If the requirements of subclause (2) are not met, the PCBU must ensure that there are at least 2 workers in attendance: one at the tank wagon and one at the cylinder fill point, one of whom must be an approved filler.
- (4) A PCBU who contravenes subclauses (1) to (3) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (5) A worker who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

### **15.73 Tank wagon location requirements**

- (1) A PCBU or a worker who supplies LPG must ensure that a tank wagon is positioned for on-site charging in accordance with the following requirements:
  - (a) so far as is reasonably practicable, the tank wagon is parked off public roads;
  - (b) warning signs are provided to exclude sources of ignition;
  - (c) the tank wagon is parked so that it can be readily driven or towed away in an emergency without recourse to reversing;
  - (d) the tank wagon does not obstruct entrances to buildings or obstruct fire escapes and is located as far as is reasonably practicable from open doorways.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—

- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (3) A worker who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

**15.74 Tank wagon size restrictions**

- (1) A PCBU who supplies LPG using a tank wagon must ensure that the tank wagon is no larger than 10 000 L water capacity if the tank wagon has to deliver LPG to on-site cylinders from the roadside.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**15.75 Charging cryogenic containers**

- (1) A PCBU who charges a cryogenic container must ensure that the provisions of this regulation are complied with.
- (2) The quantity of liquefied gas charged into a cryogenic container of up to 500 L must be such that—
  - (a) the liquid contents do not occupy more than 85% of the volume of the container; and
  - (b) the pressure of the contents when the container is closed—
    - (i) does not cause the design limits for the cylinder materials in relation to wall stress, yield stress, or tensile strength to be exceeded; and
    - (ii) does not exceed 50% of the test pressure; and
    - (iii) does not exceed the maximum developed pressure for withdrawal of the gas.
- (3) The extent to which a cryogenic container of more than 500 L is charged must be determined by volume with a fixed level measuring device.
- (4) The quantity of liquefied gas charged into a cryogenic container of more than 500 L must be such that the liquid contents do not occupy more than 95% of the volume of the container at the standard working pressure of the container.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 63

#### **15.76 Developed pressure for permanent gases**

- (1) A PCBU who charges a cylinder or stationary tank must ensure that the provisions of this regulation are complied with.
- (2) The pressure developed by a permanent gas in a cylinder or stationary tank—
  - (a) must comply with the developed pressure requirements contained in the standard to which the cylinder or stationary tank was designed; or
  - (b) must not, at 65°C, exceed 85% of the test pressure specified in the standard to which the cylinder or stationary tank was designed.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 64

#### **15.77 Restriction on cylinders previously used for class 6.1 gases**

- (1) A PCBU who charges a cylinder must ensure that the provisions of this regulation are complied with.
- (2) Cylinders that are being or have been used for class 6.1 gases with an inhalation toxicity must not be used to contain gases for human respiration or for products for human consumption.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 65

#### **15.78 Recharging cylinders**

- (1) A PCBU who charges a cylinder must ensure that no person at the workplace charges the cylinder with gas (a **new gas**) that is different from the gas that the cylinder previously contained (the **original gas**) unless the new gas is provided for in the design to which the cylinder was manufactured and—
  - (a) either—
    - (i) the new gas is compatible with the original gas contents; or
    - (ii) the original gas contents are rendered safe or removed from the cylinder by treating the cylinder in the manner described in the applicable design in accordance with—
      - (A) section 8 of AS 2030.5—2009; or

- (B) a relevant safe work instrument that prescribes requirements or standards relating to recharging cylinders; and
  - (b) the PCBU makes the necessary consequential changes to identification and testing specific to the new gas.
- (2) In subclause (1), **compatible** means that the new gas—
  - (a) is chemically inert if brought into contact with—
    - (i) the original gas for the range of temperatures and pressures to which the mixture is exposed during its life cycle; and
    - (ii) residues from sources encountered during the life of the cylinder; or
  - (b) if it is chemically reactive when brought into contact with the original gas, will not—
    - (i) cause combustion; or
    - (ii) cause an explosion; or
    - (iii) produce a hazardous substance with a classification under the Hazard Substances (Classification) Notice 2017 dealing with classification that is different from the classification of the new gas.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 66

### 15.79 Charging cylinder or tank with carbon dioxide

- (1) A PCBU must ensure that a person does not charge carbon dioxide, other than a mixture of carbon dioxide and other gases, into a cylinder or a stationary tank unless the carbon dioxide is not less than 99% pure (vol/vol).
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 67

### 15.80 Repair of cylinders

- (1) A PCBU who repairs a cylinder must—
  - (a) repair the cylinder in accordance with the procedure specified in the standard applying to the design to which the cylinder was manufactured; and

- (b) obtain a manufacturing certificate from a recognised inspection agency confirming that the repair has been carried out in accordance with the cylinder's design and meets the quality assurance requirements specified in the design standard.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/43 r 67A

## Subpart 9—Records, recalls, withdrawals, and modifying list of design standards

### 15.81 Cylinder records

- (1) WorkSafe must keep a record of—
  - (a) each cylinder design for which a design verification certificate is issued in accordance with regulation 15.13;
  - (b) all design standards that were, immediately before the commencement of this regulation, approved or used in design verification under the Hazardous Substances (Compressed Gases) Regulations 2004;
  - (c) all design standards that are specified in a safe work instrument.
- (2) WorkSafe must publish the records.
- (3) For each design verification certificate for which a record number has been allocated, WorkSafe must record the following details:
  - (a) the date of registration;
  - (b) the design standard;
  - (c) the name of the manufacturer;
  - (d) the water capacity;
  - (e) the outer diameter;
  - (f) the wall thickness;
  - (g) the material specification, material, and method of construction;
  - (h) information that specifies every gas for which the cylinder is intended to be used;
  - (i) the filling ratio or charging pressure;
  - (j) the test pressure;
  - (k) the neck thread details;
  - (l) any further information relating to the safe use of the cylinder;
  - (m) the name and country of origin of any recognised inspection agency;



- (n) whether the design standard has been amended, withdrawn, or suspended.

Compare: SR 2004/43 r 75

### **15.82 Special record for cylinders**

- (1) WorkSafe must keep a record of every cylinder design in respect of which a special record number has been allocated under regulation 15.18(4).
- (2) WorkSafe must ensure that the record is published on an Internet site that is maintained by or on behalf of WorkSafe.
- (3) For each cylinder design for which a special record number has been allocated, WorkSafe must record the following details:
  - (a) the date of registration:
  - (b) the design standard:
  - (c) the name of the manufacturer:
  - (d) the water capacity:
  - (e) the outer diameter:
  - (f) the material and the method of construction:
  - (g) information that specifies every gas for which the cylinder is intended to be used:
  - (h) the filling ratio or charging pressure:
  - (i) the test pressure:
  - (j) the neck thread details:
  - (k) any further information relating to the safe use of the cylinder:
  - (l) the name and country of origin of any recognised inspection agency.

Compare: SR 2004/43 r 76

### **15.83 Cylinder fittings record**

- (1) WorkSafe must keep a record of every cylinder fitting design for which a record number has been allocated under regulation 15.37.
- (2) WorkSafe must ensure that the record is published on an Internet site that is maintained by or on behalf of WorkSafe.
- (3) For each cylinder fitting, WorkSafe must record the following details:
  - (a) the date of registration:
  - (b) the design standard:
  - (c) the name of the manufacturer:
  - (d) the material, material specification, and method of construction:
  - (e) information that specifies every gas for which the fitting is intended to be used:

- (f) the thread or connection details:
- (g) any other requirements that WorkSafe considers are necessary to promote the safe use of the fitting:
- (h) for LPG fittings only, the name and country of origin of the recognised inspection agency:
- (i) whether the specification has been amended, withdrawn, or suspended.

Compare: SR 2004/43 r 77

#### **15.84 Special record for cylinder fittings**

- (1) WorkSafe must keep a record of every cylinder fitting for which a special record number has been allocated under regulation 15.39.
- (2) WorkSafe must ensure that the record is published on an Internet site that is maintained by or on behalf of WorkSafe.
- (3) For each cylinder fitting for which a special record number has been allocated, WorkSafe must record the following details:
  - (a) the date of registration:
  - (b) the design standard:
  - (c) the name of the manufacturer:
  - (d) the material, material specification, and method of construction:
  - (e) information that specifies every gas for which the fitting is intended to be used:
  - (f) the thread or connection details:
  - (g) any other requirements that WorkSafe considers are necessary to promote the safe use of the fitting:
  - (h) for LPG fittings only, the name and country of origin of any recognised inspection agency:
  - (i) whether the specification has been amended, withdrawn, or suspended.

Compare: SR 2004/43 r 78

#### **15.85 Recalls and withdrawals**

- (1) If WorkSafe considers that a gas container or fitting is unsafe, WorkSafe may recall, or require a PCBU or other person to recall, the gas container or fitting.
- (2) If WorkSafe considers that the design for a gas container or fitting is unsafe, WorkSafe may withdraw a design verification certificate for a container or a compliance certificate for a fitting or type of fitting.

Compare: SR 2004/43 r 79

#### **15.86 Modifying list of design standards for gas containers**

A relevant safe work instrument may modify the list of design standards for gas containers set out in Schedule 21.

## Part 16

### Tank wagons and transportable containers

#### 16.1 Interpretation

- (1) In this Part, unless the context otherwise requires,—

**Chief Inspector of Dangerous Goods** means the Chief Inspector of Explosives who was appointed under the Explosives Act 1957

**fitting**, in relation to a tank wagon, includes a valve, pump, relief vent, pipe-work, or other fitting that is permanently or occasionally attached to the tank wagon

**low-hazard hazardous substance** means a hazardous substance with a hazard classification other than class 1, 2.1.1A, 3.1A, 3.1B, 3.1C, 4, 5.1.1A, 5.1.1B, 5.1.1C, 5.1.2A, 5.2, 6.1A, 6.1B, 6.1C, 8.2A, 8.2B, 8.2C, or 9.1A

**maximum filling level** means the level to which a tank may be filled with a liquid when the temperature of that liquid is 15°C but that would allow each compartment of that tank to remain less than full if the temperature of that liquid were raised to 40°C

**maximum obtainable pressure** means the pressure of a hydrostatic head of liquid when a tank is full, plus—

- (a) 30 kPa for each tank compartment with a capacity exceeding 8 600 L; or
- (b) 20 kPa for each tank compartment with a capacity not exceeding 8 600 L

**recommended operating pressure** means the pressure at which a tank is designed to operate

**relevant PCBU** has the same meaning as in regulation 17.2

**tank** has the same meaning as in paragraph (b) of the definition of that term in regulation 3(1).

- (2) A reference in this Part to a tank wagon includes a reference to its tank.

Compare: SR 2004/46 r 3

#### 16.2 Application of Part 16

- (1) This Part applies to tank wagons and transportable containers.
- (2) Despite subclause (1), only the requirements of regulations 16.4(2), 16.5(1) and (3), 16.15 and 16.36 to 16.45 apply to the following tank wagons whose design was approved or deemed to be approved under the HSNO Act before the expiry of 2 July 2006:
- (a) a tank wagon that contains or is intended to contain a class 2.1.1, 3, or 5 substance, if one of the following requirements is met:
    - (i) the tank wagon was issued a LAB number by the Chief Inspector of Dangerous Goods that is valid or in force immediately before

the commencement of this regulation and that authorises that tank wagon or type of tank wagon to carry those substances:

- (ii) a letter or memorandum signed by the EPA or the Chief Inspector of Dangerous Goods, that is valid or in force immediately before the commencement of this regulation, authorises that tank wagon or type of tank wagon to carry those substances:
- (b) a tank wagon that contains or is intended to contain a class 6 or 8 substance, if the tank wagon was issued a TSR number (Toxic Substances Regulations number) by the Director-General of Health that is valid or in force immediately before the commencement of this regulation and that authorises that tank wagon or type of tank wagon to carry those hazardous substances:
- (c) a tank wagon that contains or is intended to contain any other class of hazardous substance.
- (3) Subclause (2) does not apply to a tank wagon with a capacity of less than 2000 L.

Compare: SR 2004/46 r 4

### Subpart 1—General requirements for tank wagons

#### 16.3 Application of subpart 1

This subpart applies to tanks and tank wagons.

Compare: SR 2004/46 r 5

#### 16.4 Compatibility

- (1) A relevant PCBU must ensure that a tank, the fittings, and any part of a tank wagon that could, in the normal course of operation, come into contact with a hazardous substance carried in that tank are designed and constructed using substances and materials that—
  - (a) are compatible with the hazardous substance; and
  - (b) are not listed in table 1 in Schedule 9 (which relates to substances and materials incompatible with class 2, 3, and 4 substances).
- (2) If a tank is to be used to carry 2 or more hazardous substances that are not compatible with each other, the PCBU must ensure that the tank is designed and constructed so that—
  - (a) different compartments of the tank are separated by double-wall bulkheads; and
  - (b) each compartment of the tank has a separate filling and discharge system.
- (3) In this regulation, **compatible** means that—

- (a) the substances or materials used in the construction of the tank are chemically inert when in contact with the hazardous substances carried in the tank at the range of temperatures and pressures at which the contact may occur; or
  - (b) if the substances or materials used in the construction of the tank chemically react with the hazardous substances carried in the tank,—
    - (i) the reaction does not cause or contribute to a fire or an explosion or generate a substance of a different hazardous property, or a different nature or degree of hazard; and
    - (ii) continuous or repeated exposure to the reaction does not soften, weaken, or otherwise affect the substances and materials used in the construction of the tank to the extent that the tank fails to meet any of the design or construction requirements specified in these regulations.
  - (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
    - (a) for an individual, to a fine not exceeding \$10,000;
    - (b) for any other person, to a fine not exceeding \$50,000.
- Compare: SR 2004/46 r 6

## 16.5 Markings

- (1) A PCBU with management or control of a tank must ensure that a marking is permanently attached to each tank or tank sub-frame and that the marking specifies—
  - (a) the design compliance certificate number issued by a compliance certifier; and
  - (b) the recommended operating pressure for each part of the tank and fittings that is intended to operate at different pressures; and
  - (c) the maximum filling level of each tank compartment; and
  - (d) the maximum density of any liquids to be carried in the tank; and
  - (e) the materials used to construct the tank; and
  - (f) the date of manufacture of the tank; and
  - (g) the manufacturer of the tank; and
  - (h) a tank wagon record number allocated by WorkSafe.
- (2) Subclause (1)(h) does not apply to a tank wagon referred to in regulation 16.2(2)(a)(ii).
- (3) If different hazardous substances are carried in different tank compartments, the PCBU must ensure that markings are attached to the tank to identify—
  - (a) the hazardous substance contained in each tank compartment; and

- (b) the hazardous properties of each hazardous substance in each tank compartment; and
  - (c) the tank connection and filling system to be used if more than 1 option is available.
- (4) A PCBU with management or control of a tank or tank sub-frame must ensure that markings are attached to the tank or tank sub-frame that specify the name and contact details of the compliance certifier who issued the last in-service compliance certificate for the tank wagon as complying with this Part.
- (5) A relevant safe work instrument may modify the marking requirements set out in this regulation.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2004/46 r 7

## Subpart 2—Design, construction, and installation requirements for large tank wagons with capacity of at least 2 000 L

### 16.6 Application of subpart 2

This subpart applies to a tank wagon that has a tank capacity of at least 2 000 L.

Compare: SR 2004/46 r 8

### 16.7 Ability to withstand stress of load

- (1) A relevant PCBU must ensure that a tank is designed and constructed so that, when undergoing stresses expected to be generated by the tank, its contents, and the fittings permanently attached to the tank, it complies with the following conditions:
  - (a) when the tank is in an upright position,—
    - (i) if the tank contains a liquid, there is no visible leakage of the liquid from the tank; or
    - (ii) if the tank contains a gas, leakage of the gas from the tank is not visible by the appearance of bubbles when soapy water is applied to the surface of the tank; and
  - (b) when the tank is inverted and resting on its top or rotated 90° about the longitudinal axis and resting on either side,—
    - (i) if the tank contains a liquid, the liquid does not leak from the tank at a rate of more than 0.3 L per day; or

- (ii) if the tank contains a gas, leakage of the gas from the tank is not visible by the appearance of bubbles when soapy water is applied to the surface of the tank.
  - (2) For the purpose of calculating the design and construction requirements in sub-clause (1),—
    - (a) the tank must be full; and
    - (b) the materials used to construct the tank must be calculated at twice their actual density; and
    - (c) the content carried must be calculated at twice its actual density or twice the density of water at 20°C, whichever is greater.
  - (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
    - (a) for an individual, to a fine not exceeding \$10,000;
    - (b) for any other person, to a fine not exceeding \$50,000.
- Compare: SR 2004/46 r 9(1), (2)

### 16.8 Pressure resistance

- (1) A relevant PCBU must ensure that a tank that operates at pressure is designed and constructed so that the tank and fittings comply with the following conditions:
  - (a) it is able to withstand a pressure of at least -7 kPa; and
  - (b) when the tank is operated at the maximum obtainable pressure, if the tank contains a liquid, there is no visible loss of the liquid from the tank; and
  - (c) when the tank is operated at the pressure for which it was designed, the pressure produced does not exceed the maximum obtainable pressure.
- (2) A PCBU who designs the tank and fittings must,—
  - (a) when calculating the maximum obtainable pressures, take the following matters into account:
    - (i) the intended vapour pressure and density of the hazardous substances intended to be carried;
    - (ii) ambient temperature fluctuations and temperature changes of the hazardous substances intended to be carried;
    - (iii) the temperatures generated by any heating and cooling system that is fitted to the tank;
    - (iv) the equipment used to transfer the substance to or from the tank;
    - (v) the pressure management capability of the tank; and

- (b) ensure that each part of the tank and fittings is designed so that, if the part contains a liquid, it is capable of operation at a pressure at least as great as the maximum obtainable pressure for the part.
- (3) For the purposes of subclause (2)(a)(ii), the ambient temperature must be—
  - (a) at least  $-10^{\circ}\text{C}$  and not more than  $40^{\circ}\text{C}$  for a liquid; or
  - (b) at least  $-20^{\circ}\text{C}$  and not more than  $40^{\circ}\text{C}$  for a gas.
- (4) Subclause (1) does not apply to a tank and fittings designed and constructed in accordance with the pressure requirements in the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999.
- (5) A relevant PCBU must ensure that a tank and its fittings carrying a class 2.1.1, 3, 4, or 5 substance are designed and constructed to ensure that, when the tank is full and exposed to heat radiation of  $15\text{ kW/m}^2$  for a minimum of 10 minutes,—
  - (a) the internal pressure of the tank does not exceed the maximum obtainable pressure; and
  - (b) a tank compartment does not rupture.
- (6) A relevant PCBU must ensure that a tank carrying a class 3, 4, or 5 substance is designed and constructed to ensure that the pressure can be equalised, within 2 seconds, between the filling pipes and the vapour space in the tank and the upper end of the dip tube and the vapour space in the tank.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 10

## **16.9 Fatigue resistance**

- (1) A relevant PCBU must ensure that a tank is designed and constructed to ensure that, after repeated filling and discharging of its contents,—
  - (a) if the tank contains a liquid, there is no visible leakage of the liquid from the tank; or
  - (b) if the tank contains a gas, leakage of the gas from the tank is not visible by the appearance of bubbles when soapy water is applied to the surface of the tank.
- (2) A PCBU who designs or constructs a tank must ensure that repeated filling and discharging from the tank is checked in design or tested as follows:
  - (a) for a road tank wagon, by 5 million pressure cycles from  $-7\text{ kPa}$  to the recommended operating pressure:



- (b) for a rail tank wagon, by 500 000 pressure cycles from  $-7$  kPa to the recommended operating pressure.
- (3) A PCBU who designs or constructs a tank must ensure that it is designed and constructed so as to be able to withstand fatigue stresses from movement while in transit produced by 5 million cycles at the following amplitudes, where  $g$  means the gravitational acceleration constant due to gravity ( $9.81 \text{ m/s}^2$ ) and  $M$  means the mass of the tank and its contents and fittings (but excluding chassis):
  - (a) vertical,  $0.6g \times M$ :
  - (b) longitudinal,  $0.4g \times M$ :
  - (c) lateral,  $0.4g \times M$ .
- (4) For the purpose of the calculations in subclause (3), the mass ( $M$ ) for the fatigue test is,—
  - (a) at the maximum part of the load cycle, the sum of the mass of the empty tank plus the mass of the contents (assuming that the tank is 100% full using the density of the contents or a density of  $1\,000 \text{ kg/m}^3$ , whichever is greater):
  - (b) at the minimum part of the load cycle, the mass of the empty tank only.
- (5) Subclauses (1) and (3) do not apply to a tank or its fittings designed and constructed in accordance with the pressure requirements in the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999.
- (6) Subclause (2) does not apply—
  - (a) to a tank that contains a liquid at atmospheric pressure; or
  - (b) to a tank that complies with the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 11

#### **16.10 Corrosion resistance**

- (1) A PCBU who designs a tank must ensure that the wall thickness specified in the design takes into account the tank's rate of corrosion to ensure that, during the lifetime of the tank wagon, the minimum wall thickness is not less than is necessary to meet the stress, pressure resistance, and fatigue resistance requirements in regulations 16.7 to 16.9.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 12

#### **16.11 Tank impact resistance**

- (1) A relevant PCBU must ensure that a tank is designed and constructed so that, if the empty tank is struck from any direction by a 20 kg smooth, hard, spherical object with a radius of 85 mm at a speed of 5 m/s, and the tank later contains a liquid, there is no visible loss of its contents on the outside of the tank or its fittings when the tank is filled with the liquid.
- (2) Subclause (1) does not apply to a tank and fittings designed and constructed in accordance with the pressure requirements in the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 13

#### **16.12 Fittings impact resistance**

- (1) A relevant PCBU must ensure that the fittings on a tank positioned below the upper liquid level of a full tank containing a liquid, and any fittings on a tank containing a gas, are designed, constructed, and installed to ensure that, if the fittings are damaged or broken off,—
  - (a) if the tank contains a liquid, there is no visible leakage of the liquid from the tank; or
  - (b) if the tank contains a gas, leakage of the gas from the tank is not visible by the appearance of bubbles when soapy water is applied to the surface of the tank.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 14

#### **16.13 Maximum compartment size**

- (1) A relevant PCBU must ensure that,—
  - (a) in the case of a tank wagon that is an aircraft refuelling unit, the compartment of the tank does not have a capacity of more than 20 000 L; and

- (b) in the case of any other tank wagon, the compartment of the tank, except a compartment that contains a gas, does not have a capacity of more than 10 000 L.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 14A

#### **16.14 Emergency preparedness**

- (1) A relevant PCBU must ensure that a road tank wagon carrying a class 2.1.1, 3, 4, or 5 substance is designed, constructed, and operated so that, if a fire occurs in the load tank, the driver of the tank wagon is protected for at least 1 minute.
- (2) The PCBU must ensure that the means of motive power or propulsion of a road tank wagon is designed and constructed so that, if a fire occurs, the driver of the tank wagon is protected for at least 1 minute.
- (3) The PCBU must ensure that a tank wagon intended to carry any class 2.1.1, 3, 4, or 5 substance has installed, in addition to the normal means of tank closure, an automatic heat-activated closing device that closes at a temperature of not more than 80% of the auto-ignition temperature of the liquid at the tank outlets, for every valve that is used for transferring liquids from the tank.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 15

#### **16.15 Loss minimisation while transferring liquids or gases**

- (1) A relevant PCBU must ensure that a tank is designed and constructed with at least 2 means, which operate independently, to shut off the flow of a liquid or a gas during a transfer of the liquid or gas from the tank.
- (2) The PCBU must ensure that the means of shutting off the flow of the liquid or the gas can—
  - (a) be activated by the person transferring the liquid or gas from the tank within 10 seconds; and
  - (b) shut off the flow of the liquid or gas within 3 seconds of the means being activated.
- (3) The PCBU must ensure that at least 1 means of shutting off the flow of a liquid or gas must shut off the flow at the tank wall and at least 1 other means must shut off the flow at the delivery connection.

- (4) The PCBU must ensure that, if a pump is installed as part of the tank wagon equipment for the transfer of the liquid or the gas from the tank, an additional means of shutting off the pump is designed, constructed, and installed so that it can be activated within 5 seconds by the person transferring the liquid or gas.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 16

#### **16.16 Attachment of tank to chassis**

- (1) A relevant PCBU must ensure that a tank is designed and constructed so that the attachment of the tank to the chassis of the tank wagon is able to resist the forces specified in Schedule 23.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 17

#### **16.17 Minimising risk of possible ignition**

- (1) A PCBU with management or control of a tank wagon that carries a class 2.1.1, 3, or 4 substance must ensure that the tank wagon complies with the requirements set out in regulations 10.6, 10.8, and 10.11.
- (2) The PCBU must ensure that the electrical resistance between the tank of a road tank wagon that carries a class 2.1.1, 3, or 4 substance and any equipment or part of equipment permanently attached to any part of that tank wagon, including the chassis, does not exceed 10  $\Omega$ .
- (3) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction to the applicable fine set out in regulations 10.6, 10.8, and 10.11.
- (4) A PCBU who contravenes subclause (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 18

### Subpart 3—Requirements for large road tank wagons with capacity of at least 2 000 L

#### 16.18 Application of subpart 3

This subpart applies to a road tank wagon that has a tank capacity of at least 2 000 L.

Compare: SR 2004/46 r 19

#### 16.19 Fuel tank requirements

- (1) A relevant PCBU must ensure that the fuel system and fuel tank of a road tank wagon are designed, constructed, and installed so that fuel is not lost at the rate of more than 0.003 L per minute when—
  - (a) the fuel system or fuel tank is exposed to heat radiation of 10 kW/m<sup>2</sup> for at least 1 minute; or
  - (b) the road tank wagon rolls over.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 20

#### 16.20 Stability and manoeuvrability

- (1) A relevant PCBU must ensure that a road tank wagon is designed and constructed so that, if the tank is full, the road tank wagon will not roll over if subjected to any of the following:
  - (a) a static roll threshold of 0.45 g;
  - (b) a maximum dynamic load transfer ratio of 0.6;
  - (c) a high-speed transient off-tracking of 0.8 m.
- (2) In subclause (1),—

**dynamic load transfer ratio** means the ratio calculated by simulating the vehicle combination in a lane-changing manoeuvre in accordance with the process set out in the 3 seconds and 90 km/h option provided in the standard SAE J2179:2000-09

**g** means the gravitational acceleration constant due to gravity

**high speed transient off-tracking** means the maximum lateral offset of the rear axis path (usually the trailer) with respect to the path of the steer axle determined during the lane change manoeuvre set out in the standard SAE J2179:2000-09 (3 seconds and 90 km/h option)

**SAE J2179:2000-09** means the Society of Automotive Engineers standard SAE J2179 on A test for evaluating the rearward amplification of multi-articulated vehicles, issued in September 1993

**static roll threshold** means the maximum level of steady turning lateral acceleration that a vehicle can tolerate without rollover, which is calculated as a proportion of g.

- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 21

#### **16.21 Longitudinal surging**

- (1) A relevant PCBU must ensure that a road tank wagon with a compartment size of more than 8 600 L is designed and constructed so that, under a deceleration force of twice the gravitational force, 50% or less of the force generated by the compartment filled to 65% of capacity is applied to the foremost wall of the compartment.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 22

#### **16.22 Rear-end collision protection**

- (1) A relevant PCBU must ensure that a road tank wagon is designed and constructed so that a static load uniformly distributed across the central 1.5 m of the rear of the road tank wagon at an elevation at least 500 mm and not more than 1 000 mm above the ground does not cause,—
- (a) if the tank contains a liquid, the liquid to leak from the tank at a rate of more than 0.1 L per minute; or
  - (b) if the tank contains a gas, leakage of the gas that is identifiable by smell or sound, or that is visible by the appearance of bubbles when soapy water is applied to the surface of the tank.
- (2) For the purposes of subclause (1), the static load must not be more than twice the weight of the fully laden road tank wagon or 40 tonnes, whichever is the lesser.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 23

### 16.23 Rear run-under by small vehicle

- (1) A relevant PCBU must ensure that a road tank wagon is designed and constructed with a bumper or similar structure that can withstand a static load uniformly distributed across the central 1.5 m section of the rear of the road tank wagon vertically in line with the bumper at an elevation of at least 300 mm and not more than 500 mm above the ground.
- (2) For the purposes of subclause (1), the static load must be—
  - (a) the weight of the laden tank, if that weight is at least 10 tonnes and not more than 20 tonnes; or
  - (b) 10 tonnes, if the weight of the laden tank is less than 10 tonnes; or
  - (c) 20 tonnes, if the weight of the laden tank is more than 20 tonnes.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 24

## Subpart 4—Requirements for smaller road tank trailers with capacity of less than 2 000 L that carry liquids

### 16.24 Application of subpart 4

This subpart applies to a road tank trailer that—

- (a) carries a liquid; and
- (b) has a tank capacity of less than 2 000 L.

Compare: SR 2004/46 r 25

### 16.25 Design, construction, installation, and operation requirements

- (1) A relevant PCBU must ensure that a road tank trailer complies with the requirements set out in regulations 16.7, 16.8, 16.10, 16.16, 16.17, 16.20, and 16.22.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 26

### **16.26 Road tank trailer impact resistance**

- (1) A relevant PCBU must ensure that a road tank trailer is designed and constructed so that, if the tank is struck from any direction by a 15 kg smooth, hard, spherical object with a radius of 77 mm at a speed of 5 m/seconds,—
  - (a) there is no visible loss of a liquid from the tank; and
  - (b) there is no release of a gas or vapour that is identifiable by smell or sound or visible by the appearance of bubbles when soapy water is applied to the surface of the tank.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 27

### **16.27 Fittings impact resistance**

- (1) A relevant PCBU must ensure that any fittings positioned below the upper liquid level of a full tank are designed, constructed, and installed so that in the event of the tank being struck from any direction by a 15 kg smooth, hard, spherical object with a radius of at least 77 mm at a speed of at least 5 m/second, the tank does not leak—
  - (a) a liquid from the tank at a rate of more than 0.03 L per minute; and
  - (b) a gas or vapour that is identifiable by smell or sound, or visible by the appearance of bubbles when soapy water is applied to the surface of the tank.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 28

### **16.28 Rear run-under**

- (1) A relevant PCBU must ensure that a road tank trailer is designed and constructed with a bumper or similar structure at an elevation of at least 500 mm and not more than 600 mm above the ground that can withstand a static load uniformly distributed across the central 1.5 m section of the rear of the road tank trailer vertically in line with the bumper.
- (2) For the purposes of subclause (1), the static load must be equal to the laden weight of the road tank trailer.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—



- (a) for an individual, to a fine not exceeding \$10,000;
- (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 29

### Subpart 5—Transportable containers

#### 16.29 Application of subpart 5

This subpart applies to a transportable container that contains or is intended to contain a hazardous substance or a gas under pressure.

Compare: SR 2004/46 r 30

#### 16.30 Requirements for UN approved containers

- (1) A PCBU must not use a transportable container unless it complies with chapter 6.5 of the UN Model Regulations (which relates to intermediate bulk containers) and,—
  - (a) for a container that is manufactured in New Zealand, the container has the design compliance certificate required by subpart 6; and
  - (b) for a container carrying a hazardous substance other than a low-hazard hazardous substance, the substance is transferred to or from the container while it remains attached to the deck of the vehicle in accordance with regulations 16.40 to 16.45.
- (2) A PCBU must not use a transportable container unless it complies with chapter 6.7 of the UN Model Regulations (which relates to portable tanks and multiple element gas containers) for the carriage of any hazardous substance or any gas under pressure and,—
  - (a) for a container manufactured in New Zealand, the container has the design compliance certificate required by subpart 6; and
  - (b) the attachment of the container to the deck of the vehicle is able to resist the forces specified in Schedule 23; and
  - (c) if the container is transported,—
    - (i) it is empty; or
    - (ii) it is filled within 10% of the maximum filling level; or
    - (iii) the vehicle transporting that container meets the requirements of regulation 16.20; and
  - (d) where a hazardous substance other than a low-hazard hazardous substance is carried, and the hazardous substance is to be transferred to or from the container while the container remains attached to the deck of the vehicle, the requirements of regulations 16.12, 16.14, 16.15, 16.17, 16.19, 16.22, 16.23, and 16.40 to 16.45 are complied with.
- (3) Subclauses (1)(b) and (2)(c)(ii) and (d) apply as if the vehicle were a road tank wagon and the transportable container were a tank.

- (4) A relevant safe work instrument may—
  - (a) provide for alternative design and construction requirements for transportable containers, in accordance with clauses 6.5.1.1.2 and 6.7.1.2 of the UN Model Regulations; and
  - (b) modify the testing, inspection, and compliance certification requirements for transportable containers that are referred to in this regulation (including those requirements set out in chapters 6.5 and 6.7 of the UN Model Regulations); and
  - (c) specify additional marking requirements for transportable containers (including those requirements set out in chapters 6.5 and 6.7 of the UN Model Regulations).
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 31

## Subpart 6—Compliance certification

### **16.31 Requirements for issue of design compliance certificates**

- (1) A PCBU who designs or constructs a tank wagon or part of a tank wagon must obtain a design compliance certificate to certify that the tank wagon or part complies with the design requirements of this Part.
- (2) Subclause (1) does not apply to a tank wagon with a tank capacity of less than 450 L that carries a low-hazard hazardous substance.
- (3) A PCBU who designs a transportable container for manufacture and use in New Zealand must obtain a design compliance certificate to certify that the container complies with chapter 6.5 or 6.7 of the UN Model Regulations.
- (4) The PCBU must ensure that the application for a design compliance certificate for a tank wagon, a part of a tank wagon, or a transportable container is submitted to a compliance certifier and includes the technical drawings, calculations, and specifications for—
  - (a) each design component set out in Schedule 24 if the certification is for the whole tank wagon; or
  - (b) each applicable design component set out in Schedule 24 if the certification is for part of a tank wagon; or
  - (c) each design component set out in chapter 6.5 or 6.7 of the UN Model Regulations if the certification is for a transportable container.
- (5) The application must be in the form required by WorkSafe (if any).

- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 32

### **16.32 Requirements relating to design compliance certificates**

A compliance certifier must give the following to WorkSafe as soon as practicable after a design certificate is issued:

- (a) a copy of a design compliance certificate;
- (b) technical drawings, calculations, and specifications referred to in regulation 16.31(4).

Compare: SR 2004/46 r 33

### **16.33 Record of designs**

WorkSafe must—

- (a) keep a record of the technical drawings, calculations, and specifications referred to in regulation 16.31(4); and
- (b) issue the number referred to in regulation 16.5(1)(h) to the compliance certifier for each design for which a design compliance certificate has been issued within 5 working days from the day on which it receives the information referred to in regulation 16.32.

### **16.34 Requirements for issue of pre-commissioning compliance certificates**

- (1) Before operating a tank wagon, a relevant PCBU must obtain a pre-commissioning compliance certificate.
- (2) Despite subclause (1), a pre-commissioning compliance certificate is not required for a tank wagon—
  - (a) with a tank capacity of less than 450 L that carries a low-hazard hazardous substance; or
  - (b) with a tank capacity of less than 2 000 L that is manufactured by an approved fabricator in accordance with the terms and conditions of the fabricator's approval.
- (3) The PCBU must apply to a compliance certifier for the certificate, and the application must be in the form required by WorkSafe (if any).
- (4) The compliance certifier may issue the certificate if satisfied that—
  - (a) each design component of the tank wagon specified in Schedule 24 as requiring a pre-commissioning compliance certificate has been constructed and installed in accordance with a design for which a design compliance certificate has been issued under regulation 16.31; and

- (b) each compartment of the tank wagon that is likely to be operated under pressure complies with subclause (5).
- (5) A tank compartment passes a pressure test if it does not crack or suffer any permanent distortion after application of one of the following tests:
  - (a) a 10-minute hydrostatic test conducted at 1.5 times the design pressure:
  - (b) a 10-minute pneumatic test conducted at 1.25 times the design pressure, with adjacent compartments—
    - (i) empty in both instances; and
    - (ii) at atmospheric pressure:
  - (c) a pressure test specified in a relevant safe work instrument.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 35(1)–(4)

#### **16.35 WorkSafe may approve tank wagon fabricators**

- (1) WorkSafe may, on application by a PCBU, give written notice to the PCBU—
  - (a) approving the PCBU as an approved fabricator; and
  - (b) specifying the terms and conditions of the approval, including all tank wagon designs that the PCBU is approved to manufacture.
- (2) The application must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (3) WorkSafe may, at any time, give written notice to an approved fabricator—
  - (a) revoking the approval; or
  - (b) changing the terms and conditions of the approval.

Compare: SR 2004/46 r 35(5)

#### **16.36 Requirements for issue and renewal of in-service compliance certificates**

- (1) A PCBU with management or control of a tank wagon must obtain an in-service compliance certificate for the tank wagon not more than 2 years after—
  - (a) either—
    - (i) the date of the pre-commissioning compliance certificate issued under regulation 16.34 for the tank wagon; or
    - (ii) the date of manufacture of the tank wagon, if the tank wagon did not require a pre-commissioning compliance certificate; or

- (b) the date of the most recent in-service compliance certificate issued under this regulation.
- (2) Despite subclause (1), an in-service compliance certificate is not required for a tank wagon with a tank capacity of less than 2 000 L that carries a low-hazard hazardous substance.
- (3) An in-service compliance certificate may be issued by a compliance certifier for a tank wagon if the compliance certifier, after completing an external visual inspection of the tank's compartments, is satisfied that the tank wagon and tank comply with the applicable requirements of regulations 16.10, 16.15, 16.22, and 16.23.
- (4) An in-service compliance certificate may be issued by a compliance certifier if the compliance certifier is satisfied that the tank wagon and tank comply with Schedule 24.
- (5) An in-service compliance certificate must not be issued under subclause (3) unless a compliance certificate has been issued for the tank wagon under subclause (4) or regulation 16.34 within the past 4 years.
- (6) WorkSafe may, on application of the PCBU, allow the in-service compliance certificate issued under subclause (3) or (4) to be issued at a later date than is specified in subclause (1), but that later date must not be more than—
  - (a) 5 years after the date of issue of the previous compliance certificate if the previous compliance certificate was issued under subclause (3); or
  - (b) 10 years after the date of issue of the previous compliance certificate if the previous compliance certificate was issued under subclause (4).
- (7) The application must be—
  - (a) in the form required by WorkSafe (if any); and
  - (b) accompanied by the fee (if any) prescribed in Schedule 2.
- (8) In exercising its discretion under subclause (6), WorkSafe must take into account—
  - (a) the maximum quantities and types of hazardous substances transported and the frequency of use of the tank wagon; and
  - (b) the review and monitoring systems in place for the management of hazardous substances and the tank wagon; and
  - (c) whether the PCBU seeking the extension of time for renewal of the compliance certificate has promptly complied with the requirements of the Act and regulations made under the Act.
- (9) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 36

### **16.37 Additional in-service compliance certificates**

- (1) This regulation applies if a component of a tank wagon that requires an in-service compliance certificate under regulation 16.36 is repaired, altered, or subject to an accident and, as a result, that component may no longer comply with the requirements of regulation 16.36.
- (2) A PCBU with management or control of a tank wagon must ensure that the tank wagon is not used until compliance certificates are obtained in accordance with regulation 16.36(3) and (4).
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 37

## **Subpart 7—Operating requirements**

### **16.38 Compatibility of hazardous substances carried**

- (1) A PCBU with management or control of a tank wagon must ensure that, before the tank wagon is used to carry a hazardous substance that differs from a hazardous substance previously carried,—
  - (a) the tank is completely emptied of the previously carried substance; or
  - (b) the mixture of the hazardous substance with any residue of the previously carried substance remaining in the tank does not create a hazardous substance of a different hazardous property, nature, or degree.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 38

### **16.39 Filling tank wagons**

- (1) This regulation applies to a tank wagon that carries a liquid.
- (2) A worker must ensure that a tank or a tank compartment is not filled to a level beyond the maximum filling level.
- (3) A worker who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding \$2,000.

Compare: SR 2004/46 r 39

**16.40 Transfer of liquid or gas**

- (1) A worker who transfers a liquid or gas to or from any tank wagon must—
  - (a) attend the tank wagon from the time the transfer of the hazardous substance commences and until it is completed unless the requirements of regulation 16.41 are met; and
  - (b) ensure that, from the time the transfer of the hazardous substance commences until it is completed, the tank wagon does not move; and
  - (c) before the tank wagon is moved, ensure that all tank openings are securely closed after the transfer of hazardous substance is complete.
- (2) A worker who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding \$2,000.

Compare: SR 2004/46 r 40

**16.41 When tank wagon may be left unattended**

- (1) A worker who operates a tank wagon that contains a liquid or a gas may leave that tank wagon unattended only if—
  - (a) it is located in a transit depot; or
  - (b) it is in a hazardous substance location that complies with the current location compliance certificate for the applicable hazard classification; or
  - (c) it is used to refuel an aircraft that carries out the aerial application of a hazardous substance and—
    - (i) all of the valves on the tank wagon are closed; and
    - (ii) the tank wagon is located—
      - (A) at least 20 m from any protected place; and
      - (B) at least 6 m from any combustible material; and
      - (C) in a compound or other place, other than a permanent heliport or aerodrome, that will ensure that any spillage of the aviation gasoline or JetA-1 aviation turbine fuel at that place will not endanger any building or flow into any stream, lake, or natural water; or
  - (d) in any other location,—
    - (i) it is unattended for a period not exceeding 15 minutes; and
    - (ii) all of the valves on the tank wagon are closed; and
    - (iii) the tank wagon is located at least 30 m way from any protected place.
- (2) A worker who contravenes this regulation commits an offence and is liable on conviction to a fine not exceeding \$2,000.

Compare: SR 2004/46 r 41

**16.42 Requirements for fire extinguishers for road tank wagons with capacity of at least 2 000 L**

- (1) This regulation applies to a road tank wagon that has a tank capacity of at least 2 000 L.
- (2) A PCBU with management or control of a road tank wagon that carries a hazardous substance with a hazard classification listed in the first column of the table in Schedule 4 must ensure that—
  - (a) at least 1 fire extinguisher that complies with the specifications set out in regulation 5.5 is located in the tank wagon cab; and
  - (b) either—
    - (i) at least 2 fire extinguishers that comply with the specifications set out in regulation 5.5 are located on each tank; or
    - (ii) at least 1 fire extinguisher that has at least the equivalent capacity of 2 fire extinguishers that comply with the specifications set out in regulation 5.5 is located on each tank.
- (3) The PCBU must ensure that fire extinguishers are installed and located on the road tank wagon in such a way that the worker who operates the road tank wagon is able to extract any extinguisher from its location and hold it ready for use within 10 seconds.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2004/46 r 42

**16.43 Requirements for fire-fighting facilities and equipment for tank wagons containing LPG, propane, butane, or isobutane with capacity of at least 12 000 L**

- (1) A PCBU with management or control of a tank wagon containing LPG, propane, butane, or isobutane with a capacity of at least 12 000 L must ensure that, when it is parked and left unattended for a period of more than 1 hour, fire-fighting facilities and equipment are provided that include a spray system, capable of delivering water to the exposed surfaces of the tank at a rate of 600 L per square metre per hour, and an automatic spray system that—
  - (a) detects fire; and
  - (b) starts delivering water to the tank; and
  - (c) can be manually controlled from a safe location.
- (2) Despite subclause (1), if the tank wagon is parked and left unattended while nominally empty, only a hydrant system equipped with a monitor or equivalent means to direct water to all sides of the tank needs to be provided.



- (3) A relevant safe work instrument may modify the requirements set out in sub-clauses (1) and (2) for the fire-fighting facilities or equipment.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**16.44 Prescribed requirements relating to exemption from fire-fighting facilities and equipment for tank wagons with capacity of at least 12 000 L**

- (1) An application for an exemption under section 220 of the Act from a requirement in regulation 16.43 must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (2) In considering whether to grant the exemption, WorkSafe must have regard to—
  - (a) the separation distance between the tank wagon and a protected place or public place (as the case may be); and
  - (b) any hazards located within the site where the tank wagon is parked; and
  - (c) the exposure of the tank wagon to or from any other property; and
  - (d) the available water supply; and
  - (e) the likely response time and available resources of the local units of Fire and Emergency New Zealand.

**16.45 Persons with access**

- (1) A PCBU with management or control of a road tank wagon with a tank capacity of at least 2 000 L must, at any time a hazardous substance (or residue of a hazardous substance) is contained in the tank, ensure that no person is in or on the tank wagon except the persons who—
  - (a) are necessary for the operation of the tank wagon; and
  - (b) carry out maintenance, inspection, training, or management duties.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2004/46 r 43

## Subpart 8—Additional and modified requirements

### **16.46 Additional and modified requirements for tank wagons**

- (1) This regulation applies to a tank wagon if the Minister approves a safe work instrument in relation to tank wagons for the purposes of this regulation.
- (2) The Minister may approve a safe work instrument for the purposes of this regulation if satisfied that compliance with the provisions of these regulations that apply to tank wagons will not appropriately control risk associated with tank wagons.
- (3) In deciding whether to approve a safe work instrument for the purposes of this regulation, the Minister must have regard to the following matters:
  - (a) whether compliance with the provisions of these regulations being considered will eliminate or minimise relevant risk so far as is reasonably practicable:
  - (b) whether it is practicable for relevant duty holders to comply with those provisions:
  - (c) whether compliance with a modified form of those provisions, or with additional or alternative requirements, would be more practicable and no less effective in eliminating or minimising risk:
  - (d) whether a modified form of those provisions, or additional or alternative requirements, would be more appropriate to the nature of the hazards and risk being considered.
- (4) A safe work instrument approved for the purposes of this regulation may—
  - (a) set out any additional requirements that apply to the design, construction, installation, operation, testing, inspection, or compliance certification of tank wagons:
  - (b) state which PCBUs are required to comply with each additional requirement:
  - (c) state which provisions of these regulations are to apply to tank wagons in a way that is modified by the instrument.
- (5) A PCBU identified under subclause (4)(b) must ensure that any additional requirement relating to the tank wagon is complied with.
- (6) A provision of these regulations, that is modified under subclause (4)(c) by a safe work instrument approved for the purposes of this regulation, applies, and must be complied with, as modified.
- (7) A PCBU who contravenes subclause (5) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.
- (8) In this regulation,—

**additional requirement** means a new requirement set out in a safe work instrument approved for the purposes of this regulation

**appropriately control**, in relation to risk, means the risk is eliminated or minimised so far as is reasonably practicable

**modified**, in relation to a provision of these regulations, means the safe work instrument has the effect of—

- (a) varying, replacing, or deleting a requirement in the provision; or
- (b) providing an alternative means of complying with a requirement in the provision.

## Part 17

### Stationary container systems

#### 17.1 Application of Part 17

- (1) This Part applies to every stationary container system in a workplace that contains, or is intended to contain, a hazardous substance.
- (2) However, this Part does not apply to—
  - (a) a stationary tank, other than a stationary tank to which subpart 11 applies, with a volume not exceeding 250 L; or
  - (b) a process container, if the process container—
    - (i) is required to comply with the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999; and
    - (ii) is constructed of a fire-resistant material; or
  - (c) a stationary container system that is only intended to contain a hazardous substance that is—
    - (i) a solid; or
    - (ii) a class 6.1E, 6.3A, 6.3B, or 6.4A substance, or a substance with any combination of those classifications, that does not have any other hazard classification; or
  - (d) a stationary container system that forms an integral part of a refrigerating unit.
- (3) This Part applies to a stationary container system—
  - (a) from each point where a hazardous substance enters the stationary container system; and
  - (b) up to each point where a hazardous substance—
    - (i) enters a distribution system that is subject to the Gas Act 1992; or
    - (ii) enters a pipeline that is subject to the Health and Safety in Employment (Pipelines) Regulations 1999; or

- (iii) enters another container to which controls under these regulations apply; or
  - (iv) in the case of a substance that is used as the motive power for, or to control, a vehicle, a ship, or an aircraft, enters the fuel system, the electrical system, the emergency system, or a control system of the vehicle, ship, or aircraft; or
  - (v) enters a vehicle, ship, or aircraft used to transport the hazardous substance if the vehicle, ship, or aircraft is under the jurisdiction of the Land Transport Rules, Maritime Rules, or Civil Aviation Rules.
- (4) For the purposes of this Part, low flashpoint diesel (low flash domestic heating oil and alpine diesel) must be treated as a class 3.1D substance.

## 17.2 Interpretation

In this Part, unless the context otherwise requires,—

**alteration** means any change to the design or location of a stationary container system, and—

- (a) includes—
  - (i) the addition or removal of 1 or more elements of the stationary container system; and
  - (ii) a change to the physical dimensions or configuration of the stationary tank or process container; and
  - (iii) any reassembling of a stationary tank or process container that has been dismantled; but
- (b) does not include repair in accordance with the approved design of the container or maintenance

**API** means the American Petroleum Institute

**API 6FA:1999** means the API standard on Specification for Fire Test for Valves

**API 570:2016 (4th Edition)** means the API standard on Piping Inspection Code—In-service inspection, rating, repair, and alternation piping systems

**API 607:2016 (7th Edition)** means the API standard on Fire test for soft-seated quarter turn valves

**API 620:2013 (12th Edition)** means the API standard on Design and construction of large, welded, low-pressure storage tanks

**API 653:2014 (5th Edition)** means the API standard on Tank inspection, repair, alteration, and reconstruction

**API 2000:2014 (7th Edition)** means the API standard on Venting atmospheric and low-pressure storage tanks—nonrefrigerated and refrigerated

**API 2610:2005 (2nd Edition) (R2010)** means the API standard on Design, construction, operation, maintenance, and inspection of terminal and tank facilities (2005 2nd Edition reaffirmed 2010)

**AS 1345—1995 (3rd Edition)** means the Australian standard on Identification of the contents of pipes, conduits and ducts

**AS 1375—2013** means the Australian standard on Industrial fuel-fired appliances

**AS 1692—2006 (4th Edition)** means the Australian standard on Tanks for flammable and combustible liquids

**AS 1940—2004 (5th Edition) (R2006)** means the Australian standard on the Storage and handling of flammable and combustible liquids (2004 5th Edition reissued incorporating Amendment No 2 2006)

**AS 2634—1983 (1st Edition)** means the Australian standard on Chemical plant equipment made from glass-fibre reinforced plastics (GRP) based on thermosetting resins

**AS 2885.1—2012** means the Australian Standard on Pipelines—Gas and liquid petroleum—Design and construction

**AS 2885.3—2012** means the Australian Standard on Pipelines—Gas and liquid petroleum—Operation and maintenance

**AS 4326—2008 (2nd Edition)** means the Australian standard on The storage and handling of oxidising agents

**ASME B31.3—2016** means the ASME standard on Process piping

**ASME B31.4:2016** means the ASME standard on Pipeline transportation systems for liquids and slurries

**ASME RTP-1:2015** means the ASME standard on Reinforced thermoset plastic corrosion-resistant equipment

**AS/NZS 1020:1995** means the Australian/New Zealand Standard on The control of undesirable static electricity

**AS/NZS 1170.2:2011 (R2016)** means the Australian/New Zealand Standard on Structural design actions—Wind actions (2011 incorporating Amendment Nos 1, 2, 3, and 4, reconfirmed 2016)

**AS/NZS 1596:2014** means the Australian/New Zealand Standard on The storage and handling of LP gas

**AS/NZS 1768:2007** means the Australian/New Zealand standard on Lightning protection

**AS/NZS 2229:2004** means the Australian/New Zealand Standard on Fuel dispensing equipment for explosive atmospheres

**ASTM D3299–10** means the ASTM standard on Filament-wound glass-fiber-reinforced thermoset resin corrosion-resistant tanks

**ASTM D4021–92** means the ASTM standard on Glass-fiber-reinforced polyester underground petroleum storage tanks

**below ground process container—**

- (a) means a process container that is situated below the ground; and
- (b) includes—
  - (i) a container over which ground has been raised to provide cover for the container; and
  - (ii) a container covered by material other than ground

**below ground stationary tank—**

- (a) means a stationary tank that is situated below the ground; and
- (b) includes—
  - (i) a tank over which ground has been raised to provide cover for the tank; and
  - (ii) a tank covered by material other than ground

**BS 799-2:1991** means the British Standard on Oil-burning equipment—Specification for vaporising burners

**BS 799-5:2010** means the British Standard on Oil-burning equipment—Carbon steel oil storage tanks—Specification

**BS EN 1:1998** means the British/European Standard on Flued oil stoves with vaporizing burners

**BS EN 267:2009+A1:2011** means the British/European Standard on Automatic forced draught burners for liquid fuels

**BS EN 746-2:2010** means the British/European Standard on Industrial thermo-processing equipment—Safety requirements for combustion and fuel handling systems

**BS EN 12285-1:2005** means the British/European Standard on Workshop fabricated steel tanks—Horizontal cylindrical single skin and double skin tanks for the underground storage of flammable and non-flammable water polluting liquids

**BS EN 13121-3:2016** means the British/European Standard on GRP tanks and vessels for use above ground—Design and workmanship

**BS EN 13842:2004** means the British/European Standard on Oil fired forced convection air heaters—Stationary and transportable for space heating

**BS EN 14015:2004** means the British/European Standard Specification for the design and manufacture of site built, vertical, cylindrical, flat-bottomed, above ground, welded, steel tanks for the storage of liquids at ambient temperature and above

**BS EN ISO 10467:2004** means the British/European/International Standard on Plastics piping systems for pressure and non-pressure drainage and sewerage—

Glass-reinforced thermosetting plastics (GRP) systems based on unsaturated polyester (UP) resin

**change in service**, in relation to a stationary container system, means a change of use of the stationary container system to contain 1 or more hazardous substances—

- (a) that are different from the hazardous substances that the stationary container system was designed or certified to contain; or
- (b) at 1 or more pressures or temperatures (or both) that are different from the pressures or temperatures at which the stationary container system was designed or certified to contain hazardous substances

**compatible**, in relation to a hazardous substance, means that the hazardous substance—

- (a) is chemically inert if brought into contact with another hazardous substance for the range of temperatures and pressures that the mixture is exposed to during its life cycle; or
- (b) if it is chemically reactive when brought into contact with another hazardous substance, does not—
  - (i) cause combustion; or
  - (ii) generate an explosion; or
  - (iii) generate a new substance of a different class, subclass, or category

**dispenser** includes a pump approved under section 214 of the HSNO Act before its expiry

**distribution system** has the same meaning as in section 2(1) of the Gas Act 1992

**EEMUA 159** means Publication No 159 (2014 4th Edition) entitled *Above ground flat bottomed storage tanks—A guide to inspection, maintenance and repair* published by the Engineering Equipment and Materials Users Association

**equipment** means equipment that—

- (a) is part of a container or pipework (for example, a burner, or a vapouriser or vent condenser for changing the state of a substance from liquid to gas or from gas to liquid); or
- (b) is used to fill or empty a tank (for example, a dispenser)

**fitting** means any part of a stationary container system that connects the stationary tank or process container with its associated pipework to ensure that hazardous substances passing into or out of the stationary tank or process container are contained and pass safely (for example, elbows, tees, valves, pressure relief equipment, and measuring instruments)

**intermediate secondary containment system** means an intermediate secondary containment system referred to in regulation 17.102(6)

**liquid** includes an emulsion or a gel

**low pressure liquefied gas** has the meaning given in regulation 15.1

**maintenance** means the servicing of any component of a stationary container system to ensure that it continues to perform in accordance with the specifications to which it was designed

**NZS 1170.5:2004** means the New Zealand Standard on Structural design actions—Part 5: Earthquake Actions—New Zealand

**NZS/API** means the New Zealand Standard/American Petroleum Institute

**NZS/API 650:1998** means the NZS/API standard on Welded steel tanks for oil storage

**pipeline** has the same meaning as in regulation 2 of the Health and Safety in Employment (Pipelines) Regulations 1999

**process pipeline**—

- (a) means pipework that—
  - (i) is connected to a process container; and
  - (ii) is used to transfer a hazardous substance into or out of the container; and
- (b) includes a fuel line and a lubricating line

**relevant PCBU** means a PCBU who—

- (a) has the ability to control or influence a matter that is the subject of a duty under this Part; or
- (b) would have that ability but for an agreement or arrangement purporting to limit or remove that ability

**repair**—

- (a) means the restoration of any part of a stationary container system to its design specifications; and
- (b) in relation to a stationary tank or process container, includes—
  - (i) removal and replacement of material of the structure of the tank or container; and
  - (ii) levelling or jacking of the tank or container; and
  - (iii) the addition of reinforcing plates to any part of the structure of the tank or container; and
  - (iv) repair to flaws in the structure of the tank or container, such as tears or gouges; and
  - (v) repair or replacement of strakes and plates; but
- (c) does not include alterations or maintenance

**service tank** means a stationary tank that—



- (a) is part of a stationary container system that supplies fuel to a burner or stationary engine; and
- (b) is the immediate source, but not the main source, of fuel for that stationary container system

**testing** means a method of verifying that a stationary container system is structurally sound and suitable for the service for which it is to be used and includes hydrostatic pressure tests, pressure tests, and non-destructive testing methods

**UL 142:2006 (9th Edition)** means the UL standard on Steel above-ground tanks for flammable and combustible liquids

**UL 296:2017 (11th Edition)** means the UL standard on Oil burners

**UL 896:1993** means the UL standard on Oil-burning stoves

**UL 971:1995 (1st Edition)** means the UL standard on Non-metallic underground piping for flammable liquids

**UL 1316:1994 (2nd Edition)** means the UL standard on Glass-fibre-reinforced plastic underground storage tanks for petroleum products, alcohols, and alcohol-gasoline mixtures

**UL 2085:1997 (2nd Edition)** means the UL standard on Protected above-ground tanks for flammable combustible liquids

**UPSS** means the Code of Practice for the Design, Installation and Operation of Underground Petroleum Storage Systems (1st Edition), published in 1992 by the Occupational Safety and Health Service of the Department of Labour, New Zealand.

Compare: *Gazette* 2004, pp 837–845, Schedule 8, cl 2

### 17.3 Accepted engineering principles and practice to be applied

The question whether a stationary container system complies with this Part is to be determined having regard to the need to comply with this Part in a way that is—

- (a) reasonably practicable; and
- (b) consistent with accepted engineering principles and practice.

Compare: *Gazette* 2004, p 839, Schedule 8, cl 5

## Subpart 1—General requirements for stationary container systems

### 17.4 General performance requirements for stationary container systems

- (1) A relevant PCBU must ensure that all parts of a stationary container system are designed, constructed, installed, operated, maintained, inspected, tested, and repaired so that the stationary container system contains any hazardous substance that is put into it without leakage of that hazardous substance (including any diluent or desensitising agent) when subjected to all likely—
  - (a) operating temperatures; and

- (b) pressures; and
  - (c) stresses and loadings (including seismic and wind stresses and loadings); and
  - (d) environmental conditions.
- (2) A relevant PCBU must ensure that all parts of a stationary container system that are likely to come into contact with a hazardous substance are designed, constructed, installed, operated, maintained, inspected, tested, and repaired so that, when the stationary container system contains a hazardous substance,—
  - (a) the system is,—
    - (i) if the stationary container system is designed for use in specific environmental conditions or a specific temperature range (or both), able to contain the hazardous substance in those environmental conditions or that temperature range (or both); or
    - (ii) if a hazardous substance to be contained in the stationary container system is subject to requirements relating to environmental conditions or the temperature range in which it must be contained (or both), able to contain the hazardous substance in those environmental conditions or that temperature range (or both); or
    - (iii) in any other case, able to contain the hazardous substance in the temperature range from  $-10^{\circ}\text{C}$  to  $50^{\circ}\text{C}$ ; and
  - (b) any materials used in the construction, maintenance, or repair of the stationary container system do not react with the hazardous substance in or on the stationary container system, or interact to significantly affect or weaken the stationary container system so that the requirements of this Part cannot be complied with.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 839-840, Schedule 8, cl 6

### **17.5 Requirements when contained hazardous substances change**

- (1) This regulation applies if a stationary tank that has contained a hazardous substance (the **old substance**) is to contain a different hazardous substance (the **new substance**).
- (2) A relevant PCBU must ensure that the new substance is not introduced into the stationary tank unless—
  - (a) the new substance and the old substance are compatible; or
  - (b) if the new substance and the old substance are not compatible, the stationary tank has been emptied of the old substance.

- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 840, Schedule 8, cl 7

*Obligations and restrictions for above ground stationary tanks for hazardous liquids*

**17.6 Design, construction, and installation of above ground stationary tanks for hazardous liquids**

- (1) A relevant PCBU must ensure that an above ground stationary tank that is used to store hazardous liquids is designed and constructed in accordance with any of the following:
- (a) NZS/API 650:1998;
  - (b) BS EN 14015:2004;
  - (c) API 620:2013 (12th Edition);
  - (d) SwRI 95-03;
  - (e) SwRI 93-01;
  - (f) UL 2085:1997 (2nd Edition);
  - (g) AS 1692—2006 (4th Edition);
  - (h) UL 142:2006 (9th Edition);
  - (i) BS 799-5:2010;
  - (j) if the tank is used to store corrosive or toxic liquids that do not have a flammable classification,—
    - (i) AS 2634—1983 (1st Edition); or
    - (ii) BS EN 13121-3:2016; or
    - (iii) ASTM D3299-10; or
    - (iv) ASME RTP-1:2015;
  - (k) requirements in a relevant safe work instrument.
- (2) A relevant PCBU must ensure that an above ground stationary tank used to store hazardous liquids—
- (a) is installed on foundations that will prevent subsidence of the ground that endangers safety; and
  - (b) if the volume of the stationary tank is more than 150 m<sup>3</sup>, is installed in accordance with the requirements of—
    - (i) NZS/API 650:1998; or
    - (ii) requirements in a relevant safe work instrument.

- (3) A relevant PCBU must ensure that an above ground stationary tank used to store hazardous liquids is designed, constructed, and installed to—
  - (a) the seismic and wind loading requirements specified in—
    - (i) NZS/API 650:1998; or
    - (ii) BS EN 14015:2004; or
    - (iii) AS/NZS 1170.2:2011 (R2016); or
    - (iv) NZS 1170.5:2004; or
  - (b) requirements in a relevant safe work instrument.
- (4) This regulation does not apply to an above ground stationary tank that is required to comply with the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 840-841, Schedule 8, cl 8

### *Pressure management*

#### **17.7 Design, construction, installation, and operation of above ground stationary tank for hazardous liquids for pressure management**

- (1) A relevant PCBU must ensure that an above ground stationary tank used to store hazardous liquids is designed, constructed, installed, and operated so as to ensure that the pressure or vacuum resulting from any of the conditions referred to in subclause (2) will not cause—
  - (a) stress in the tank that exceeds its maximum design stress; or
  - (b) the tank to collapse.
- (2) The conditions are—
  - (a) filling or emptying of the tank;
  - (b) changes in atmospheric temperature.
- (3) An above ground stationary tank used to store liquids with a flammable classification complies with subclause (1) if it is vented in accordance with—
  - (a) section 5.4 of AS 1940—2004 (5th Edition) (R2006); or
  - (b) API 2000:2014 (7th Edition); or
  - (c) requirements in a relevant safe work instrument.
- (4) This regulation does not apply to an above ground stationary tank that is required to comply with the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999.

- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 841-842, Schedule 8, cl 9

### **17.8 Emergency pressure management for above ground stationary tank for flammable and oxidising liquids**

- (1) A relevant PCBU must ensure that an above ground stationary tank that is used to store liquids with a flammable or oxidising classification has an emergency pressure management system that ensures that—
- (a) the maximum design stress of the tank is not exceeded in any reasonably foreseeable event; and
  - (b) the tank does not collapse in any reasonably foreseeable event.
- (2) An above ground stationary tank is managed in accordance with subclause (1)—
- (a) if,—
    - (i) for a tank used to store hydrogen peroxide, it is vented in accordance with section 8.3.4(b) of AS 4326—2008 (2nd Edition); or
    - (ii) for a tank used to store liquids with a flammable or oxidising classification, it is vented in accordance with—
      - (A) API 2000:2014 (7th Edition); or
      - (B) section 5.5 and Appendix I of AS 1940:2004 (5th Edition) (R2006); or
  - (b) if a tank described in paragraph (a) is vented in accordance with requirements in a relevant safe work instrument.
- (3) This regulation does not apply to an above ground stationary tank that is required to comply with the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 842, Schedule 8, cl 10

### *Lightning and stray current protection*

### **17.9 Lightning protection for above ground stationary tank for flammable liquids**

- (1) This regulation applies to an above ground stationary tank that—

- (a) is used to store class 3.1A or 3.1B flammable liquids; and
  - (b) has a safe fill capacity above 60 m<sup>3</sup>.
- (2) A relevant PCBU must ensure that an above ground stationary tank is designed, constructed, installed, and operated in accordance with—
  - (a) sections 1 to 5 and 7 and 8 of NZS/AS 1768:2007; or
  - (b) requirements in a relevant safe work instrument.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 843, Schedule 8, cl 11

#### **17.10 Earthing and bonding for above ground stationary tank for flammable liquids**

- (1) This regulation applies to an above ground stationary tank that is used to store class 3.1A, 3.1B, or 3.1C flammable liquids.
- (2) A relevant PCBU must ensure that static electricity is controlled in accordance with—
  - (a) AS/NZS 1020:1995; or
  - (b) requirements in a relevant safe work instrument.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### *Liquid level indicators*

#### **17.11 Filling above ground stationary tank with hazardous liquids**

- (1) A relevant PCBU must ensure that an above ground stationary tank is not filled with a hazardous liquid to a level that exceeds its safe fill capacity.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 843, Schedule 8, cl 12

**17.12 Liquid level indicator required for above ground stationary tank for hazardous liquids**

- (1) A relevant PCBU must ensure that an above ground stationary tank that is used to store a hazardous liquid has a liquid level indicator that indicates the actual liquid level in relation to the safe fill level.
- (2) A relevant PCBU must ensure that a liquid level indicator is designed, constructed, and installed to resist heat and impact to which it may be subjected in any reasonably foreseeable situation.
- (3) A liquid level indicator complies with subclauses (1) and (2) if it complies with requirements for the design, construction, or installation of liquid level indicators in a relevant safe work instrument.
- (4) A relevant PCBU must ensure that any additional requirements for the design, construction, or installation of liquid level indicators in a relevant safe work instrument are complied with.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 843, Schedule 8, cl 13

**Subpart 2—Above ground stationary tanks for gases****17.13 Design, construction, and installation of above ground stationary tank for gases**

- (1) A relevant PCBU must ensure that an above ground stationary tank that is used to store class 2.1.1 low-pressure liquefied gases is designed, constructed, and installed in accordance with—
  - (a) section 7.3 and section 7.5 of AS/NZS 1596:2014; or
  - (b) requirements in a relevant safe work instrument.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 843, Schedule 8, cl 14

**17.14 Above ground stationary tank for class 2.1.1 liquefied gas not to be in compound**

- (1) A relevant PCBU must ensure that an above ground stationary tank that is used to contain a class 2.1.1 liquefied gas is not installed in a compound or in a depression in the ground.

- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- Compare: *Gazette* 2004, p 843, Schedule 8, cl 15

*Pressure management*

**17.15 Design, construction, installation, and operation of above ground stationary tank for gases for pressure management**

- (1) A relevant PCBU must ensure that an above ground stationary tank used to store gases is designed, constructed, installed, and operated so as to ensure that the pressure or vacuum resulting from any of the conditions referred to in subclause (2) will not cause—
- (a) stress in the tank that exceeds its maximum design stress; or
  - (b) the tank to collapse.
- (2) The conditions are—
- (a) filling or emptying the tank;
  - (b) changes in atmospheric temperature.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- Compare: *Gazette* 2004, p 844, Schedule 8, cl 16

**17.16 Emergency pressure management for above ground stationary tank for gases**

- (1) A relevant PCBU must ensure that an above ground stationary tank used to store gases has an emergency pressure management system that ensures that the maximum design stress of the tank is not exceeded in any reasonably foreseeable event.
- (2) An above ground stationary tank used to store a class 2.1.1 low-pressure liquefied gas is managed in accordance with subclause (1) if it complies with—
- (a) sections 5.4 and 5.5 of AS/NZS 1596:2014; or
  - (b) requirements in a relevant safe work instrument.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- Compare: *Gazette* 2004, p 844, Schedule 8, cl 17



## Subpart 3—Separation of above ground stationary tanks

*Tanks that contain hazardous substances of the same class***17.17 Tanks containing class 2.1.1 substances**

- (1) A relevant PCBU must ensure that an above ground stationary tank that contains a class 2.1.1 permanent gas is separated from—
  - (a) another above ground stationary tank that contains a class 2.1.1 permanent gas by a distance of not less than 1 m; and
  - (b) an above ground stationary tank that contains a class 2.1.1 liquefied gas by a distance of at least,—
    - (i) for quantities of class 2.1.1 permanent gas not exceeding 100 m<sup>3</sup>, 3 m; or
    - (ii) for quantities of class 2.1.1 permanent gas exceeding 100 m<sup>3</sup> but not exceeding 500 m<sup>3</sup>, 5 m; or
    - (iii) for quantities of class 2.1.1 permanent gas exceeding 500 m<sup>3</sup>, 10 m.
- (2) A relevant PCBU must ensure that an above ground stationary tank that contains a class 2.1.1 liquefied gas is, unless subclause (3) applies, separated from another above ground stationary tank that contains a class 2.1.1 liquefied gas by the greater of—
  - (a) the diameter of the larger of the 2 tanks:
  - (b) the following:
    - (i) if the capacity of the larger of the 2 tanks is less than or equal to 10 000 L water capacity, 1 m; or
    - (ii) if the capacity of the larger of the 2 tanks is more than 10 000 L water capacity, 2 m.
- (3) If the tanks are located end to end on a horizontal plane, the PCBU must ensure each tank is separated from an adjacent tank by the greater of—
  - (a) 3 m; and
  - (b) twice the diameter of the larger of the 2 tanks.
- (4) Above ground stationary tanks referred to in subclauses (1) and (2) must not be stacked above one another.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 844–845, Schedule 8, cl 18

### **17.18 Tanks containing class 3 substances**

- (1) A relevant PCBU must ensure that an above ground stationary tank (**tank A**) that contains a class 3 substance is separated from another above ground stationary tank that contains a class 3 substance by a distance of at least that specified in column 2 or 3 of table 1 in Schedule 25 corresponding to the capacity of tank A specified in column 1 of that table.
- (2) If the capacity of tank A is between any 2 successive capacities specified in column 1 of table 1 in Schedule 25, the PCBU must ensure that it is separated from another above ground stationary tank by a distance that is at least that which is proportional to the difference in capacity.
- (3) The PCBU must ensure that the tanks are not located end to end on a horizontal plane unless the PCBU has, in determining the tanks' location, taken into account the potential for a failure occurring at the end of a tank and the resulting risk.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 845, Schedule 8, cl 19

### **17.19 Separation between tanks designed and constructed to certain specifications**

Despite regulation 17.18, an above ground stationary tank that contains a class 3.1 substance may be separated from another above ground stationary tank that contains a class 3.1 substance by a distance of at least 1 m if one of the tanks is designed and constructed in accordance with—

- (a) SwRI 95-03; or
- (b) SwRI 93-01; or
- (c) UL 2085:1997 (2nd Edition); or
- (d) requirements in a relevant safe work instrument.

Compare: *Gazette* 2004, p 848, Schedule 8, cl 24

### **17.20 Tanks containing class 5, 6, or 8 substances**

- (1) A relevant PCBU must ensure that an above ground stationary tank that contains a class 5, 6, or 8 substance that does not have a flammable classification is separated by at least 1 m from another above ground stationary tank that contains a hazardous substance that—
  - (a) is of the same class or class 9; and
  - (b) does not have a flammable classification.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—

- (a) for an individual, to a fine not exceeding \$10,000;
- (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 846, Schedule 8, cl 20

*Tanks that contain hazardous substances of different classes*

**17.21 Tanks containing class 2.1.1 substance**

- (1) A relevant PCBU must ensure that an above ground stationary tank that contains a class 2.1.1 permanent gas (**tank A**) is separated from any other above ground stationary tank that contains a hazardous substance of a different class by a distance of,—
  - (a) for quantities of class 2.1.1 permanent gas in tank A not exceeding 100 m<sup>3</sup>, at least 3 m; or
  - (b) for quantities of class 2.1.1 permanent gas in tank A exceeding 100 m<sup>3</sup> but not exceeding 500 m<sup>3</sup>, at least 5 m; or
  - (c) for quantities of class 2.1.1 permanent gas in tank A exceeding 500 m<sup>3</sup>, at least 10 m.
- (2) A relevant PCBU must ensure that an above ground stationary tank that contains a class 2.1.1 liquefied gas (**tank B**) is separated from—
  - (a) an above ground stationary tank that contains any class 3 substance (**tank C**) by a distance of,—
    - (i) if the capacity of tank C does not exceed 100 000 L, at least 6 m; or
    - (ii) if the capacity of tank C exceeds 100 000 L, at least 15 m; and
  - (b) an above ground stationary tank that contains a class 2.1.1 permanent gas, or a class 5, 6, 8, or 9 substance that does not have a flammable classification (**tank D**), by a distance of,—
    - (i) if the water capacity of tank B does not exceed 100 000 L, at least 6 m; or
    - (ii) if the water capacity of tank B exceeds 100 000 L, at least 15 m; and
  - (c) any opening into a below ground stationary tank that contains a class 3 substance by a distance of at least 6 m; and
  - (d) the centre line of the outer wall of a compound that contains a class 3 substance by a distance of at least 3 m.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 846–847, Schedule 8, cl 21

### **17.22 Tanks containing class 3 substance**

- (1) A relevant PCBU must ensure that an above ground stationary tank that contains a class 3 substance (**tank A**) is separated from an above ground stationary tank that contains a hazardous substance of a different class, other than a class 2.1.1 substance, by a distance of,—
  - (a) if the capacity of tank A does not exceed 100 000 L, at least 8 m; or
  - (b) if the capacity of tank A exceeds 100 000 L, at least 15 m.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 847, Schedule 8, cl 22

### **17.23 Tanks containing class 6 or 8 substance**

- (1) A relevant PCBU must ensure that an above ground stationary tank that contains a class 6 or 8 substance that does not have a flammable classification is separated from a stationary tank that contains another class 6 or 8 substance, or a class 9 substance, that does not have a flammable classification—
  - (a) by a distance of at least 1 m; or
  - (b) in accordance with separation requirements in a relevant safe work instrument.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 847, Schedule 8, cl 23

#### *Separation of chemically incompatible substances*

### **17.24 Above ground stationary tanks containing chemically incompatible substances to have separate secondary containment systems**

- (1) This regulation applies to 2 or more above ground stationary tanks if—
  - (a) each tank contains a hazardous substance of any class except class 2.1.1; and
  - (b) the hazardous substance in one tank is not compatible with the hazardous substance in the other tank or tanks.
- (2) A relevant PCBU must ensure that each above ground stationary tank to which this regulation applies has a separate secondary containment system.
- (3) This regulation does not apply in relation to the following above ground stationary tanks:

- (a) a tank containing 65–70% nitric acid that has a 5.1.1C classification:
  - (b) a tank containing a class 8 substance that is compatible with that nitric acid.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 848, Schedule 8, cl 25

### *Transfer point separation*

#### **17.25 Separation between transfer point and above ground stationary tank containing class 2.1.1 or 3 substance**

- (1) A relevant PCBU must ensure that an above ground stationary tank that is used to store a class 2.1.1 permanent gas is,—
- (a) if the transfer point of the stationary container system is used to refuel vehicles, separated from that transfer point by a distance of at least 2.5 m; and
  - (b) separated from any other transfer point that is used to transfer class 2.1.1 liquefied gases or class 3.1A or 3.1B substances, by a distance of at least 5 m.
- (2) A relevant PCBU must ensure that an above ground stationary tank that is used to store a class 2.1.1 liquefied gas is,—
- (a) if the transfer point of the stationary container system is used to fill that tank, separated from that transfer point by at least the distance specified in column 2 of table 2 in Schedule 25 that corresponds to the capacity of the tank specified in column 1 of that table; or
  - (b) if the transfer point of the stationary container system is used to refuel vehicles (for example, with liquefied petroleum gas fuel), separated from that transfer point by a distance of at least 3 m; or
  - (c) if the transfer point of the stationary container system is used to fill cylinders (for example, with liquefied petroleum gas fuel), separated from that transfer point by,—
    - (i) if the quantity of gas stored at the transfer point does not exceed 100 kg, a distance of at least 3 m; or
    - (ii) if the quantity of gas stored at the transfer point exceeds 100 kg, a distance of at least 8 m.
- (3) Subclause (4) applies to an above ground stationary tank that—
- (a) either—

- (i) has a capacity of more than 25 000 L and is used to store a class 3.1A or 3.1B substance; or
  - (ii) has a capacity of more than 60 000 L and is used to store a class 3.1C substance; and
- (b) is connected to a transfer point that is used to fill or empty packages, tank wagons, or transportable containers.
- (4) A relevant PCBU must—
  - (a) ensure that—
    - (i) the tank is separated from the transfer point by a distance of at least 8 m; and
    - (ii) the transfer point is separated from any other tank by not less than 8 m; or
  - (b) comply with requirements in a relevant safe work instrument.
- (5) A transfer point that is used to fill or empty an above ground stationary tank with a class 3.1 substance is not required to be separated from the above ground stationary tank to which it belongs if that tank is designed and constructed in accordance with any the following:
  - (a) SwRI 95-03:
  - (b) SwRI 93-01:
  - (c) UL 2085:1997 (2nd Edition):
  - (d) requirements in a relevant safe work instrument.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 848–849, Schedule 8, cl 26

#### **17.26 Separation between transfer points**

- (1) A relevant PCBU must ensure that a transfer point that is used to fill cylinders or packages with a class 2.1.1, 3.1A, 3.1B, or 3.1C substance is separated from a transfer point used to fill a tank wagon or transportable container with a class 2.1.1, 3.1A, 3.1B, or 3.1C substance by not less than 8 m.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 849, Schedule 8, cl 27

*Separation between tank wagon and above ground stationary tank***17.27 Tank wagon and above ground stationary tank containing class 2.1.1 substances**

- (1) A relevant PCBU must ensure that a tank wagon being filled from a stationary tank with a class 2.1.1 substance is separated by a distance of at least 15 m from—
  - (a) the stationary tank that it is being filled from; and
  - (b) any other above ground stationary tank that contains a class 2.1.1 or 3.1 substance.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 849–850, Schedule 8, cl 28

*Separation of above ground stationary tanks containing class 6 or 8 substances from protected places and public places***17.28 Location of tank containing class 6 substance**

- (1) A relevant PCBU must ensure that an above ground stationary tank that contains a class 6.1A, 6.1B, 6.1C, or 6.1D substance that does not have a flammable classification is separated from a protected place or public place—
  - (a) by at least the distance specified in the second, third, or fourth column of table 2 or 4 in Schedule 17 that corresponds to the quantity of those hazardous substances in the tank specified in the first column of those tables; or
  - (b) in accordance with separation requirements set out in a relevant safe work instrument.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 850, Schedule 8, cl 29

**17.29 Location of tank containing class 8 substance**

- (1) A relevant PCBU must ensure that an above ground stationary tank that contains a class 8 substance that does not have a flammable classification or an acutely toxic class 6.1A, 6.1B, or 6.1C substance is separated from a protected place or a public place in accordance with—

- (a) the requirements specified in section 5.3.2.2(b) to (d) of AS 3780—2008 (2nd Edition) (R2009); or
  - (b) requirements in a relevant safe work instrument.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 850, Schedule 8, cl 30

#### Subpart 4—Below ground stationary tanks for hazardous liquids

##### **17.30 Design and construction of below ground stationary tank for hazardous liquids**

- (1) A relevant PCBU must ensure that a below ground stationary tank that is used to store hazardous liquids is designed and constructed in accordance with—
  - (a) AS 1692—2006 (4th Edition) (category 4); or
  - (b) BS EN 12285-1:2005; or
  - (c) UL 1316:1994 (2nd Edition); or
  - (d) ASTM D4021-92; or
  - (e) requirements in a relevant safe work instrument.
- (2) This regulation does not apply to a below ground stationary tank that is required to comply with the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 851, Schedule 8, cl 32

##### **17.31 Installation of below ground stationary tank for hazardous liquids**

- (1) A relevant PCBU must ensure that a below ground stationary tank that is used to store hazardous liquids is installed in accordance with—
  - (a) the following requirements:
    - (i) requirements set out in sections 12.8, 12.9, 15, and 16 of UPSS; and
    - (ii) the requirement that any permanently fixed equipment, structures, and tanks are effectively bonded to the main body of earth so that the resistance to earth does not exceed 10  $\Omega$ ; or
  - (b) requirements in a relevant safe work instrument.



- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 851, Schedule 8, cl 33

### *Pressure management*

#### **17.32 Design, construction, installation, and operation of below ground stationary tank for hazardous liquids for pressure management**

- (1) A relevant PCBU must ensure that a below ground stationary tank used to store hazardous liquids is designed, constructed, installed, and operated so that the pressure or vacuum resulting from filling or emptying the tank will not cause—
- (a) stress in the tank that exceeds its maximum design stress; or
  - (b) the tank to collapse.
- (2) A below ground stationary tank complies with subclause (1) if,—
- (a) for a tank constructed in accordance with AS 1692—2006 (4th Edition), it is vented in accordance with section 5.4 of AS 1940—2004 (5th Edition) (R2006); or
  - (b) it is vented in accordance with requirements in a relevant safe work instrument.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 851, Schedule 8, cl 34

### *Liquid level indicator requirements*

#### **17.33 Filling a below ground stationary tank with hazardous liquid**

- (1) A relevant PCBU must ensure that a below ground stationary tank is not filled with a hazardous liquid to a level that exceeds its safe fill capacity.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 852, Schedule 8, cl 35

#### **17.34 Filling below ground stationary tank from tank wagon**

- (1) A relevant PCBU must ensure that a below ground stationary tank that is to be filled with a class 3.1A or 3.1B hazardous liquid from a tank wagon is filled—

- (a) by gravity through a line having all connections gas tight and liquid tight; or
  - (b) by another means of delivery approved under regulation 17 of the Dangerous Goods (Class 3—Flammable Liquids) Regulations 1985; or
  - (c) in accordance with requirements in a relevant safe work instrument.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 852, Schedule 8, cl 35A

### **17.35 Liquid level indicator requirements for below ground stationary tank for hazardous liquids**

- (1) A relevant PCBU must ensure that a below ground stationary tank used to store hazardous liquids has a liquid level indicator that indicates the actual liquid level in relation to the safe fill level.
- (2) A relevant PCBU must ensure that a liquid level indicator that is part of a below ground stationary tank is designed, constructed, and installed to resist heat and impact to which the liquid level indicator may be subjected in any reasonably foreseeable situation.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 852, Schedule 8, cl 36

## **Subpart 5—Below ground stationary tanks for gases**

### **17.36 Design, construction, and installation of tank**

- (1) A relevant PCBU must ensure that a below ground stationary tank used to store a class 2.1.1 low-pressure liquefied gas is designed, constructed, and installed in accordance with—
  - (a) sections 5.3, 5.5, 7.3, 7.4, and 7.5 of AS/NZS 1596:2014; or
  - (b) requirements in a relevant safe work instrument.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 852, Schedule 8, cl 37

*Pressure management***17.37 Design, construction, installation, and operation of tank for pressure management**

- (1) A relevant PCBU must ensure that a below ground stationary tank that is used to store hazardous substances that are gases is designed, constructed, installed, and operated to ensure that the pressure or vacuum resulting from filling or emptying the tank does not cause—
  - (a) stress in the tank that exceeds its maximum design stress; or
  - (b) the tank to collapse.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 852, Schedule 8, cl 38

**17.38 Emergency pressure management**

- (1) A relevant PCBU must ensure that a below ground stationary tank that is used to store hazardous substances that are gases has an emergency pressure management system that ensures that the maximum design stress of the tank is not exceeded in any reasonably foreseeable event.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 852, Schedule 8, cl 39

**Subpart 6—Disused below ground stationary tanks****17.39 Disused tanks**

- (1) If a below ground stationary tank is no longer used to store a hazardous substance, the relevant PCBU must—
  - (a) ensure that the tank and any pipes connected to it are removed; or
  - (b) ensure, in a manner approved by WorkSafe, that the tank and any pipes connected to it are not a hazard and comply with any conditions of the approval; or
  - (c) ensure that the requirements in a relevant safe work instrument are complied with.
- (2) If the PCBU proposes to comply with subclause (1)(b), it must apply to WorkSafe for approval of the proposed action.
- (3) An application under subclause (2) must—

- (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (4) In determining the application, WorkSafe must have regard to the following:
  - (a) the hazards associated with any substance remaining in the tank and pipes:
  - (b) the likelihood and impact of any discharge of a hazardous substance from the tank:
  - (c) whether it is practicable, in all the circumstances, to remove the tank:
  - (d) whether the location of the tank will continue to be used to store hazardous substances:
  - (e) any other matter WorkSafe considers appropriate.
- (5) For the purposes of subclause (1), a below ground stationary tank is no longer used to store a hazardous substance if the tank has not stored a hazardous substance for 3 months unless WorkSafe is satisfied, on the basis of evidence provided by the relevant PCBU, that the tank is still used for that purpose.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 853, Schedule 8, cl 40

## Subpart 7—Fire-fighting equipment and facilities

### **17.40 Fire-fighting equipment and facilities must be available**

- (1) A relevant PCBU must ensure that equipment and facilities for fighting a fire are, in accordance with this regulation, available for —
  - (a) an above ground stationary tank that has a water capacity more than 12 000 L and contains a class 2.1.1 low-pressure liquefied gas; or
  - (b) a cluster of 2 or more above ground stationary tanks that contain a class 2.1.1 low-pressure liquefied gas, if the total water capacity of the clustered tanks is more than 12 000 L; or
  - (c) an above ground stationary tank that has a water capacity more than 60 m<sup>3</sup> and contains a class 3.1 substance; or
  - (d) a group of 2 or more above ground stationary tanks that contain a class 3.1 substance, if the total water capacity of the grouped tanks is more than 60 m<sup>3</sup>.
- (2) For the purposes of subclause (1)(a) and (b), the fire-fighting equipment and facilities must be—
  - (a) permanently erected around each tank; and

- (b) capable of delivering water to the entire surface of the tank at a rate of 600 L per square metre an hour; and
  - (c) equipped with an automatic system that—
    - (i) detects fire; and
    - (ii) starts delivering water to the location of the fire; and
    - (iii) can be manually controlled from a safe location.
- (3) For the purposes of subclause (1)(c) and (d), the fire-fighting equipment and facilities must comply with—
  - (a) sections 11.3, 11.12, 11.13, 11.15, 11.16, and Appendix J of AS 1940—2004 (5th Edition) (R2006); or
  - (b) requirements in a relevant safe work instrument.
- (4) For the purposes of subclause (1)(b),—
  - (a) an above ground stationary tank (**tank A**) is in a **cluster** with another above ground stationary tank if they are separated by a distance no greater than the distance specified in column 2 of table 3 in Schedule 25 corresponding to the capacity of tank A:
  - (b) if an above ground stationary tank is in a cluster with another above ground stationary tank (**tank B**), it is also in a cluster with every stationary tank that is in a cluster with tank B:
  - (c) if the capacity of an above ground stationary tank is between any 2 successive capacities specified in column 1 of table 3 in Schedule 25, for the purposes of that table, it is to be taken as having the smaller of those 2 capacities.
- (5) For the purposes of subclause (1)(d), groups of above ground stationary tanks that are within the boundaries of a single site and share a single water supply are distinct groups for the purpose of determining total fire protection requirements if the groups are separated from each other by at least the distances specified in columns 2 and 3 of table 5 in Schedule 12.
- (6) This regulation does not apply to an above ground stationary tank that is used to contain a class 3.1 substance and is designed and constructed in accordance with—
  - (a) SwRI 95-03; or
  - (b) SwRI 93-01; or
  - (c) UL 2085:1997 (2nd Edition); or
  - (d) requirements in a relevant safe work instrument.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 853-855, Schedule 8, cl 41

#### **17.41 Exemption from fire-fighting equipment and facilities requirements**

- (1) An application by a relevant PCBU for an exemption under section 220 of the Act from a requirement under regulation 17.40 must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (2) In determining the application, WorkSafe must have regard to the following:
  - (a) any hazards within the site where a stationary tank, or the cluster or other group of tanks, is located:
  - (b) any hazard (for example, radiated heat) that the stationary tank, or the cluster or other group of tanks, is exposed to from another site or to which it exposes another site:
  - (c) the available water supply:
  - (d) the likely response time and resources of the local unit or units of Fire and Emergency New Zealand:
  - (e) the ability of a stationary tank, and the cluster or other group of tanks, to resist fire:
  - (f) any other matter WorkSafe considers relevant.

#### **17.42 Testing of fire fighting equipment and facilities**

- (1) A relevant PCBU must ensure that fire-fighting equipment and facilities made available under regulation 17.40 are tested as follows:
  - (a) equipment and facilities described in regulation 17.40(1)(a) and (b) must be tested—
    - (i) annually for compliance with regulation 17.40; or
    - (ii) in accordance with requirements in a relevant safe work instrument:
  - (b) equipment and facilities described in regulation 17.40(1)(c) and (d) must be tested—
    - (i) in accordance with section 11.3.10 of AS 1940—2004 (5th Edition) (R2006); or
    - (ii) in accordance with requirements in a relevant safe work instrument.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 856, Schedule 8, cl 43

## Subpart 8—Process containers and equipment

### 17.43 Material for process containers and equipment

- (1) This regulation applies to—
  - (a) a process container and any associated equipment used to contain a hazardous substance of any of the following classes:
    - (i) class 2.1.1:
    - (ii) class 3.1A:
    - (iii) class 3.1B:
    - (iv) class 3.1C; and
  - (b) any structure that supports that process container or equipment.
- (2) A relevant PCBU must ensure that a process container and associated equipment and any structure to which this regulation applies is made from fire-resistant material.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 856-857, Schedule 8, cl 44

### 17.44 Liquid level indicators for process containers or equipment

- (1) A relevant PCBU must ensure that a liquid level indicator that is part of a process container or any associated equipment is designed, constructed, and installed to resist heat and impact to which the liquid level indicator may be subjected in any reasonably foreseeable operating condition.
- (2) If the liquid level indicator is a sight glass, the PCBU must ensure that,—
  - (a) if the process container is in a secondary containment system, the sight glass is located within that system; or
  - (b) otherwise, the sight glass is installed so that it can be isolated from the process container.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 857, Schedule 8, cl 45

#### **17.45 Filling open process container**

- (1) A relevant PCBU must ensure that an open process container is not filled with a hazardous substance to a level less than 150 mm from the top of the container.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 857, Schedule 8, cl 46

#### **17.46 Overflow provision**

- (1) This regulation applies to an open process container—
  - (a) in which the area of the hazardous substance exposed to the air is more than 1 m<sup>2</sup>; or
  - (b) that has a capacity more than 750 L.
- (2) A relevant PCBU must ensure that an open process container has an overflow provision that discharges overflow into a safe location.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 857, Schedule 8, cl 47

### **Subpart 9—Dispensers for retail sale of class 2.1.1, 3.1A, 3.1B, and 3.1C substances**

#### **17.47 Dispensers must be of approved type**

- (1) A relevant PCBU must ensure that a dispenser is not used in a PCBU's workplace for the retail sale of a class 2.1.1, 3.1A, 3.1B, or 3.1C hazardous substance unless the dispenser is—
  - (a) of a type that has been approved and recorded by WorkSafe under regulations 17.48 and 17.49 for its intended use; and
  - (b) installed in accordance with accepted engineering principles and practice.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 857, Schedule 8, cl 48



**17.48 Approval of types of dispenser**

- (1) A PCBU may apply to WorkSafe for approval of a type of dispenser.
- (2) An application must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (3) WorkSafe may approve a type of dispenser if—
  - (a) the dispenser complies with the requirements of AS/NZS 2229:2004; or
  - (b) WorkSafe is satisfied that it meets a level of safety equivalent to the level of safety provided by those requirements.
- (4) WorkSafe may impose any conditions that it considers appropriate on an approval of a type of dispenser.

Compare: *Gazette* 2004, pp 857–858, Schedule 8, cl 49

**17.49 Record of approved type of dispenser**

- (1) WorkSafe must keep a record of every type of dispenser approved under regulation 17.48.
- (2) WorkSafe must publish the record.

Compare: *Gazette* 2004, p 858, Schedule 8, cl 51

**17.50 Removal of approved type of dispenser from record**

- (1) WorkSafe may remove the approval of a type of dispenser from the record if it considers that the dispenser—
  - (a) does not meet or no longer meets the requirements of regulation 17.48(3); or
  - (b) is unsafe.
- (2) If WorkSafe considers that a dispenser of an approved type that is currently in New Zealand is a dispenser to which subclause (1) applies, WorkSafe may recall the dispenser or require the relevant PCBU to recall it or remove it from service.

Compare: *Gazette* 2004, Schedule 8, cl 51A

**17.51 Shutdown of dispenser**

- (1) A relevant PCBU must ensure that a dispenser used for the retail sale of class 2.1.1, 3.1A, 3.1B, or 3.1C substances is able to be shut down immediately if an event occurs that gives rise to safety concerns.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 858, Schedule 8, cl 52

## Subpart 10—Vapourisers

### **17.52 Vapourisers must be of approved type**

- (1) A relevant PCBU must ensure that a vapouriser is not used in a workplace unless it is of a type that has been approved and recorded by WorkSafe under regulations 17.53 and 17.54.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 858, Schedule 8, cl 53

### **17.53 WorkSafe may approve types of vapouriser**

- (1) A PCBU may apply to WorkSafe for approval of a type of vapouriser.
- (2) An application must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (3) In determining whether to approve a vapouriser, WorkSafe must consider the following:
  - (a) the design of the vapouriser;
  - (b) the hazards associated with the substance that the vapouriser is to be used to vapourise;
  - (c) the quantity of that substance that will be held in the vapouriser;
  - (d) the rate at which that substance will flow through the vapouriser;
  - (e) any other matter WorkSafe considers relevant.
- (4) WorkSafe may impose any conditions that it considers appropriate on an approval of a type of vapouriser.

### **17.54 Record of approved type of vapouriser**

- (1) WorkSafe must keep a record of every type of vapouriser approved under regulation 17.53.
- (2) WorkSafe must ensure that the record is published on an Internet site that is maintained by or on behalf of WorkSafe.

Compare: *Gazette* 2004, p 858, Schedule 8, cl 54

### **17.55 Removal of approved type of vapouriser from record**

- (1) WorkSafe may remove the approval of a type of vapouriser from the record if it considers that the vapouriser—
  - (a) does not meet the requirements of regulation 17.53; or

- (b) is unsafe.
  - (2) If WorkSafe considers that a vapouriser of an approved type currently in New Zealand is a vapouriser to which subclause (1) applies, WorkSafe may recall the vapouriser or require a PCBU to recall it or remove it from service.
- Compare: *Gazette* 2004, Schedule 8, r 54A

#### 17.56 Other requirements for vapourisers

- (1) A relevant PCBU must ensure that a vapouriser used to vapourise liquefied gases is designed and constructed so that—
  - (a) the flow of liquid to the vapouriser is automatically cut off if the vapouriser ceases to vapourise the liquefied gas; and
  - (b) it is not possible for a liquefied gas in its liquid phase to discharge from the vapouriser outlet nozzle.
- (2) Subclause (3) applies to a vapouriser that—
  - (a) is direct fired or may be an ignition source for any other reason; and
  - (b) is used to vapourise a liquefied gas.
- (3) A relevant PCBU must ensure that a vapouriser to which this subclause applies is installed,—
  - (a) for a liquefied petroleum gas vapouriser with a capacity of 610 L per hour or less, not less than 8 m from—
    - (i) a public place or a protected place; or
    - (ii) an above ground stationary tank used to store liquefied petroleum gas; or
    - (iii) the filling connections of a tank referred to in subparagraph (ii); or
  - (b) for a liquefied petroleum gas vapouriser with a capacity of more than 610 L per hour, not less than 15 m from—
    - (i) a public place or a protected place; or
    - (ii) an above ground stationary tank used to store liquefied petroleum gas; or
    - (iii) the filling connections of a tank referred to in subparagraph (ii).
- (4) A relevant PCBU must ensure that a vapouriser that is used to vapourise liquid oxygen is indirectly heated.
- (5) A relevant PCBU must ensure, in relation to a vapouriser that is used to vapourise anhydrous ammonia, that—
  - (a) the vapouriser is indirectly heated; and
  - (b) any direct fired device for supplying heat to the vapouriser is located not less than 15 m from the storage tank for the anhydrous ammonia.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—

- (a) for an individual, to a fine not exceeding \$10,000;
- (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 859, Schedule 8, cl 55

### Subpart 11—Installations for burning class 3.1 substance or substance approved by EPA

#### **17.57 Installation of stationary container system**

- (1) This regulation applies to every stationary container system that is—
  - (a) used to contain—
    - (i) a class 3.1 substance; or
    - (ii) a hazardous substance that has been approved by the EPA for use as a fuel for an internal combustion engine or a burner; and
  - (b) used to provide fuel to an internal combustion engine or a burner.
- (2) A relevant PCBU must ensure that a stationary container system to which this regulation applies is installed to ensure that,—
  - (a) if the stationary container system is located in a building, the hazardous substance does not discharge or leak from any part of the stationary container system within that building; and
  - (b) any transfer point used for filling the stationary container system with the hazardous substance is located outside that building; and
  - (c) any vent pipe, relief valve, or overfill pipe that is part of the stationary container system terminates outside that building, except an emergency vent installed on a tank that complies with SwRI 95-03; and
  - (d) exhaust fumes created as a result of using the hazardous substance are discharged into a safe place that is outside that building; and
  - (e) the flow of the hazardous substance to the internal combustion engine or burner associated with the stationary container system is modulated to match the capacity of the engine or burner; and
  - (f) the supply of the hazardous substance to the internal combustion engine or burner associated with the stationary container system, or any pump used to supply the substance to that engine or burner, is cut off if the temperature of the air above the engine or burner reaches 90°C; and
  - (g) if the hazardous substance spills or leaks into the system's secondary containment system, any pump that is part of the system is located so that it will not come into contact with the spilled substance.
- (3) Despite subclause (2)(b), a stationary tank, located in a building, that is used to contain a class 3.1D substance may be directly filled from a nozzle if—
  - (a) the tank size is no more than 1 000 L; and
  - (b) the fill point is clearly identified; and

- (c) there is spill containment with a capacity of 15 L around the fill point; and
  - (d) the requirements of section 5.3.2(a) to (f) of AS 1940—2004 (5th Edition) (R2006) are complied with.
- (4) Despite subclause (2)(b), a stationary tank, located in a building, that is used to contain a class 3.1D substance may be directly filled using a connection that is both liquid tight and vapour tight and seals without spillage when disconnected (dry break coupling) if—
  - (a) the tank size is no more than 15 000 L; and
  - (b) the fill point is clearly identified; and
  - (c) there is a manual valve directly upstream of the coupling; and
  - (d) the requirements of sections 5.3.2(a) to (f), 5.3.3(a) to (c), and 5.3.4 of AS 1940—2004 (5th Edition) (R2006) are complied with.
- (5) A relevant PCBU must ensure that a stationary container system to which this regulation applies has a means of preventing the hazardous substance from draining from a stationary tank that is part of the stationary container system in the event that pipework that is part of the system fails.

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**Examples**

Anti-siphoning device, non-return valve or other valve.

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- (6) The means of preventing the substance from draining under subclause (5) must be fitted as close as practicable to each stationary tank that is part of the system.
- (7) This regulation does not apply to a stationary container system that—
  - (a) does not have a service tank; and
  - (b) has a capacity of less than—
    - (i) 50 L, for class 3.1A, 3.1B, and 3.1C substances supplying an internal combustion engine; or
    - (ii) 500 L, for class 3.1D substances supplying an internal combustion engine or substances approved by the EPA for use as a fuel for an internal combustion engine; or
    - (iii) 60 L, for class 3.1 substances supplying a burner or substances approved by the EPA for use as a fuel for a burner.
- (8) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 859–860, Schedule 8, cl 56

**17.58 System to have automatic cut-off**

- (1) This regulation applies to a stationary container system to which regulation 17.57 applies that is used to contain—
  - (a) a class 3.1C substance with a flashpoint of not less than 50°C that flows into the stationary container system by gravity; or
  - (b) a class 3.1D substance, or a substance that has been approved by the EPA for use as a fuel, that flows into the stationary container system by gravity.
- (2) A relevant PCBU must ensure that a stationary container system to which this regulation applies has a means of automatically cutting off the flow of the substance from a stationary tank that is part of the system in the event of a fire near the system.
- (3) The PCBU must ensure that the automatic cut-off is located as close as reasonably practicable to each stationary tank that is part of the stationary container system.
- (4) A stationary container system supplying fuel to an internal combustion engine used for fire protection purposes is not required to have an automatic cut-off.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 860–861, Schedule 8, cl 57

**17.59 Requirements for pipework of stationary container system**

- (1) This regulation applies to a stationary container system to which regulation 17.57 applies.
- (2) A relevant PCBU must ensure that pipework in a stationary container system (other than a system that supplies fuel to an internal combustion engine)—
  - (a) is—
    - (i) constructed of fire-resistant materials; and
    - (ii) constructed of corrosion-resistant materials that do not react with the hazardous substance, or interact with the pipework to significantly affect or weaken the pipework, so that the requirements of this Part cannot be complied with; and
    - (iii) installed securely; and
    - (iv) tested to ensure that the pipework does not leak at a pressure that is the greater of—
      - (A) 350 kPa:

- (B) 1.5 times the maximum working pressure of that pipework;  
or
  - (b) is constructed, installed, and tested in accordance with requirements in a relevant safe work instrument.
- (3) A relevant PCBU must ensure that, in a stationary container system that supplies fuel to an internal combustion engine,—
  - (a) the pipework complies with subclause (2) up to the first connection point on the engine; and
  - (b) the engine is equipped with an emergency shut-down system that will isolate the fuel supply from the engine if a fire occurs on the engine.
- (4) For the purposes of subclause (2)(a)(i) and (ii), pipework is constructed of a fire-resistant and corrosion-resistant material if it is constructed from—
  - (a) any of the following:
    - (i) solid-drawn steel tubing;
    - (ii) mild-steel or wrought iron tubing;
    - (iii) solid-drawn copper tubing; or
  - (b) stainless steel or high tensile steel braided hose of a type suitable for petroleum products, in short lengths—
    - (i) no longer than 500 mm if it is practicable to use pipework of the type specified in paragraph (a); or
    - (ii) no longer than 1 m if the use of that type of pipework is impracticable.
- (5) A relevant PCBU must ensure that pipework and associated fittings in a stationary container system that is used in connection with an oil burning installation—
  - (a) is constructed of materials that are resistant to corrosion that may occur from contact with oil (whether heated or cold); and
  - (b) is not constructed of materials that are combustible or have a low melting-point that could result in early failure if exposed to fire; and
  - (c) is not constructed of any of the following:
    - (i) the low grade alloy of copper or zinc known as yellow brass;
    - (ii) lead;
    - (iii) zinc;
    - (iv) a galvanised metal.
- (6) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 861, Schedule 8, cl 58

#### **17.60 Requirements for heaters to transfer heat to hazardous substance**

- (1) This regulation applies to a heater that is—
  - (a) part of a stationary container system to which regulation 17.57 applies; and
  - (b) used for the purpose of transferring heat to the hazardous substance contained in the system so that the substance remains fluid.
- (2) A relevant PCBU must ensure that a heater has—
  - (a) elements that—
    - (i) do not generate a heat flux above 1.25 watts/cm<sup>2</sup>; and
    - (ii) are sheathed in material that does not react with the hazardous substance, or interact to significantly affect or weaken the element so that fuel comes into direct contact with the heating element; and
  - (b) a thermostat control and a back-up control to ensure that fuel cannot be heated in the stationary container system to a temperature above 20°C below the flashpoint of the fuel.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 861–862, Schedule 8, cl 59

#### **17.61 Heater for combustion of substance in stationary container system**

- (1) This regulation applies to a heater that is—
  - (a) part of a stationary container system to which regulation 17.57 applies; and
  - (b) used for the purpose of efficient combustion of the hazardous substance contained in the stationary container system.
- (2) A relevant PCBU must ensure that a heater—
  - (a) is designed to ensure that no gas or air pockets develop in the heater; and
  - (b) has elements that—
    - (i) do not generate a heat flux above 1.25 watts/cm<sup>2</sup>; and
    - (ii) are sheathed in material that does not react with the hazardous substance, or affect or interact to significantly weaken the element, so that fuel comes into direct contact with the heating element; and



- (c) has a thermostat control and a back-up control to ensure that fuel cannot be heated in the stationary container system to a temperature above 20°C below the flashpoint of the fuel; and
  - (d) is capable of maintaining a preset temperature range for fuel transferred into any burner that is part of the stationary container system; and
  - (e) is able to withstand normal operating pressures; and
  - (f) is fitted with a pressure relief valve.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 862, Schedule 8, cl 60

#### **17.62 Stationary tank for class 3.1A or 3.1B substances**

- (1) This regulation applies to a stationary tank that—
- (a) is part of a stationary container system to which regulation 17.57 applies; and
  - (b) supplies the internal combustion engine or burner of the stationary container system with a class 3.1A or 3.1B substance.
- (2) If part of a stationary container system is located in a building, a relevant PCBU must ensure that any stationary tank associated with that system is located outside the building.
- (3) Despite subclause (2), a stationary tank may be located inside the building if—
- (a) the capacity of the tank does not exceed 5 L; or
  - (b) the capacity of the tank does not exceed 100 L and the substance is not supplied to the internal combustion engine or burner by gravity.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 862–863, Schedule 8, cl 61

#### **17.63 Stationary tank for certain class 3.1C and 3.1D substances**

- (1) This regulation applies to a stationary tank that—
- (a) is part of a stationary container system to which regulation 17.57 applies; and
  - (b) supplies the internal combustion engine or burner of the stationary container system directly through pipework with—

- (i) a class 3.1C substance that has a flashpoint of not less than 50°C; or
  - (ii) a class 3.1D substance.
- (2) A relevant PCBU must ensure that a stationary tank is not installed in a stationary container system that is located in a building unless, when the stationary tank is installed,—
  - (a) the aggregate capacity of all stationary tanks in all stationary container systems in the building does not exceed 190 000 L, and—
    - (i) all tanks are located on the lowest level of the building; and
    - (ii) no individual tank exceeds 95 000 L in capacity; or
  - (b) otherwise, the aggregate capacity of all stationary tanks in all stationary container systems in the building does not exceed—
    - (i) 25 000 L, if the building is not of fire-resistant construction; or
    - (ii) 50 000 L, if the building is of fire-resistant construction.
- (3) If the internal combustion engine or the burner of a stationary container system is located in a building, a relevant PCBU must ensure that a stationary tank that is a part of that system is located—
  - (a) outside that building; or
  - (b) in that building, in accordance with subclause (4); or
  - (c) in another building, in accordance with subclause (5); or
  - (d) in any building, in accordance with subclause (6); or
  - (e) in accordance with a relevant safe work instrument.
- (4) A stationary tank may be located in the building in which the internal combustion engine or burner is located if—
  - (a) the tank is located in a room or chamber that—
    - (i) is located on the lowest level of the building; and
    - (ii) complies with subclause (7); and
  - (b) the building has a secondary containment system with a capacity greater than or equal to the capacity of the stationary tank.
- (5) A stationary tank may be located in another building, if—
  - (a) the building—
    - (i) has a secondary containment system with a capacity greater than or equal to the capacity of the stationary tank; and
    - (ii) contains only the tank itself; and
    - (iii) is separated from any other building by a distance calculated in accordance with columns 2 and 3 of table 5 in Schedule 12; or

- (b) the stationary tank is located in that other building in accordance with requirements in a relevant safe work instrument.
- (6) A stationary tank may be located in any building, if—
  - (a) the tank has a 4-hour fire rating that complies with the requirements of SwRI 95-03; and
  - (b) the design of the tank is listed on the record of certified designs and fabricators referred to in regulation 17.95.
- (7) For the purposes of subclause (4)(a)(ii), the room or chamber must comply with the following requirements:
  - (a) the walls have a fire-resistance rating of 240/240/240 minutes; and
  - (b) the roof (including any section of roof that is removable for access or maintenance) is constructed of reinforced concrete that is at least 150 mm thick; and
  - (c) the strength of the walls and the roof is appropriately increased for a tank chamber that is subject to superimposed loads; and
  - (d) the floor is made of masonry or reinforced concrete or of material (not including earth or asphalt) of strength; and
  - (e) there is a clear space of at least 450 mm between any tank and any wall, roof, or other tank in the same room or chamber; and
  - (f) any doorway or other access opening in any wall is protected by a fire door or cover with a fire resistance rating of at least –/120/30 minutes; and
  - (g) any doorway or other access opening in any wall is designed to be normally closed; and
  - (h) the sill of any doorway or other access opening in any wall—
    - (i) is raised to provide a liquid-tight compound capable of sustaining the hydrostatic load; and
    - (ii) has a net capacity of at least that of the largest tank in the building; and
  - (i) there is no automatic pump-out system.
- (8) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 863, Schedule 8, cl 62

#### **17.64 Service tank in stationary container system**

- (1) This regulation applies to a service tank that is part of a stationary container system to which regulation 17.57 applies that is used to store—

- (a) a class 3.1C substance that has a flashpoint of not less than 50°C; or
  - (b) a class 3.1D substance.
- (2) A relevant PCBU must ensure that a service tank is not installed in a stationary container system located in any building unless, when the service tank is installed, the aggregate capacity of all service tanks in all stationary container systems in the building does not exceed,—
  - (a) if the service tank provides fuel to a burner,—
    - (i) if the burner normally consumes more than 300 L in an 8 hour period, 1, 200 L; or
    - (ii) in any other case, 300 L; or
  - (b) if the service tank provides fuel to an internal combustion engine,—
    - (i) if the engine normally consumes more than 500 L in an 8 hour period, 1, 200 L; or
    - (ii) in any other case, 500 L.
- (3) If the capacity of a service tank to which this regulation applies exceeds 500 L, a relevant PCBU must ensure that the service tank complies with—
  - (a) subclause (4); or
  - (b) requirements in a relevant safe work instrument.
- (4) The service tank must—
  - (a) be located—
    - (i) outside the building in which the stationary container system is located; or
    - (ii) in a room or chamber that complies with regulation 17.63(4)(a); and
  - (b) have a secondary containment system of sufficient capacity to retain the capacity of the tank.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 864, Schedule 8, cl 63

### **17.65 Stationary container system operational requirements**

- (1) This regulation applies to every stationary container system to which regulation 17.57 applies.
- (2) A relevant PCBU must ensure that a stationary container system is operated as follows:
  - (a) in accordance with the following:

- (i) if the hazardous substance in the system is contaminated with solid particles or water, the particles or water must be trapped and prevented from entering the system's internal combustion engine or burner;
  - (ii) if the hazardous substance is contaminated with any volatile fractions that have a flashpoint of less than 60°C, those fractions must be removed;
  - (iii) when the stationary tank that is part of the system is being filled, the filling must be monitored to prevent over-filling; or
- (b) in accordance with requirements in a relevant safe work instrument.
- (3) A relevant PCBU must ensure that operating instructions for any burner that is part of a stationary container system are displayed at all times so that any person checking or monitoring the system can see them.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 865, Schedule 8, cl 65

## Subpart 12—Burners

### 17.66 Record of burners not permitted for use

- (1) WorkSafe must keep a record of every burner for the combustion of a class 3.1D or 3.1C substance with a flashpoint of not less than 50°C that is deemed to be not permitted for use under Schedule 8 of the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004.
- (2) WorkSafe must publish the record.

Compare: *Gazette* 2004, p 866, Schedule 8, r 67

### 17.67 Approval of type of burner

- (1) This regulation applies to every type of burner used for the combustion of—
  - (a) class 3.1 substances; or
  - (b) a hazardous substance that has been approved by the EPA for use as a fuel for a burner.
- (2) A relevant PCBU must ensure that a burner is not used unless it is a type of burner approved and recorded by WorkSafe.
- (3) A PCBU may apply to WorkSafe for approval of a type of burner.
- (4) An application must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.

- (5) WorkSafe may approve a type of burner that complies with—
  - (a) AS 1375—2013; or
  - (b) BS EN 267:2009+A1:2011; or
  - (c) BS EN 1:1998; or
  - (d) BS EN 13842:2004; or
  - (e) UL 896:1993; or
  - (f) BS 799-2:1991; or
  - (g) NFPA 86:2015; or
  - (h) UL 296:2017 (11th Edition); or
  - (i) BS EN 746-2:2010; or
  - (j) requirements in a relevant safe work instrument.
- (6) WorkSafe may impose any conditions that it considers appropriate on an approval of a type of burner.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 866, Schedule 8, r 68

#### **17.68 Record of approved type of burner**

- (1) WorkSafe must keep a record of every type of burner approved under regulation 17.67 and any conditions imposed on the approval.
- (2) WorkSafe must publish the record.

Compare: *Gazette* 2004, p 867, Schedule 8, r 70

#### **17.69 Removal of approved type of burner from record**

- (1) WorkSafe may revoke the approval of a type of burner and remove that approval from the record if it considers that the type of burner—
  - (a) is unsafe; or
  - (b) does not comply with the requirements of this subpart.
- (2) If Worksafe considers that an approved type of burner currently in New Zealand is unsafe, it may recall the burner or require a PCBU or other person to recall it or remove it from service.

Compare: *Gazette* 2004, Schedule 8, cl 70A

#### **17.70 Installation requirements for burners**

- (1) A relevant PCBU must ensure that a burner used for a hazardous substance specified in subclause (2)—
  - (a) is installed with a remote cut-off valve; and

- (b) has a combustion chamber capable of resisting an explosion.
- (2) The substance is—
  - (a) a class 3.1C substance with a flashpoint of not less than 50°C:
  - (b) a class 3.1D substance.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 867, Schedule 8, cl 71

### 17.71 Operating instructions for burners

- (1) A PCBU who supplies a burner to another PCBU who, after supply, has management or control of the burner (the **second PCBU**) must provide the second PCBU with comprehensive operating instructions for the burner.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 867, Schedule 8, cl 72

## Subpart 13—Pipework

### 17.72 Requirements for pipework

- (1) This regulation applies to pipework used to convey a hazardous substance if the pipework is not required to comply with any of the following:
  - (a) the Health and Safety in Employment (Pipelines) Regulations 1999:
  - (b) the Gas (Safety and Measurement) Regulations 2010.
- (2) A relevant PCBU must ensure that pipework is designed, constructed, installed, operated, inspected, tested, and maintained so as to ensure that the pipework is suitable for all reasonably foreseeable working pressures, temperatures, and structural stresses.
- (3) A relevant PCBU must ensure that pipework complies with the following:
  - (a) transfer lines must be designed, constructed, and installed—
    - (i) in accordance with ASME B31.4:2016; or
    - (ii) in accordance with AS 2885.1—2012; or
    - (iii) for pipework that is not pressure piping within the meaning of the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999, in accordance with those regulations as if the pipework were pressure piping; or

- (iv) if the transfer lines are part of the underground pipework of an underground petroleum storage system, in accordance with—
      - (A) sections 13 and 14 of the UPSS; or
      - (B) UL 971:1995 (1st Edition); or
    - (v) in accordance with the requirements in a relevant safe work instrument:
  - (b) transfer lines must be operated, inspected, tested, and maintained—
    - (i) in accordance with AS 2885.3—2012; or
    - (ii) for pipework that is not pressure piping within the meaning of the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999, in accordance with those regulations as if the pipework were pressure piping; or
    - (iii) if the transfer lines are part of the underground pipework of an underground petroleum storage system, in accordance with section 14 of the UPSS; or
    - (iv) in accordance with the requirements in a relevant safe work instrument:
  - (c) process pipelines must be designed, constructed, and installed—
    - (i) in accordance with ASME B31.3:2016; or
    - (ii) in accordance with ASME B31.4:2016; or
    - (iii) in accordance with AS 2885.1—2012; or
    - (iv) for pipework that is not pressure piping within the meaning of the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999, in accordance with those regulations as if the pipework were pressure piping; or
    - (v) in accordance with the requirements in a relevant safe work instrument:
  - (d) process pipelines must be operated, inspected, tested, and maintained—
    - (i) in accordance with API 570:2016 (4th Edition); or
    - (ii) in accordance with AS 2885.3—2012; or
    - (iii) for pipework that is not pressure piping within the meaning of the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999, in accordance with those regulations as if the pipework were pressure piping; or
    - (iv) in accordance with the requirements in a relevant safe work instrument.
- (4) Pipework used to convey a hazardous substance that is required to comply with the Health and Safety in Employment (Pressure Equipment, Cranes, and Pas-



senger Ropeways) Regulations 1999 is not required to comply with the requirements of subclause (3), except that—

- (a) transfer lines that are part of the underground pipework of an underground petroleum storage system, must be designed, constructed, and installed in accordance with sections 13 and 14 of the UPSS; and
  - (b) transfer lines must be operated, inspected, tested, and maintained in accordance with the requirements of subclause (3)(b).
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 867–868, Schedule 8, cl 73

#### **17.73 Installation of non-return valve for class 3.1 substance**

- (1) A relevant PCBU must ensure that a transfer point that is used to fill a stationary tank with a class 3.1 substance is installed in accordance with—
- (a) section 6.3.1(b) of AS 1940—2004 (5th Edition) (R2006); or
  - (b) requirements in a relevant safe work instrument.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 869, Schedule 8, cl 74

#### **17.74 Installation of transfer line between ship and stationary tank**

- (1) A relevant PCBU must ensure that pipework that is used to transfer a hazardous substance between a ship and a stationary tank is provided with—
- (a) a stop valve located in the section of the pipework that runs over or adjacent to the water to ensure that, in the event that the pipework fails, spillage into the water is minimised; and
  - (b) a back flow prevention system as close as reasonably practicable to the transfer point, on the landward side of the transfer point; and
  - (c) a stop valve located as close as reasonably practicable to the back flow prevention system, on the landward side of the back flow prevention system; and
  - (d) blank flanges or screwed caps at the seaward end of the pipe to ensure that the pipework is watertight when it is not in use.
- (2) A relevant PCBU must ensure that, if a stop valve required by subclause (1) is located in an area to which the public has access, the valve is locked closed when—

- (a) not in use; or
  - (b) unattended.
- (3) If the pipework is used to transfer a class 3.1 substance, the relevant PCBU must ensure that the stop valves required by subclause (1)(a) and (c) comply with—
  - (a) section 6.3.3 of AS 1940—2004 (5th Edition) (R2006); or
  - (b) requirements in a relevant safe work instrument.
- (4) If a fire safe stop valve is required under subclause (3), a stop valve is fire safe if it complies with—
  - (a) BS EN ISO 10467:2004; or
  - (b) API 6FA:1999; or
  - (c) API 607:2016 (7th Edition); or
  - (d) requirements in a relevant safe work instrument.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, pp 869–870, Schedule 8, cl 75

## Subpart 14—Fittings

### **17.75 Valve for stationary tank containing hazardous substance**

- (1) This regulation applies to an above ground stationary tank used to store a hazardous substance if—
  - (a) pipework connected to the tank has 1 or more nozzles; and
  - (b) the hazardous substance could escape from 1 or more of those nozzles if the pipework fails.
- (2) A relevant PCBU must ensure that a stationary tank is fitted with a valve that is—
  - (a) as close as reasonably practicable to each nozzle; and
  - (b) positioned so as to be able to cut off the flow of the hazardous substance from the tank.
- (3) If the tank contains a class 3.1 substance, the valve required by subclause (2)—
  - (a) must—
    - (i) comply with section 6.3.3 of AS 1940—2004 (5th Edition) (R2006); and
    - (ii) if the tank has a capacity more than 2 500 L,—
      - (A) be made of cast steel; and

- (B) be fire safe; or
  - (b) comply with requirements in a relevant safe work instrument.
- (4) For the purposes of subclause (3), a valve is fire safe if it complies with—
  - (a) BS EN ISO 10467:2004; or
  - (b) API 6FA:1999; or
  - (c) API 607:2016 (7th edition); or
  - (d) requirements in a relevant safe work instrument.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 870, Schedule 8, cl 76

## Subpart 15—Marking and records

### *Markings*

#### **17.76 Marking of stationary tanks**

- (1) A relevant PCBU must ensure that a stationary tank used to store a hazardous substance is marked—
  - (a) in accordance with the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999, if those regulations apply; or
  - (b) if those regulations do not apply,—
    - (i) permanently and legibly with the following information:
      - (A) the specification to which the tank was designed (if any);
      - (B) the date on which the tank was manufactured;
      - (C) the materials used in the construction of the tank;
      - (D) the name or mark and address of the manufacturer of the tank;
      - (E) the maximum and minimum design pressure of the tank;
      - (F) the maximum and minimum design temperature of the tank;
      - (G) the maximum permitted density of any liquid that may be contained in the tank;
      - (H) the maximum safe fill level of the tank;
      - (I) an identifier that links the tank to the records and compliance certificate that relate to the tank;
      - (J) the design approval number (if any) for the tank; or

- (ii) in accordance with the requirements in a relevant safe work instrument.
  - (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
    - (a) for an individual, to a fine not exceeding \$6,000;
    - (b) for any other person, to a fine not exceeding \$30,000.
- Compare: *Gazette* 2004, p 871, Schedule 8, cl 77

**17.77 Renewal of stationary tank markings**

- (1) A relevant PCBU must ensure that markings applied to a stationary tank under regulation 17.76 are renewed as often as is necessary to ensure that they continue to be legible.
  - (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
    - (a) for an individual, to a fine not exceeding \$6,000;
    - (b) for any other person, to a fine not exceeding \$30,000.
- Compare: *Gazette* 2004, p 871, Schedule 8, cl 78

**17.78 Markings for pipework connected to above ground stationary tank in stationary container system**

- (1) This regulation applies to pipework connected to an above ground stationary tank that forms part of a stationary container system used to store a hazardous substance if the water capacity of the stationary tank is at least—
  - (a) 12 000 L for a stationary tank used or intended to be used to contain a class 2.1.1A flammable gas; or
  - (b) 60 000 L for a stationary tank used or intended to be used to contain a class 3.1 substance; or
  - (c) 500 L for a stationary tank used or intended to be used to contain a class 6.1A or 6.1B substance; or
  - (d) 5 000 L for a stationary tank used or intended to be used to contain other hazardous liquids.
- (2) A relevant PCBU must ensure that pipework is marked—
  - (a) permanently and legibly with the following information:
    - (i) the applicable colour code in accordance with AS 1345—1995 (3rd Edition); and
    - (ii) an arrow or arrows indicating the direction in which liquid or gas flows through the pipework; or
  - (b) in accordance with requirements in a relevant safe work instrument.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—

- (a) for an individual, to a fine not exceeding \$6,000;
- (b) for any other person, to a fine not exceeding \$30,000.

Compare: *Gazette* 2004, pp 871–872, Schedule 8, cl 79

### **17.79 Renewal of pipework markings**

- (1) A relevant PCBU must ensure that the markings applied to pipework under regulation 17.78 are renewed as often as is necessary to ensure that they continue to be legible.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: *Gazette* 2004, p 872, Schedule 8, cl 80

## *Records*

### **17.80 Records for stationary container systems**

- (1) A relevant PCBU must ensure that there is available for inspection in relation to every stationary container system used to store a hazardous substance a plan of the workplace that describes the physical position of the stationary container system in relation to,—
  - (a) if any separation distance required by these regulations between the system and a legal boundary of the workplace place is 5 m or less, the location of that legal boundary; and
  - (b) every building; and
  - (c) every other stationary tank used to store a hazardous substance at the place; and
  - (d) every storage area for packages containing hazardous substances; and
  - (e) every storage area for gas cylinders; and
  - (f) every secondary containment system for any stationary tank that is part of the system; and
  - (g) all fire-fighting equipment and facilities, including firewalls and vapour barriers; and
  - (h) every transfer point for a class 2.1.1 or class 3.1 substance.
- (2) A relevant PCBU must ensure that there is available for inspection, in relation to every stationary container system, records that describe how the system complies with—
  - (a) this subpart; and
  - (b) the requirements for secondary containment in subpart 18.

- (3) A relevant PCBU must ensure that the plan specified in subclause (1) and the records specified in subclause (2) are updated when the stationary container system to which the plan and records relate is—
  - (a) modified; or
  - (b) repaired; or
  - (c) relocated.
- (4) The plan specified in subclause (1) and the records specified in subclause (2) may be part of any other management documentation relating to the safety of a stationary container system whether that documentation is—
  - (a) required under the Act or any other Act; or
  - (b) prepared for any other reason.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: *Gazette* 2004, pp 872–873, Schedule 8, cl 81

#### **17.81 Requirement to keep records for stationary container system**

- (1) A relevant PCBU must ensure that the documents specified in subclause (2) are readily available for inspection.
- (2) The documents are—
  - (a) the plan specified in regulation 17.80(1);
  - (b) the records specified in regulation 17.80(2);
  - (c) the management documentation (if any) referred to in regulation 17.80(4).
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

Compare: *Gazette* 2004, p 873, Schedule 8, cl 82

### **Subpart 16—Repairs, alterations, and maintenance**

#### **17.82 Above ground stationary tank for storing hazardous liquids**

- (1) A relevant PCBU must ensure that repair, alteration, maintenance, inspection, and testing of an above ground stationary tank with a capacity greater than 250 000 L used to store hazardous liquids is carried out in accordance with—
  - (a) API 653:2014 (5th Edition); or
  - (b) EEMUA 159; or

- (c) requirements in a relevant safe work instrument.
- (2) A relevant PCBU must ensure that, if an inspection or testing is required to be undertaken in relation to the repair, alteration, or maintenance of the tank, the person undertaking the inspection is able to demonstrate appropriate experience.
- (3) This regulation does not apply to an above ground stationary tank that is required to comply with the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 873, Schedule 8, cl 83

### **17.83 Compliance certificate for above ground stationary tank can become invalid**

A compliance certificate issued under subpart 17 in relation to a stationary container system becomes invalid if,—

- (a) for a stationary container system that includes an above ground stationary tank certified as suitable to contain a hazardous liquid,—
  - (i) repairs or alterations (except minor repairs or alterations) are carried out on the tank below the maximum liquid level of the tank; or
  - (ii) the tank is altered so that the shell height or length is changed; or
  - (iii) the tank (unless it is constructed to be movable and has an integral support structure that rests on the ground) is relocated; or
  - (iv) the tank is reconstructed; or
  - (v) there is a change in service in relation to the tank; or
- (b) for a stationary container system that includes an above ground stationary tank certified as suitable to contain a gas,—
  - (i) the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999 do not apply to the tank, the tank is repaired or altered; or
  - (ii) the tank is relocated; or
  - (iii) there is a change in service in respect of the tank; or
- (c) for a stationary container system that includes a stationary tank, any certificate of inspection issued for that tank under the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways)

Regulations 1999 is suspended or cancelled under regulation 34 of those regulations.

Compare: *Gazette* 2004, pp 873–874, Schedule 8, cl 84

**17.84 Repair, alteration, testing, inspection, and maintenance of below ground stationary tank for hazardous liquids**

- (1) A relevant PCBU must ensure that a below ground stationary tank used to store hazardous liquids is repaired, altered, tested, inspected, and maintained—
  - (a) in a manner that ensures that the tank continues to meet the standards and codes to which the tank was designed and constructed; or
  - (b) in accordance with the requirements in a relevant safe work instrument.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 874, Schedule 8, cl 85

**17.85 Below ground stationary tank for hazardous liquids**

- (1) A relevant PCBU must ensure that a below ground stationary tank used to store a hazardous liquid—
  - (a) has inventory control checks in accordance with—
    - (i) section 17 of UPSS and Appendix A of Supplement No 1 to UPSS; or
    - (ii) requirements in a relevant safe work instrument; and
  - (b) is leak-tested in accordance with,—
    - (i) in UPSS,—
      - (A) section 19; and
      - (B) appendix A or appendix E; or
    - (ii) the requirements in a relevant safe work instrument.
- (2) The PCBU must keep records of each check or test under subclause (1) in accordance with section 20 of UPSS.
- (3) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (4) A PCBU who contravenes subclause (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;



- (b) for any other person, to a fine not exceeding \$10,000.

Compare: *Gazette* 2004, p 874, Schedule 8, cl 86

#### **17.86 Compliance certificate for below ground stationary tank can become invalid**

A compliance certificate issued under subpart 17 in relation to a stationary container system that includes a below ground stationary tank used to store a hazardous liquid or a gas becomes invalid if,—

- (a) in the case of a below ground stationary tank that is not subject to the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999, the tank is repaired or altered; or
- (b) the tank is relocated; or
- (c) the tank is reconstructed; or
- (d) there is a change in service in relation to the tank; or
- (e) tests show that any cathodic protection system or tank coating system no longer provides effective protection from corrosion; or
- (f) there is evidence that the tank is leaking; or
- (g) a certificate of inspection issued for the tank under the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999 is suspended or cancelled under regulation 34 of those regulations.

Compare: *Gazette* 2004, p 875, Schedule 8, cl 87

#### **17.87 Repair, maintenance, etc of equipment**

- (1) A relevant PCBU must ensure that all equipment that forms part of a stationary container system is repaired, inspected, tested, and maintained to ensure that the equipment continues to comply with requirements under this Part to which the equipment was designed, constructed, and installed.
- (2) Equipment to which subclause (1) applies includes—
  - (a) a dispenser that is required to be of an approved type and recorded under subpart 9; and
  - (b) a vapouriser that is required to be of an approved type and recorded under subpart 10; and
  - (c) equipment that is part of a stationary container system to which subpart 11 applies.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 875, Schedule 8, cl 88

#### **17.88 Repair, maintenance, etc of process container**

- (1) A relevant PCBU must ensure that a process container is repaired, altered, maintained, inspected, and tested to ensure that the container continues to comply with requirements under this Part in accordance with which the container was designed, constructed, and installed.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 875, Schedule 8, cl 89

#### **17.89 Compliance certificate for process container can become invalid**

A compliance certificate issued under subpart 17 for a stationary container system that includes a process container becomes invalid if—

- (a) the process container is—
  - (i) repaired (except minor repairs); or
  - (ii) altered (except minor alterations); or
  - (iii) replaced; or
  - (iv) relocated; or
- (b) there is a change of service in relation to the process container.

Compare: *Gazette* 2004, pp 875–876, Schedule 8, cl 90

### **Subpart 17—Compliance certification**

#### **17.90 Compliance certificate required for certain installed stationary container systems**

- (1) A relevant PCBU must ensure that a person does not put a hazardous substance into a stationary container system of the type specified in subclause (2) unless the stationary container system is certified under regulation 17.91.
- (2) The types of stationary container system are—
  - (a) a stationary container system that includes a stationary tank that—
    - (i) is a below ground stationary tank that contains or is to contain any hazardous substance; or
    - (ii) contains or is to contain a gas and has a water capacity greater than 500 L; or
    - (iii) contains or is to contain a class 3.1A or 3.1B substance and has a water capacity greater than 2 500 L; or

- (iv) contains or is to contain a hazardous liquid, other than a hazardous liquid that is a class 3.1A or 3.1B substance, and has a water capacity greater than 5 000 L;
- (b) a stationary container system that includes a process container that—
  - (i) is a below ground process container that contains or is to contain any hazardous substance; or
  - (ii) contains or is to contain a hazardous gas and has a water capacity greater than 250 L; or
  - (iii) contains or is to contain a hazardous liquid and has a water capacity greater than 1 000 L;
- (c) a stationary container system that includes a dispenser to which subpart 9 applies;
- (d) a stationary container system that includes a vapouriser to which subpart 10 applies;
- (e) a stationary container system to which subpart 11 applies.
- (3) Subclause (2) does not apply to a stationary container that contains or is to contain LPG.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: *Gazette* 2004, p 876, Schedule 8, cl 91

#### **17.91 Requirements for compliance certificate**

- (1) A compliance certifier may issue a compliance certificate in relation to a stationary container system if satisfied that the container complies with the requirements set out in subclause (2).
- (2) The requirements are that—
  - (a) the stationary container system is—
    - (i) suitable for service with a hazardous substance specified in the certificate, without leakage of the substance, for all reasonably foreseeable operating pressures, temperatures, stresses, and loadings; and
    - (ii) constructed of materials that are compatible with any hazardous substance that the system is likely to contain; and
  - (b) if the system includes a stationary tank, the stationary tank complies with the requirements in this Part relating to the following:
    - (i) tank design;
    - (ii) tank construction;

- (iii) tank installation:
- (iv) pressure management:
- (v) emergency pressure management:
- (vi) level indicators:
- (vii) lightning and stray current protection:
- (viii) separation:
- (ix) fire fighting equipment and facilities:
- (x) marking:
- (xi) plans; and
- (c) if the system includes a stationary tank with integral secondary containment, the stationary container system complies with subpart 18; and
- (d) if the system includes a stationary tank that contains or is to contain a class 3.1D, 6, or 8 substance that is not also a class 2, 3 (other than class 3.1D), 4, or 5 substance, the system complies with the requirements of subpart 18; and
- (e) if the system includes a process container, the process container complies with subpart 8; and
- (f) if the system includes a vapouriser, the vapouriser complies with regulation 17.56; and
- (g) the system complies with subpart 11, if that subpart applies; and
- (h) if the system includes a burner, the burner is—
  - (i) approved in accordance with regulation 17.67; and
  - (ii) installed in accordance with regulation 17.70; and
- (i) the system's pipework complies with requirements for—
  - (i) design, construction, and installation; and
  - (ii) operation, inspection, testing, and maintenance; and
  - (iii) installation of transfer point pipework (under regulation 17.74); and
- (j) the requirements for valves in regulation 17.75 are complied with; and
- (k) the records specified in regulation 17.80 are available for inspection; and
- (l) any repairs and alterations carried out comply with the requirements of subpart 16; and
- (m) a dispenser to which subpart 9 applies complies with regulation 17.47.
- (3) A stationary container system that includes a stationary tank complies with subclause (2)(b)(i) if the tank is—
  - (a) constructed in accordance with a design that is certified under regulation 17.93(1)(a); and

- (b) marked in accordance with regulation 17.76.
- (4) A stationary container system that includes a stationary tank complies with subclause (2)(b)(i) and (ii) if the stationary tank is—
  - (a) constructed in accordance with a design that is certified under regulation 17.93(1)(a); and
  - (b) constructed by a fabricator that is certified under regulation 17.93(1)(b) in respect of that design; and
  - (c) marked in accordance with regulation 17.76.
- (5) A stationary container system that includes a stationary tank that contains a hazardous substance for which a current certificate of inspection has been issued under the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999 complies with—
  - (a) subclause (2)(a); and
  - (b) subclause (2)(b)(i) to (v); and
  - (c) subclause (2)(l).
- (6) Pipework forming part of a stationary container system that contains a hazardous substance for which a current certificate of inspection has been issued in accordance with the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999 or the Health and Safety in Employment (Pipelines) Regulations 1999 complies with—
  - (a) subclause (2)(i)(i) and (ii); and
  - (b) subclause (2)(l).

Compare: *Gazette* 2004, pp 876–79, Schedule 8, cl 92

#### **17.92 Validity of compliance certificate for stationary container system**

- (1) A compliance certificate issued under regulation 17.91 is valid for—
  - (a) a period determined by the compliance certifier that issues the certificate in accordance with,—
    - (i) for an above ground stationary tank used to store a hazardous liquid,—
      - (A) API 653:2014 (5th Edition); or
      - (B) NZS/BS 2654; or
      - (C) BS EN 14015:2004; or
      - (D) table 9.1 in AS 1940—2004 (5th Edition) (R2006) for category 6 tanks; or
      - (E) a relevant safe work instrument; or
    - (ii) for a place that has more than 1 above ground stationary tank used to store a hazardous liquid,—
      - (A) API 2610:2005 (2nd Edition) (R2010); or

- (B) EEMUA 159; or
  - (C) a relevant safe work instrument; or
- (b) if WorkSafe has determined a validity period, that period; or
- (c) if the certificate is based on a certificate of inspection issued under the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999, the period for which the certificate of inspection is valid; or
- (d) in any other case, 1 year.
- (2) WorkSafe may not determine a validity period for the purposes of subclause (1)(b) that is longer than,—
  - (a) for an above ground stationary tank, 15 years; or
  - (b) for a below ground stationary tank, 10 years; or
  - (c) for a process container, 15 years.
- (3) In determining a validity period, WorkSafe must consider—
  - (a) the maximum quantity and type of hazardous substance to be contained or likely to be contained in the stationary container system; and
  - (b) the review and monitoring systems in place for the management of the stationary container system and any hazardous substances to be contained in it; and
  - (c) the compliance history of the PCBU who manages or controls the stationary container system.
- (4) WorkSafe may increase the validity period of a compliance certificate, but only within the limits set out in subclause (2).
- (5) An application to increase the validity period of a compliance certificate must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.

Compare: *Gazette* 2004, pp 879–880, Schedule 8, cl 93

### **17.93 Certification of designs or fabricators**

- (1) A compliance certifier may certify—
  - (a) a design for a stationary tank or process container if that design complies with the requirements of this Part that relate to the stationary tank or process container (as the case may be); or
  - (b) in relation to a certified design or designs, a fabricator for the purpose of constructing a stationary tank or process container in accordance with the design.
- (2) The compliance certifier must advise WorkSafe of,—

- (a) for a certified design, the requirements for which the design is certified; or
- (b) for a certified fabricator, the name and contact details of the fabricator and the design in respect of which the fabricator is certified.

Compare: *Gazette* 2004, p 880, Schedule 8, cl 94

#### **17.94 Duration of certification for fabricators**

Certification of a fabricator under regulation 17.93 remains in force for 3 years or any shorter period specified in the certificate.

Compare: *Gazette* 2004, p 880, Schedule 8, cl 95

#### **17.95 Record of certified designs and fabricators**

- (1) WorkSafe must keep a record of every design and every fabricator that is certified under regulation 17.93.
- (2) On receiving advice under regulation 17.93(2), WorkSafe must—
  - (a) allocate a record number to the certified design or fabricator (as the case may be); and
  - (b) enter the details of the certified design or fabricator (as the case may be) on the record; and
  - (c) ensure that the record is published on an Internet site that is maintained by or on behalf of WorkSafe.
- (3) WorkSafe may impose any conditions it considers appropriate on the certification of a design or fabricator before allocating a record number.

Compare: *Gazette* 2004, p 880, Schedule 8, cl 96

#### **17.96 Investigation and removal of design or fabricator**

- (1) This regulation applies to a stationary tank or a process container that is constructed—
  - (a) in accordance with a design that is certified under regulation 17.93; and
  - (b) by a fabricator that is certified under regulation 17.93.
- (2) If WorkSafe considers that a stationary tank or a process container may not comply with this Part, WorkSafe may—
  - (a) investigate the matter; and
  - (b) if it concludes that the tank or container does not comply, remove from the record—
    - (i) the design; or
    - (ii) the fabricator; or
    - (iii) both.

Compare: *Gazette* 2004, pp 880–881, Schedule 8, cl 97

**17.97 Information to be shown on compliance certificate**

- (1) A compliance certificate issued for a stationary container system must include the following information about a stationary tank or process container that is part of the system:
  - (a) an identifier that links the stationary tank or process container to the compliance certificate;
  - (b) the address or other clear identification of the place where the stationary tank or process container is located;
  - (c) the capacity for which the stationary tank or process container is certified;
  - (d) identification of the hazardous substance or hazardous substances that may be contained in the stationary tank or process container;
  - (e) the code, safe work instrument, or standard applied in the design of the stationary tank or process container;
  - (f) the year in which the stationary tank or process container was manufactured;
  - (g) the date on which the compliance certificate is issued;
  - (h) the date on which the compliance certificate expires;
  - (i) the name of the issuing compliance certifier;
  - (j) the record number for the compliance certifier.
- (2) A compliance certifier must provide WorkSafe with a copy of each compliance certificate issued by the certifier within 15 working days after issuing the certificate.

Compare: *Gazette* 2004, p 881, Schedule 8, cl 98

**17.98 Requirement for more than 1 compliance certificate**

If more than 1 compliance certificate must be obtained under this Part in respect of 1 place,—

- (a) the compliance certifier may, at the request of the person or persons required to obtain the certificates, examine at the same time any or all of those matters that require certification and for which the certifier is competent to certify; and
- (b) if more than 1 matter has been examined, the certifier's report must—
  - (i) indicate whether the requirements relating to each matter have been met; and
  - (ii) include details of any failure to meet those requirements; and
- (c) a single compliance certificate may be issued for any or all of those matters if the requirements for each matter have been met.

Compare: *Gazette* 2004, pp 881–882, Schedule 8, cl 99



## Subpart 18—Secondary containment

**17.99 Requirement to have secondary containment system for pooling substances**

- (1) This regulation applies to a place within a workplace—
  - (a) where—
    - (i) 1 or more stationary container systems are located; and
    - (ii) an aggregate quantity of a hazardous substance greater than the quantity specified in table 9 in Schedule 9, table 5 in Schedule 10, table 7 in Schedule 11, or the table in Schedule 16 for that substance is present or likely to be present; and
  - (b) that is not a port, or part of a port facility, that is used to store hazardous substances for 72 hours or less.
- (2) A relevant PCBU must ensure that the place has a secondary containment system.
- (3) The secondary containment system must comply with regulation 17.100, regulation 17.101, and (if applicable) regulation 17.102.
- (4) A relevant PCBU must ensure that controls for a secondary containment system are implemented that,—
  - (a) if the stationary container system contains flammable or organic peroxides, exclude any energy source capable of igniting them or causing them to decompose thermally;
  - (b) if the stationary container system contains explosive substances, exclude any energy source capable of causing them to explode or deflagrate;
  - (c) if the stationary container system contains corrosive or toxic substances, prevent people from being directly exposed to them;
  - (d) prevent the substances retained by the stationary container system from being contaminated by incompatible substances and materials.
- (5) For the purposes of this regulation and regulations 17.100 and 17.101, the quantity of any hazardous substance contained in pipework of the stationary container system is not to be taken into account in determining whether a place is required to have a secondary containment system.
- (6) This regulation does not apply to a place where there is stored—
  - (a) petrol, aviation gasoline, racing gasoline, kerosene, E10, or E85 in total quantities of less than 1 000 L; or
  - (b) at a farm of not less than 4 ha, petrol, aviation gasoline, racing gasoline, kerosene, E10, or E85 in total quantities of less than 2 500 L that is located so that any spillage will not endanger any building or flow into any stream, lake, or natural water; or
  - (c) petrol, aviation gasoline, racing gasoline, kerosene, E10, or E85 that is—

- (i) in total quantities of less than 2 000 L; and
  - (ii) contained in—
    - (A) a tank wagon; or
    - (B) secure containers, each of which has a capacity of less than 250 L; and
  - (iii) located so that any spillage will not endanger any building or flow into any stream, lake, or natural water; and
  - (iv) stored or proposed to be stored for a continuous period of less than 14 days; or
- (d) at a farm of not less than 4 ha, diesel that is—
  - (i) in quantities of less than 2 500 L; and
  - (ii) used in farm work; and
  - (iii) located so that any spillage will not endanger any building or flow into any stream, lake, or natural water.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**17.100 Secondary containment for above ground stationary containers**

- (1) Subject to this regulation, if the pooling substances above ground in a place within a workplace are in stationary containers, 1 or more of which have a capacity of at least 250 L, a relevant PCBU must ensure that the capacity of the secondary containment system for the stationary container system is at least 110% of the capacity of the largest container.
- (2) Subclause (1) applies to a container (**container A**) that is so connected to 1 or more other containers that leakage from it will cause another container to empty, as if the capacity of container A were the sum of the capacities of all the connected containers.
- (3) The capacity that a secondary containment system is required to have under this regulation may be reduced—
  - (a) by WorkSafe on application by any PCBU and subject to such conditions as WorkSafe considers appropriate; or
  - (b) in accordance with a relevant safe work instrument.
- (4) An application for approval of a lesser capacity of a secondary containment system, for the purposes of subclause (3)(a), must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.

- (5) WorkSafe must not approve a capacity that is less than 100% of the capacity of the largest stationary tank located in the secondary containment system to which the application relates.
- (6) In considering an application under subclause (5), WorkSafe must take into account any means provided to prevent the capacity of the secondary containment system to which the application relates being taken up by rainwater.
- (7) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **17.101 Secondary containment for below ground stationary containers**

- (1) If pooling substances held in a place within a workplace are in 1 or more below ground stationary containers, a relevant PCBU must ensure that the secondary containment system for the stationary container system has a capacity at least equal to the total pooling potential.
- (2) In subclause (1), **below ground stationary container**—
  - (a) means a container that is situated below ground; and
  - (b) includes—
    - (i) a container below ground, the level of which has been raised to provide cover for the container; and
    - (ii) a container covered by other incombustible material instead of ground.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

#### **17.102 Secondary containment systems for storage of class 3.1 substances in above ground stationary tank**

- (1) This regulation applies to a secondary containment system—
  - (a) to which regulation 17.100 applies; and
  - (b) that contains a class 3.1 substance.
- (2) A relevant PCBU must ensure that a secondary containment system that was constructed or significantly altered after the commencement of these regulations is—
  - (a) impervious to the class 3.1 substance it contains; and
  - (b) fire resistant.

- (3) A relevant PCBU must ensure that the total quantity of class 3.1 substances in the stationary tanks (whether 1 tank or more than 1) in a secondary containment system does not exceed 75 000 000 L, unless a greater capacity for that tank or those tanks is approved by WorkSafe under regulation 17.103.
- (4) If the total quantity of class 3.1 substances in the stationary tanks in a secondary containment system is greater than 25 000 000 L, a relevant PCBU must ensure that those tanks are divided into groups.
- (5) A relevant PCBU must ensure that the aggregate capacity of a group of stationary tanks does not exceed—
  - (a) 25 000 000 L; or
  - (b) a greater capacity approved by WorkSafe under regulation 17.104.
- (6) A relevant PCBU must ensure that each group of stationary tanks is separated from all other stationary tanks in the secondary containment system by an intermediate secondary containment system.
- (7) A relevant PCBU must ensure that an intermediate secondary containment system complies with all requirements applying to a secondary containment system, except that—
  - (a) it must have a capacity of at least 50% of the capacity of the largest stationary tank located within it; and
  - (b) the walls that form a subdivision of the intermediate secondary containment system must not be higher than 0.25 m below the top of the lowest wall of the secondary containment system in which it is located.
- (8) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

**17.103 WorkSafe may increase capacity of tanks in secondary containment systems**

- (1) For the purposes of regulation 17.102(3), WorkSafe may, on application from a relevant PCBU, increase the capacity of the stationary tanks within a secondary containment system to contain a class 3.1 substance.
- (2) An application to increase the capacity of stationary tanks must be—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (3) WorkSafe must not approve an increased capacity that exceeds 120 000 000 L.
- (4) In considering whether to increase capacity, WorkSafe must have regard to the following matters:

- (a) the degree of hazard associated with the class 3.1 substance or substances within the secondary containment system to which the application relates and (if applicable) any existing secondary containment system;
- (b) for each secondary containment system, the relationship between the capacity of the system's largest stationary tank and the capacity of the system;
- (c) the type of design and construction of the stationary tank;
- (d) the availability of means to prevent unintended ignition, and of means to control the effects of unintended ignition, of hazardous substances within the secondary containment system;
- (e) any other matter that WorkSafe considers appropriate.

**17.104 WorkSafe may increase aggregate capacity for groups of stationary tanks**

- (1) For the purposes of regulation 17.102(5), WorkSafe may, on application by a relevant PCBU, approve an increase of the aggregate capacity of a group of stationary tanks within a intermediate secondary containment system that contains a class 3.1 substance.
- (2) An application to increase the aggregate capacity of a group of stationary tanks must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.
- (3) WorkSafe must not approve an increased aggregate capacity that exceeds 40 000 000 L.
- (4) In considering whether to approve an increase, WorkSafe must take the following into account:
  - (a) the degree of hazard associated with any hazardous substance within each intermediate secondary containment system in the secondary containment system;
  - (b) the capacity of the largest stationary tank within each intermediate secondary containment system in the secondary containment system and the relationship of that capacity to the total capacity of the relevant intermediate secondary containment system;
  - (c) in relation to each intermediate secondary containment system to which the application relates, the capacity of the intermediate secondary containment systems adjacent to it;
  - (d) the availability of means to prevent unintended ignition, and of means to control the effects of unintended ignition, of hazardous substances stored within each intermediate secondary containment system to which the application relates;
  - (e) any other matter that WorkSafe considers appropriate.

## Subpart 19—Additional and modified requirements

### **17.105 Additional and modified requirements for stationary tanks**

- (1) This regulation applies to a stationary tank if the Minister approves a safe work instrument in relation to stationary tanks for the purposes of this regulation.
- (2) The Minister may approve a safe work instrument for the purposes of this regulation if satisfied that compliance with the provisions of these regulations that apply to stationary tanks will not appropriately control risk associated with stationary tanks.
- (3) In deciding whether to approve a safe work instrument for the purposes of this regulation, the Minister must have regard to the following matters:
  - (a) whether compliance with the provisions of these regulations being considered will eliminate or minimise relevant risk so far as is reasonably practicable:
  - (b) whether it is practicable for relevant duty holders to comply with those provisions:
  - (c) whether compliance with a modified form of those provisions, or with additional or alternative requirements, would be more practicable and no less effective in eliminating or minimising risk:
  - (d) whether a modified form of those provisions, or additional or alternative requirements, would be more appropriate to the nature of the hazards and risk being considered.
- (4) A safe work instrument approved for the purposes of this regulation may—
  - (a) set out any additional requirements that apply to the installation, operation, testing, inspection, or compliance certification of a stationary tank:
  - (b) state which PCBUs are required to comply with each additional requirement:
  - (c) state which provisions of these regulations are to apply to stationary tanks in a way that is modified by the instrument.
- (5) A PCBU identified under subclause (4)(b) must ensure that any additional requirement relating to stationary tanks is complied with.
- (6) A provision of these regulations that is modified under subclause (4)(c) by a safe work instrument approved for the purposes of this regulation applies, and must be complied with, as modified.
- (7) A PCBU who contravenes subclause (5) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000:
  - (b) for any other person, to a fine not exceeding \$50,000.
- (8) In this regulation,—

**additional requirement** means a new requirement set out in a safe work instrument approved for the purposes of this regulation

**appropriately control**, in relation to risk, means the risk is eliminated or minimised so far as is reasonably practicable

**modified**, in relation to a provision of these regulations, means the safe work instrument has the effect of—

- (a) varying, replacing, or deleting a requirement in the provision; or
- (b) providing an alternative means of complying with a requirement in the provision.

## Part 18

### Laboratories

#### 18.1 Interpretation

In this Part, unless the context otherwise requires,—

**approved hazardous substance**—

- (a) means a hazardous substance for which an approval to import or manufacture for release, or to import into containment or to manufacture in containment, has been issued by the EPA under the HSNO Act; and
- (b) includes a hazardous substance approved under section 48 of the HSNO Act for release or use in an emergency

**emergency response plan** means an emergency response plan required under subpart 2 of Part 5

**laboratory manager** means a person designated under regulation 18.12(1) as a manager of a laboratory or of a part of a laboratory

**small container**—

- (a) means a container in which a hazardous substance is being held before or during use in a laboratory in quantities typically used for that purpose; and
- (b) includes any laboratory equipment in which any hazardous substance remains after that use.

Compare: SR 2001/115 r 3

#### 18.2 Application

(1) This Part applies to a laboratory if—

- (a) the laboratory uses hazardous substances in research and development, analytical testing, or teaching; and
- (b) none of those hazardous substances, or any substance created from their use, is sold by that laboratory as a substance or in a product containing, or derived from, 1 or more of those substances.

- (2) Despite subclause (1)(b), this Part applies to the laboratory if a substance referred to in subclause (1)(b) is sold by that laboratory to—
- (a) another laboratory in New Zealand that complies with this Part; or
  - (b) a laboratory outside New Zealand if—
    - (i) the laboratory in New Zealand complies with this Part; and
    - (ii) the laboratory in New Zealand holds evidence that the hazardous substance or the substance will be used by the laboratory outside of New Zealand in research and development, analytical testing, or teaching; and
    - (iii) the laboratory in New Zealand produces that evidence to Work-Safe on request.

Compare: SR 2001/115 r 4

### *Laboratory design requirements*

#### **18.3 Parts of laboratory to be impervious to hazardous substances**

- (1) A PCBU with management or control of a laboratory must ensure that all parts of the laboratory that could come into contact with a hazardous substance, either in the course of normal use of the substance or as a result of spillage, are—
- (a) made of a material that is not capable of absorbing or retaining the substance or is treated and finished to that level of imperviousness; or
  - (b) while those parts come into contact with the substance, covered by a disposable material that is capable of absorbing or retaining the substance.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/115 r 5

#### **18.4 Design of laboratory**

- (1) If a hazardous substance (whether approved or not approved) is used or is available for use in a laboratory, the PCBU with management or control of the laboratory must ensure that the laboratory is designed and operated so as to prevent the substance from escaping from the laboratory.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/115 r 6



**18.5 Entry to laboratories**

- (1) A PCBU with management or control of a laboratory must ensure that all entrances to the laboratory are clearly marked by signs that—
  - (a) warn that only authorised persons are permitted inside the laboratory; and
  - (b) comply with the requirements for comprehensibility, clarity, and durability listed in regulation 2.5(2)(c).
- (2) At all times when a laboratory is not supervised by a laboratory manager or by any other person nominated by a laboratory manager to be in charge in their absence, the PCBU must ensure that the laboratory is secured so that a person can only enter the laboratory by using a tool, a key, or any other device used to operate a lock.
- (3) In this regulation,—

**authorised person**, in relation to a laboratory,—

  - (a) means a person (**person A**) who, in the normal course of their work, is required to enter the laboratory; and
  - (b) includes any other person under person A's direct supervision while person A is present in the laboratory

**entrance**, in relation to a laboratory, means a door, gate, or passage that is a point of entry into the laboratory.
- (4) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.
- (5) A PCBU who contravenes subclause (2) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/115 r 8

*Recording of hazardous substances***18.6 Recording of hazardous substances in laboratory**

- (1) A PCBU with management or control of a laboratory must ensure that a record is kept in accordance with regulation 3.1 of the quantities of the following hazardous substances in the laboratory:
  - (a) all approved hazardous substances that would, if they were outside the laboratory, be subject to tracking under Part 19; and
  - (b) all substances that are likely to be hazardous substances and that are not approved hazardous substances.

- (2) The record must be kept for at least 12 months after the substance is consumed or removed from the laboratory.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

Compare: SR 2001/115 r 9

**18.7 Additional recording and notification requirements respecting sodium fluoroacetate**

- (1) If, at any time in a calendar year, a laboratory holds, obtains, or manufactures sodium fluoroacetate, the PCBU with management or control of the laboratory must provide WorkSafe with the following information in respect of that year:
  - (a) the name and physical address of the laboratory;
  - (b) the laboratory manager's name;
  - (c) the quantity or quantities of sodium fluoroacetate held, obtained, and manufactured;
  - (d) for any sodium fluoroacetate not manufactured at the laboratory, the supplier's name;
  - (e) the purpose or purposes for which the sodium fluoroacetate was held, obtained, and manufactured;
  - (f) if any sodium fluoroacetate was transferred to another place,—
    - (i) how much was transferred; and
    - (ii) the physical address of the place; and
    - (iii) the identity of and position held by the person responsible for the substance at that place; and
    - (iv) the date on which the transfer occurred;
  - (g) if any sodium fluoroacetate was disposed of,—
    - (i) the quantity disposed of; and
    - (ii) how and where it was disposed of; and
    - (iii) the date on which it was disposed of.
- (2) The information must be provided in writing no later than 31 March of the following calendar year.
- (3) To avoid doubt, subclause (1) applies even if the sodium fluoroacetate held by the laboratory was obtained or manufactured in a previous calendar year.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;

- (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/115 r 17

### *Importation of sodium fluoroacetate*

#### **18.8 Requirements respecting importation of sodium fluoroacetate**

- (1) A PCBU with management or control of a laboratory who imports sodium fluoroacetate must, before the sodium fluoroacetate is collected,—
  - (a) provide WorkSafe with a written notice containing the following information:
    - (i) the supplier's name;
    - (ii) the quantity to be collected;
    - (iii) the name of the person collecting it; and
  - (b) obtain a certificate from WorkSafe confirming that the PCBU has complied with paragraph (a); and
  - (c) provide a copy of the certificate to the New Zealand Customs Service together with a written notice of the date on which and place from where the sodium fluoroacetate will be collected.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/115 r 19

### *Handling, packaging, and storage of hazardous substances*

#### **18.9 Handling, packaging, and storage of approved hazardous substances**

- (1) A PCBU with management or control of a laboratory must ensure that any approved hazardous substance is handled, packaged, and stored in the laboratory—
  - (a) in the way in which a substance with the same hazard classification must be managed under the applicable provisions of Parts 9 to 13; or
  - (b) in accordance with a relevant safe work instrument.
- (2) Despite subclause (1), the PCBU is not required to comply with any provision of Parts 9 to 13 that requires a substance to be—
  - (a) under the control of a certified handler; or
  - (b) in a hazardous substance location for which a compliance certificate has been issued.

- (3) The PCBU must ensure that any sodium fluoroacetate held in the laboratory is secured so that a person can access it only by using a tool or key or any other device used to operate a lock.
- (4) If an approved hazardous substance that is used or available for use in a laboratory is held in small containers, the PCBU must, so far as is reasonably practicable, ensure that the following information is provided on each container:
  - (a) the identity of the substance; and
  - (b) if the hazardous substance is diluted with a non-hazardous substance, the concentration of any hazardous substance present; and
  - (c) a warning of the hazardous properties of the substance if the substance is classified as—
    - (i) class 1.1, 1.2, 1.3, or 1.4; or
    - (ii) class 2.1.1, 2.1.2, 3.1A, 3.2A, 4.1.2A, 4.1.2B, 4.1.3A, 4.2A, 4.3A, 5.1.1A, 5.1.2A, 5.2A, 5.2B, 6.1A, 6.1B, 6.1C, 8.2A, or 8.3A.
- (5) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction to the applicable fine set out in Parts 9 to 13.
- (6) A PCBU who contravenes subclauses (3) and (4) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/115 r 10(1)–(3)

#### **18.10 Handling, packaging, and storage of unapproved hazardous substances**

- (1) A PCBU with management or control of a laboratory must ensure that a substance that is likely to be hazardous but is not an approved hazardous substance is handled, packaged, and stored in the laboratory—
  - (a) in the way in which a similar quantity of an approved hazardous substance with similar hazardous properties and equivalent degrees of hazard must be handled, packaged, and stored under the applicable provisions of Parts 9 to 13; or
  - (b) in accordance with a relevant safe work instrument.
- (2) Despite subclause (1), the PCBU is not required to comply with any provision of Parts 9 to 13 that requires the approved hazardous substance to be—
  - (a) under the control of a certified handler; or
  - (b) in a hazardous substance location for which a compliance certificate has been issued.
- (3) In managing a hazardous substance that is not an approved hazardous substance, the PCBU must have regard to—

- (a) the hazardous properties of all products that are likely to result from a reaction used to form the substance; and
  - (b) any known physical or chemical properties of—
    - (i) the substance; or
    - (ii) any of the compounds, elements, or chemical functional groups that make up the substance; and
  - (c) any known hazardous properties of substances that have a similar chemical structure; and
  - (d) if the substance is a mixture, any known or likely interactions between the compounds, elements, or chemical functional groups that make up the mixture; and
  - (e) if the substance was imported from another jurisdiction, any information about the substance available from that jurisdiction.
- (4) If a hazardous substance that is not an approved hazardous substance is used or available for use in a laboratory and held in small containers, the PCBU must, so far as is reasonably practicable, ensure that the following information is provided on each container:
- (a) the identity of the substance; and
  - (b) if available, information about any hazardous property of the substance; and
  - (c) if available, an indication of the precautions that should be taken when handling the substance.
- (5) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/115 r 11(1)–(3)

### 18.11 Specifications of small containers

- (1) A PCBU with management or control of a laboratory must ensure that every small container in the laboratory meets the requirements set out in regulation 2.12(2).
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/115 r 12

*Personnel requirements for laboratories***18.12 Laboratory manager**

- (1) The PCBU with management or control of a laboratory must ensure that at least 1 person is designated as a laboratory manager for the laboratory.
- (2) A laboratory manager—
  - (a) may be designated as the manager of all or a specified part of the laboratory; and
  - (b) is in charge of—
    - (i) the laboratory or specified part of the laboratory; and
    - (ii) all hazardous substances contained within the laboratory or part of the laboratory (as the case may be); and
  - (c) may nominate another person to be in charge in their absence.
- (3) If more than 1 person is designated as a laboratory manager, the PCBU with management or control of the laboratory must ensure that—
  - (a) the terms and conditions of the designation are recorded in writing; and
  - (b) at any given time, only 1 person is in charge of the laboratory or part of the laboratory, and of all hazardous substances contained within the laboratory or part of the laboratory.
- (4) A PCBU who contravenes subclause (1) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (5) A PCBU who contravenes subclause (3) commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

Compare: SR 2001/115 r 13

**18.13 Skill and knowledge requirements for laboratory managers**

- (1) A PCBU with management or control of a laboratory must ensure that the laboratory manager has—
  - (a) technical knowledge of the physical and chemical properties of all substances managed or used in the laboratory, including the likely hazardous properties of substances being synthesised, in order to prevent or manage the adverse effects of those substances; and
  - (b) knowledge of—
    - (i) precautions for handling the hazardous substances managed or used in the laboratory; and

- (ii) the disposal of those substances in accordance with the Hazardous Substances (Disposal) Notice 2017; and
    - (iii) any relevant safe work instrument relating to laboratories; and
  - (c) the specific knowledge and skill requirements set out in the laboratory's emergency response plan; and
  - (d) the ability to demonstrate the correct operation and maintenance of equipment, including personal protective clothing and equipment, necessary to manage the substances in the laboratory throughout their life cycle.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/115 r 14

#### **18.14 Knowledge requirements for persons handling hazardous substances**

- (1) A PCBU with management or control of a laboratory must ensure that every person handling a hazardous substance in the laboratory is provided with the following information before handling the substance:
- (a) procedures to prevent the contamination of any equipment, clothing, or part of the laboratory;
  - (b) if the substance is an approved hazardous substance, procedures to ensure that persons in the laboratory are not exposed to more than the prescribed exposure standard (if any) for that substance;
  - (c) if the substance is not an approved hazardous substance, the method of management required under regulation 18.10(1) and (3);
  - (d) the disposal requirements for the substance set out in the Hazardous Substances (Disposal) Notice 2017;
  - (e) the actions required under the laboratory's emergency response plan in the event of an accident or accidental exposure to the substance.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$6,000;
  - (b) for any other person, to a fine not exceeding \$30,000.

Compare: SR 2001/115 r 15

*Emergency response plans*

**18.15 Emergency response plan requirements**

- (1) A PCBU with management or control of a laboratory must ensure that the laboratory, irrespective of the quantities of hazardous substances present, has an emergency response plan that meets the requirements of subpart 2 of Part 5.
- (2) The emergency response plan may be part of any other planning for an emergency, whether required by these regulations or any other enactment, or be undertaken for any other reason.
- (3) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/115 r 16

**Part 19**  
**Tracking hazardous substances**

**19.1 Interpretation**

In this Part, unless the context otherwise requires,—

**competent person** means—

- (a) a certified handler; or
- (b) a person who has received information, instruction, and training in accordance with regulation 4.5

**tracked substance**—

- (a) means a hazardous substance described in table 1 or 2 in Schedule 26; but
- (b) does not include a hazardous substance described in table 3 in Schedule 26

**treatment**, in relation to a hazardous substance, includes incorporating the substance into any other substance or product.

Compare: SR 2001/120 r 3

*Application*

**19.2 Application of Part 19**

This Part applies to a tracked substance and any other hazardous substance required by a relevant safe work instrument to comply with this Part.



**19.3 Adding to list of hazardous substances that do not require tracking**

A relevant safe work instrument may add a hazardous substance to table 3 in Schedule 26.

*Requirements to track hazardous substances***19.4 Tracked substances recording information**

- (1) A PCBU with management or control of a workplace where a tracked substance is present must ensure that a record is kept of the location and movement of the tracked substance at each phase of its life cycle in accordance with this Part.
- (2) The PCBU must ensure that the record includes the information specified in Schedule 27.
- (3) A relevant safe work instrument may modify the recording requirements referred to in subclauses (1) and (2).
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

Compare: SR 2001/120 rr 4(1), 5

**19.5 Requirement to make record available**

- (1) A PCBU with management or control of a workplace where a tracked substance is present must ensure that the record required to be kept under regulation 19.4 is—
  - (a) readily accessible to any worker handling the substance; and
  - (b) readily understandable by any competent person required to have access to the substance.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

**19.6 Retention of records**

- (1) The PCBU with management or control of a workplace where a tracked substance has been but is no longer present must ensure that the record relating to the substance is retained,—
  - (a) for a substance that has been transferred to another place, for 12 months from the date of transfer; but

- (b) for a substance that has undergone treatment that results in it no longer being a tracked substance, or that has been intentionally or unintentionally disposed of, for 3 years from the date of treatment or disposal.
- (2) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$2,000;
  - (b) for any other person, to a fine not exceeding \$10,000.

### **19.7 Transfer of tracked substance**

- (1) A PCBU with management or control of a workplace (**A**) where a tracked substance is present may transfer the substance only to another workplace under the management and control of another PCBU (**B**) and only if A has received written notification that—
  - (a) a competent person at the other workplace will accept responsibility for the tracked substance; and
  - (b) the other workplace has a compliance certificate for a hazardous substance location for the amount and hazard classification of the substance, if required by Part 9, 10, 12, or 13; and
  - (c) any place where the substance is to be held during transit to the other workplace complies with—
    - (i) the requirements of Part 5; and
    - (ii) to the extent relevant, the requirements for a transit depot specified in Part 10, 12, or 13.
- (2) Subclause (1) does not apply to a substance described in subclause (3) if it is sold by retail to a person (the **buyer**) and at the time of sale—
  - (a) the aggregate quantity of each substance being sold to the buyer is 3 kg or less; and
  - (b) the buyer advises the seller that the substance will be used for the purpose of fumigation.
- (3) The substances are—
  - (a) pellets containing 570 g/kg aluminium phosphide, HSNO approval number HSR001636;
  - (b) pellets containing 660 g/kg magnesium phosphide, HSNO approval number HSR001634;
  - (c) any other hazardous substance specified in a relevant safe work instrument.
- (4) A PCBU who contravenes this regulation commits an offence and is liable on conviction,—
  - (a) for an individual, to a fine not exceeding \$10,000;

- (b) for any other person, to a fine not exceeding \$50,000.

Compare: SR 2001/120 r 6

## **Part 20**

### **Consequential amendment to other health and safety at work regulations**

#### **20.1 Consequential amendment to Health and Safety at Work (General Risk and Workplace Management) Regulations 2016**

- (1) This regulation amends the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016.
- (2) In regulation 3(1), definition of **prescribed exposure standard**, replace paragraph (c) with:
  - (c) a control under section 77 or 77A, or an exposure limit under section 77B, of the Hazardous Substances and New Organisms Act 1996; or

## Schedule 1

### Transitional, savings, and related provisions

r 5

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*Preliminary***1 Interpretation**

In this schedule,—

**2004 Transfer Notice** means the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004 issued by the Environmental Risk Management Authority under section 160A of the HSNO Act as that section was in force before 2 July 2006

**commencement date** means 1 December 2017

**compliance certificate** means a compliance certificate issued under regulation 6.23

**test certificate** means a test certificate issued by a test certifier under section 82 of the HSNO Act.

*Provision relating to Part 5 (emergency management)***2 Emergency response plans**

An emergency response plan prepared under regulations 27 to 30 of the Hazardous Substances (Emergency Management) Regulations 2001 and in force immediately before the commencement date—

- (a) continues in force on and after that date; and
- (b) must be treated as an emergency response plan prepared under subpart 2 of Part 5 of these regulations.

*Provision relating to Part 6 (compliance certification)***3 Test certificates continue as compliance certificates**

- (1) A test certificate (including a conditional test certificate for a hazardous substance location) in force immediately before the commencement date—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and
  - (b) must be treated as an equivalent compliance certificate under subpart 2 of Part 6.
- (2) Despite subclause (1)(a), a conditional test certificate for a hazardous substance location continues in force subject to the condition that, if the requirements specified in the certificate are not met by the date specified, the certificate expires at the close of that date.

**4 Test certifiers continue as compliance certifiers**

- (1) An approval of a person as a test certifier granted under section 84 of the HSNO Act and in force immediately before the commencement date—

- (a) continues in force on and after that date until its expiry under that section for the balance of the period (if any) for which it was given; and
  - (b) must be treated as an equivalent authorisation as a compliance certifier under subpart 1 of Part 6.
- (2) A limitation to which an approval continued under subclause (1) is subject—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was imposed; and
  - (b) must be treated as a condition under regulation 6.8(4).

*Provision relating to Part 7 (controlled substance licences)*

**5 HSNO licences continue as controlled substance licences**

- (1) A licence granted under section 95B of the HSNO Act and in force immediately before the commencement date—
  - (a) continues in force on and after that date, subject to any condition specified in the licence, for the balance of the period (if any) for which it was granted; and
  - (b) must be treated as a controlled substance licence under Part 7.
- (2) A condition to which a licence continued under subclause (1) is subject—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was imposed; and
  - (b) must be treated as a condition under regulation 7.1(3)(b).

*Provisions relating to Parts 9 to 12 (class 1 to 5 substances)*

**6 Containers used for securing class 1 substances: construction requirements and test certificates**

- (1) For a magazine constructed before 1 December 2017, the requirements of regulation 9.19(1)(a)(i) are varied as follows:
  - (a) a steel magazine or a converted freight container that has an effective weather shield fitted above its door opening is not required to comply with clause 2.3.2.2(c) of AS 2187.1–1998;
  - (b) a relocatable, fixed, or permanent magazine that has a door of 5 mm thick steel plate is not required to have a door of 10 mm thickness as required by AS 2187.1–1998.
- (2) A test certificate for the design or construction of a container for securing class 1 substances, issued for the purposes of regulation 24 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001 and in force immediately before the commencement date,—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and

- (b) must be treated as an equivalent compliance certificate issued by a compliance certifier under subpart 2 of Part 6 of these regulations for the purposes of regulation 9.20(1)(b) of these regulations.

**7 Test certificates for hazardous substance location where class 1 substances present**

- (1) A test certificate or conditional test certificate for a hazardous substance location where a class 1 substance is present, issued for the purposes of regulation 30 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001 and in force immediately before the commencement date,—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and
  - (b) must be treated as an equivalent compliance certificate or conditional compliance certificate issued under subpart 2 of Part 6 of these regulations for the purposes of regulation 9.26 of these regulations.
- (2) Despite subclause (1)(a), a conditional test certificate for a hazardous substance location continues in force subject to the condition that, if the requirements specified in the certificate are not met by the date specified, the certificate expires at the close of that date.

**8 Test certificate for outdoor pyrotechnic displays**

A test certificate for an outdoor pyrotechnic display that uses class 1 category G substances, issued for the purposes of regulation 40 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001 and in force immediately before the commencement date,—

- (a) continues in force on and after that date until the end of the display that is specified on the certificate; and
- (b) must be treated as an equivalent compliance certificate issued under subpart 2 of Part 6 of these regulations for the purposes of regulation 9.36 of these regulations.

**9 Test certificates for hazardous substance location for class 2.1.1, 2.1.2, or 3.1 substances**

- (1) A test certificate or conditional test certificate for a hazardous substance location where a class 2.1.1, 2.1.2, or 3.1 substance is present, issued for the purposes of regulation 81 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001 and in force immediately before the commencement date,—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and
  - (b) must be treated as an equivalent compliance certificate issued under subpart 2 of Part 6 of these regulations for the purposes of regulation 10.34 of these regulations.



- (2) Despite subclause (1)(a), a conditional test certificate for a hazardous substance location continues in force subject to the condition that, if the requirements specified in the certificate are not met by the date specified, the certificate expires at the close of that date.

#### **10 Test certificates for hazardous substance location for class 3.2 or 4 substances**

- (1) A test certificate or conditional test certificate for a hazardous substance location where a class 3.2 or 4 substance is present, issued for the purposes of regulation 82 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001 and in force immediately before the commencement date,—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and
  - (b) must be treated as an equivalent compliance certificate issued under subpart 2 of Part 6 of these regulations for the purposes of regulation 10.36 of these regulations.
- (2) Despite subclause (1)(a), a conditional test certificate for a hazardous substance location continues in force subject to the condition that, if the requirements specified in the certificate are not met by the date specified, the certificate expires at the close of that date.

#### **11 Previously approved installations of class 2.1.1 liquefiable gas cylinders and above ground tanks**

- (1) This clause applies to cylinders or above ground tanks, containing a class 2.1.1 liquefiable gas, that complied with clause 35 of Schedule 10 of the 2004 Transfer Notice immediately before the commencement date.
- (2) The cylinders or above ground tanks must, on and after the commencement date, be treated as meeting the separation distance requirements of regulation 11.6 or 11.7 (for cylinders or above ground tanks not located at a hazardous substance location) or regulation 11.20 or 11.21 (for cylinders or above ground tanks located at a hazardous substance location) if—
  - (a) their separation distances exceed 50% of the separation distances required under subpart 1 or 2 of Part 11; and
  - (b) there are intervening walls that comply with subclause (4).
- (3) The reduced separation distances referred to in subclause (2)(a) may be applied only to 1 side or 2 adjacent sides of the cylinder or above ground tank.
- (4) For the purposes of subclause (2)(b),—
  - (a) in the case of separation from a protected place, the intervening wall must—
    - (i) have a minimum fire-resistance rating of 240/240/240 minutes for at least that length of the wall that separates the cylinder or tank

- and any connections, associated pipework, and operable fittings in a line of sight from the area being protected; and
- (ii) for the length of the wall that does not comply with subparagraph (i), be constructed of fire-resistant materials as a minimum standard; and
- (iii) be vapour-tight; and
- (iv) be more than 1.8 metres high or 0.6 metres above the top surface of the tank; and
- (b) in the case of separation from a public place, the intervening wall must—
  - (i) be constructed of fire-resistant materials; and
  - (ii) be vapour-tight; and
  - (iii) be more than 1.8 metres high or 0.6 metres above the top surface of the tank; and
- (c) the distance measured in the horizontal plane around the end of each intervening wall by the most direct line to the protected place or public place (as the case may be) must at least meet the relevant requirements of table 2 or 3 in Schedule 12.

**12 Reduced separation distances for containers of class 2.1.1, 2.1.2, or 3.1 hazardous substances or variation of other matters**

- (1) This clause applies to any reduction of prescribed separation distances or variation of other matters, in respect of a hazardous substance under Part 2 or 3 of Schedule 10 of the 2004 Transfer Notice, determined by the EPA under clause 33 of Schedule 10 of the transfer notice and in force immediately before the commencement date.
- (2) The reduced separation distances or variation of any other matters continues in force on and after the commencement date for the balance of the period (if any) for which the reduction or variation was determined.
- (3) While the reduced distances or variation of any other matter continue in force, the provisions of Part 11 of these regulations apply subject to that reduction or variation.
- (4) In this regulation, **prescribed separation distances** means separation distances imposed as controls for containers that contain class 2.1.1, 2.1.2, or 3.1 hazardous substances under Part 2 or 3 of Schedule 10 of the 2004 Transfer Notice.

**13 Compliance plaques for certain quantities of LPG in cylinders**

- (1) A compliance plaque for a hazardous substance location where LPG is stored in cylinders in quantities more than 100 kg and less than 300 kg that is fixed to the location in accordance with code of practice HSNOCOP 50, approved

under section 78 of the HSNO Act and in force immediately before the commencement date,—

- (a) continues in force on and after that date until its expiry date under that code of practice; and
  - (b) must be treated as a valid compliance plaque for the purposes of regulation 11.43.
- (2) In this clause, **HSNOCOP 50** means the code of practice on LPG Compliance 100kg to 300 kg (June 2011).

**14 Test certificates for hazardous substance location for class 5.1.1A, 5.1.1B, 5.1.1C, or 5.1.2A substances**

A test certificate for a hazardous substance location where a class 5.1.1A, 5.1.1B, 5.1.1C, or 5.1.2A substance is present, issued for the purposes of regulation 98 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001 and in force immediately before the commencement date,—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and
- (b) in the case of a conditional test certificate, continues in force subject to the condition that, if the requirements specified in the certificate are not met by the date specified, the certificate expires on that date; and
- (c) must be treated as an equivalent compliance certificate issued under subpart 2 of Part 6 of these regulations for the purposes of regulation 12.17 of these regulations.

**15 Test certificates for hazardous substance location for class 5.2A, 5.2B, 5.2C, 5.2D, 5.2E, or 5.2F substances**

A test certificate for a hazardous substance location where a class 5.2A, 5.2B, 5.2C, 5.2D, 5.2E, or 5.2F substance is present, issued for the purposes of regulation 120 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations 2001 and in force immediately before the commencement date,—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and
- (b) in the case of a conditional test certificate, continues in force subject to the condition that, if the requirements specified in the certificate are not met by the date specified, the certificate expires on that date; and
- (c) must be treated as an equivalent compliance certificate issued under subpart 2 of Part 6 of these regulations for the purposes of regulation 12.42 of these regulations.

*Provisions relating to Part 15 (gases under pressure)***16 Recognised inspection agency**

A person or an organisation that was recognised by the Authority (as defined in the HSNO Act) as a recognised inspection agency under the Hazardous Substances (Compressed Gases) Regulations 2004 for the purposes of regulation 16, 17, 19, 36, 39, or 67A of those regulations and in force immediately before the commencement date continues in force as a recognised inspection agency under Part 15, for the purposes of regulation 15.15, 15.16, 15.37, 15.40, or 15.80 of these regulations.

**17 Gas containers and fittings**

- (1) A gas container or fitting that, immediately before the commencement date, complied with the design and manufacture requirements of the Hazardous Substances (Compressed Gases) Regulations 2004 must, on and after that date, be treated as complying with the design and manufacture requirements of Part 15 of these regulations.
- (2) Without limiting subclause (1),—
  - (a) a cylinder (other than a fire extinguisher) that complied with relevant requirements of those regulations must be treated as complying with regulation 15.8:
  - (b) a refillable high-pressure fire extinguisher that complied with relevant requirements of those regulations must be treated as complying with regulation 15.9:
  - (c) a neck thread of a cylinder (other than a low-pressure fire extinguisher) that complied with relevant requirements of those regulations must be treated as complying with regulation 15.10:
  - (d) a cryogenic container that complied with relevant requirements of those regulations must be treated as complying with regulation 15.12:
  - (e) a low-pressure fire extinguisher that complied with relevant requirements of those regulations must be treated as complying with subpart 3 of Part 15.
  - (f) an aerosol dispenser that complied with relevant requirements of those regulations must be treated as complying with regulation 15.25(1)(a):
  - (g) a non-refillable gas container that complied with relevant requirements of those regulations must be treated as complying with regulation 15.26(1)(a):
  - (h) a cylinder valve for an LPG cylinder that complied with relevant requirements of those regulations must be treated as complying with regulation 15.28(1):

- (i) a cylinder valve, other than a valve referred to in paragraph (h), that complied with relevant requirements of those regulations must be treated as complying with regulation 15.28(2):
- (j) a cylinder valve outlet connection (other than for LPG) that complied with relevant requirements of those regulations must be treated as complying with regulation 15.29(1):
- (k) an LPG cylinder valve outlet connection that complied with relevant requirements of those regulations must be treated as complying with regulation 15.29(2):
- (l) an outlet connection for a cylinder that is part of the motive power of a forklift (but is not permanently attached or integral to the forklift) and that complied with relevant requirements of those regulations must be treated as complying with regulation 15.29(3):
- (m) a valve that is incorporated in a cylinder design for a flammable or class 6.1A to 6.1D gas and that complied with relevant requirements of those regulations must be treated as complying with regulation 15.30(1):
- (n) a valve that is incorporated in a cylinder design for a gas other than a flammable or class 6.1A to 6.1D gas and that complied with relevant requirements of those regulations must be treated as complying with regulation 15.30(2):
- (o) a cylinder design, other than a cylinder designed to contain a class 6.1 to 6.1C toxic substance, that incorporated overpressure protection that complied with relevant requirements of those regulations must be treated as complying with regulation 15.31(1):
- (p) a fire extinguisher cylinder design that, at pressures of more than 19 MPa, complied with relevant requirements of those regulations must be treated as complying with regulation 15.31(2):
- (q) a gas regulator, other than an LPG regulator or an LPG automatic changeover device, that complied with relevant requirements of those regulations must be treated as complying with regulation 15.32:
- (r) an LPG regulator or LPG automatic changeover device that complied with relevant requirements of those regulations must be treated as complying with regulation 15.33(1):
- (s) a valve inlet connection of an LPG regulator that complied with relevant requirements of those regulations must be treated as complying with regulation 15.33(2):
- (t) an LPG cylinder that has a nominal capacity of more than 4 kg and less than 11 kg, is fitted with an overfill protection device, and complied with relevant requirements of those regulations must be treated as complying with regulation 15.34:

- (u) an adaptor that is fitted to an LPG cylinder and that complied with relevant requirements of those regulations must be treated as complying with regulation 15.35(1)(c).

Compare: SR 2004/43 r 5

## **18 Design verification certificates**

- (1) A design verification certificate for a cylinder design issued under regulation 15 of the Hazardous Substances (Compressed Gases) Regulations 2004 and in force immediately before the commencement date (a **HSNO certificate**)—
  - (a) continues in force on and after that date for the balance of the period for which it was issued; and
  - (b) must be treated as an equivalent design verification certificate issued under regulation 15.13 of these regulations.
- (2) Conditions to which a HSNO certificate is subject also continue in force and must be treated as conditions under regulation 15.13(4) of these regulations.

## **19 Test certificates for imported cylinders**

A test certificate for an imported cylinder or a batch of imported cylinders issued for the purposes of regulation 19 of the Hazardous Substances (Compressed Gases) Regulations 2004 and in force immediately before the commencement date—

- (a) continues in force on and after that date; and
- (b) must be treated as an equivalent compliance certificate under regulation 15.16 of these regulations.

## **20 Pre-commissioning certificates**

A pre-commissioning certificate for a cylinder issued under section 82 of the HSNO Act for the purposes of regulation 20 of the Hazardous Substances (Compressed Gases) Regulations 2004 and in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and
- (b) must be treated as an equivalent compliance certificate under regulation 15.19 of these regulations.

## **21 Waiver of requirement for pre-commissioning certificate**

A waiver of the requirement to obtain a pre-commissioning certificate for a cylinder issued under regulation 21 of the Hazardous Substances (Compressed Gases) Regulations 2004 and in force immediately before the commencement date must, for the purposes of regulation 15.18 of these regulations, be treated as an exemption continued under clause 6 of Schedule 1 of the Act.

**22 Test certificates for imported fittings for LPG cylinders**

A test certificate for imported fittings for LPG cylinders issued for the purposes of regulation 36 of the Hazardous Substances (Compressed Gases) Regulations 2004 and in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and
- (b) must be treated as an equivalent compliance certificate under regulation 15.37 of these regulations.

**23 Waiver of test certificate for imported fittings for LPG cylinders**

A waiver of the requirement to obtain a test certificate for fittings for LPG cylinders issued under regulation 38 of the Hazardous Substances (Compressed Gases) Regulations 2004 and in force immediately before the commencement date must, for the purposes of regulation 15.39 of these regulations, be treated as an exemption continued under clause 6 of Schedule 1 of the Act.

**24 Periodic certificates**

A periodic certificate for a cylinder issued under regulation 52 of the Hazardous Substances (Compressed Gases) Regulations 2004 and in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period for which it was issued; and
- (b) must be treated as an equivalent document of certification under regulation 15.56 of these regulations.

**25 Approved filler certificates**

An approved filler certificate issued under section 82 of the HSNO Act for the purposes of regulation 60 of the Hazardous Substances (Compressed Gases) Regulations 2004 and in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and
- (b) must be treated as an equivalent approved filler certificate under regulation 15.66 of these regulations.

**26 Recalls and design withdrawals**

A recall of a fitting, aerosol, cylinder, or non-refillable container, or a withdrawal of an approval for a design of a fitting, aerosol, cylinder, or non-refillable container, made or issued under regulation 79 of the Hazardous Substances (Compressed Gases) Regulations 2004 and in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was made or issued; and

- (b) must be treated as a recall or a withdrawal (as the case may be) of that fitting, aerosol, cylinder, or non-refillable container under regulation 15.85 of these regulations.

*Provisions relating to Part 16 (tank wagons and transportable containers)*

**27 LAB number, TSR number, design registration number, and tank wagon record number**

For the purposes of regulations 16.5(1)(h) and 16.33(b), the following numbers that are in force immediately before the commencement of this clause are to be treated as a tank wagon record number, but only until the expiry of the day on which they are rescinded by WorkSafe, or until they are replaced by a tank wagon record number issued by WorkSafe under regulation 16.33(b) :

- (a) a LAB number referred to in regulation 16.2(2)(a)(i):
- (b) a TSR number referred to in regulation 16.2(2)(b):
- (c) a design registration number referred to in regulations 7(1)(a) and 34(1)(b) of the Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004.

**28 Design test certificates for tank wagons**

A design test certificate for a tank wagon or part of a tank wagon issued for the purposes of regulation 32 of the Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004 and in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and
- (b) must be treated as an equivalent design compliance certificate under regulation 16.31 of these regulations.

**29 Design test certificates for transportable containers**

A design test certificate for a transportable container in force immediately before the commencement date continues in force on and after that date for the balance of the period (if any) for which it was issued, and must be treated as an equivalent design compliance certificate under regulation 16.31 if—

- (a) the container was approved under regulation 32(2)(b) of the Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004; and
- (b) the container was issued a number under regulation 34 of the Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004.



**30 Certificate of design verification**

A certificate of design verification issued under the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999 and in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and
- (b) must be treated as an equivalent design compliance certificate under regulation 16.31 of these regulations for the components to which that certificate of design verification applies.

**31 Pre-commissioning test certificates**

- (1) A pre-commissioning test certificate for a tank wagon issued for the purposes of regulation 35 of the Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004 and in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and
- (b) must be treated as an equivalent pre-commissioning compliance certificate issued under regulation 16.34 of these regulations.

- (2) A limitation to which a pre-commissioning compliance certificate continued under subclause (1) is subject continues in force on and after the commencement date.

**32 Approvals of tank wagon fabricators**

An approval of a person as a tank wagon fabricator given under regulation 35(4) of the Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004 and in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was given; and
- (b) must be treated as an equivalent approval under regulation 16.35 of these regulations.

**33 In-service test certificates**

An in-service test certificate for a tank wagon issued for the purposes of regulation 36 of the Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004 and in force immediately before the commencement date—

- (a) continues in force on and after that date; and
- (b) must be treated as an equivalent in-service compliance certificate under regulation 16.36 of these regulations.

**34 Variations of modified controls for LPG, butane, and isobutane**

- (1) This clause applies to the variation of the controls that attach to LPG, propane, butane, and isobutane under reassessment decision HRC09001, made under section 63A of the HSNO Act and in force immediately before the commencement date.
- (2) The variation of controls continues in force on and after the commencement date for the balance of the period (if any) for which the variation was made.
- (3) While the variation continues in force, the provisions of Part 16 apply as so varied to LPG, propane, butane, and isobutane.
- (4) In this clause,—

**HRC09001** means the Environmental Risk Management Authority Decision HRC09001 of 2 September 2012, which—

- (a) approved an application for a reassessment of LPG, propane, butane, and isobutane; and
- (b) imposed new controls on those substances, including by the deemed insertion of subclause (6) in regulation 42 of the Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004; and
- (c) by the deemed insertion of subclause (7) in that regulation, allowed those new controls to be varied by the Authority

**modified controls** means the controls contained in deemed regulation 42(6) of the Hazardous Substances (Tank Wagons and Transportable Containers) Regulations 2004 as referred to in HRC09001.

*Provisions relating to Part 17 (stationary container systems)*

**35 Disused below ground stationary tanks: approvals of actions taken**

An approval of an action ensuring that a disused below ground stationary tank and any pipes connected to it are not a hazard, given by the EPA under clause 40(2)(b) of Schedule 8 of the 2004 Transfer Notice and in force immediately before the commencement date,—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was given; and
- (b) must be treated as an equivalent approval under regulation 17.39(1)(b).

**36 Variations and waivers of fire-fighting requirements**

A variation or waiver granted under clause 42(1) or 42(3) (as the case may be) of Schedule 8 of the 2004 Transfer Notice and in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was granted; and

- (b) must be treated as an equivalent exemption granted under section 220 of the Act for the purposes of regulation 17.41.

### **37 Previously approved dispensers**

- (1) An approval of a type of dispenser given under clause 49 (including a deemed approval under clause 50) of Schedule 8 of the 2004 Transfer Notice and in force immediately before the commencement date—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was given; and
  - (b) must be treated as an equivalent approval under regulation 17.48.
- (2) Any conditions added to the approval or deemed approval under the transfer notice must be treated as conditions added under regulation 17.48.

Compare: *Gazette* 2004, p 858, Schedule 8, clause 50

### **38 Previously approved vapourisers**

- (1) An approval of a type of vapouriser given under clause 53 (including a deemed approval under clause 53(5)) of Schedule 8 of the 2004 Transfer Notice and in force immediately before the commencement date—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was given; and
  - (b) must be treated as an equivalent approval under regulation 17.53.
- (2) Any conditions added to the approval or deemed approval under the transfer notice must be treated as conditions added under regulation 17.53.

### **39 Burners previously not permitted for use**

A burner for the combustion of a class 3.1D substance or a class 3.1C substance with a flashpoint of not less than 50°C that was, immediately before the commencement date, deemed to be not permitted for use in New Zealand under clause 66 of Schedule 8 of the 2004 Transfer Notice must be treated as a burner that is not permitted for use under Part 17.

Compare: *Gazette* 2004, p 866, Schedule 8, clause 66

### **40 Previously approved burners**

- (1) An approval of a type of burner used for the combustion of class 3.1 hazardous substances given under clause 68 of Schedule 8 of the 2004 Transfer Notice and in force immediately before the commencement date—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was given; and
  - (b) must be treated as an equivalent approval under regulation 17.67.
- (2) A deemed approval of a type of burner used for the combustion of class 3.1C hazardous substances with a flashpoint of at least 50°C or a class 3.1D hazard-

ous substance under clause 69 of Schedule 8 of the 2004 Transfer Notice that was in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was given; and
- (b) must be treated as an equivalent approval under regulation 17.67.
- (3) Any conditions added to the approval or deemed approval under the transfer notice must be treated as conditions added under regulation 17.67.
- (4) WorkSafe must include a record of every approval continued under this clause on the record kept under regulation 17.68.

Compare: *Gazette* 2004, pp 866-867, Schedule 8, clause 69

#### **41 Certifications of designs of stationary tanks and process containers and of fabricators of stationary containment systems**

- (1) A certification of the design of a stationary tank or process container given as a test certificate under section 82 of the HSNO Act for the purposes of clause 94 of Schedule 8 of the 2004 Transfer Notice (including a deemed certification under clause 94(3)) and in force immediately before the commencement date—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was given; and
  - (b) must be treated as a compliance certificate under regulation 17.93.
- (2) A certification of a fabricator for constructing stationary container systems given as a test certificate under section 82 of the HSNO Act for the purposes of clause 94 of Schedule 8 of the 2004 Transfer Notice (including a deemed certification under clause 94(3)) and in force immediately before the commencement date—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was given; and
  - (b) must be treated as a compliance certificate under regulation 17.93.
- (3) Any conditions added to the certification or deemed certification under clause 96(3) of the transfer notice must be treated as conditions added under regulation 17.95.

#### **42 Existing stationary container systems**

- (1) A PCBU with management or control of an existing stationary container system is not required to comply with Part 17, but must comply with—
  - (a) the following:
    - (i) a compliance plan—
      - (A) approved under clause 44(1); or
      - (B) continued under clause 44(4); and
    - (ii) those provisions of Part 17 that are—

- (A) not covered by the plan approved under clause 44; or
    - (B) equivalent to the corresponding requirements not covered by the plan continued under clause 44(4); and
  - (iii) those provisions of subparts 16 and 17 of Part 17 that apply to any repair, alteration, or maintenance performed on an existing stationary container system; or
  - (b) Part 17; or
  - (c) requirements in a relevant safe work instrument.
- (2) A safe work instrument approved for the purposes of subclause (1)(c) may modify a provision of Part 17, other than a provision referred to in subclause (1)(a)(iii).
- (3) A PCBU who contravenes this clause commits an offence and is liable on conviction,—
- (a) for an individual, to a fine not exceeding \$10,000;
  - (b) for any other person, to a fine not exceeding \$50,000.
- (4) In subclause (2), **modify** means—
- (a) to vary, replace, or delete a requirement in a provision; or
  - (b) to provide an alternative means of complying with a requirement in a provision.
- (5) In this clause and clauses 43 to 45, **existing stationary container system** means a stationary container system to which Part 17 applies and that—
- (a) was being used to contain a hazardous substance immediately before 1 July 2006 and has been or is being used for the same purpose on and after that date; or
  - (b) immediately before 1 July 2006, was being constructed to contain a hazardous substance in accordance with its design and, after that date, has been or is being used for the purpose for which it was designed.

Compare: *Gazette* 2004, pp 882, 883, Schedule 8, clauses 100, 102

#### **43 Existing stationary container systems: preparation of compliance plans**

- (1) For the purposes of clause 42, a PCBU with management or control of an existing stationary container system must engage a compliance certifier to assess and report on the extent to which the system complies with Part 17.
- (2) If the compliance certifier determines that the system does not comply with Part 17, the PCBU must give WorkSafe a compliance plan setting out—
- (a) the compliance certifier's view, based on the information available to the compliance certifier, of the extent to which the existing stationary container system has been maintained and repaired to conform to the standard to which it was constructed and installed; and

- (b) how, and the time within which, the system or its operational procedures will be altered so that the system complies with—
    - (i) the standard to which it was constructed and installed; or
    - (ii) Part 17; or
    - (iii) variations to the requirements of subparts 1 to 16 of Part 17, which may be treated as compliance with those subparts.
- (3) A compliance plan for a stationary container system must—
  - (a) be in the form required by WorkSafe (if any); and
  - (b) be accompanied by the fee (if any) prescribed in Schedule 2.

Compare: *Gazette* 2004, pp 882, 883, Schedule 8, clause 101

#### **44 Existing stationary container systems: approval of compliance plans**

- (1) WorkSafe must, as soon as practicable after receiving a compliance plan under clause 43,—
  - (a) approve the plan; or
  - (b) decline to approve the plan.
- (2) If WorkSafe declines to approve a compliance plan,—
  - (a) WorkSafe must advise the PCBU who gave the plan to WorkSafe of the reasons for declining to approve it; and
  - (b) WorkSafe and that PCBU must attempt to agree on amendments to the plan that WorkSafe considers will allow it to approve the compliance plan.
- (3) If WorkSafe and the PCBU agree on amendments to the compliance plan within 20 working days after the date on which WorkSafe advised its reasons for declining to approve the plan, or any further period that WorkSafe allows, WorkSafe must approve the plan with those amendments.
- (4) A compliance plan approved under clause 102 of Schedule 8 of the 2004 Transfer Notice and in force immediately before the commencement date—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was approved; and
  - (b) must be treated as an equivalent compliance plan approved under this clause.
- (5) WorkSafe and the PCBU may from time to time agree on amendments to a compliance plan that has been—
  - (a) approved under subclause (1); or
  - (b) continued under subclause (4).

Compare: *Gazette* 2004, p 883, Schedule 8, clause 102

**45 Existing stationary container systems: issue of compliance certificates**

A compliance certifier may issue a compliance certificate under regulation 17.91 for an existing stationary container system if—

- (a) a compliance plan for the system has been—
  - (i) approved under clause 44(1); or
  - (ii) continued under clause 44(4); or
- (b) the PCBU with management or control of the system has complied with the requirements in a safe work instrument approved for the purposes of clause 42(1)(b).

**46 Test certificates for certain installed stationary container systems**

A test certificate for a stationary container system of a type specified in clause 91(2) of Schedule 8 of the 2004 Transfer Notice issued for the purposes of clause 104 of that schedule and in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was issued; and
- (b) must be treated as an equivalent compliance certificate under regulation 17.91.

Compare: *Gazette* 2004, p 883, Schedule 8, clause 104

**47 Approvals of reduced capacity of secondary containment systems**

An approval of a lesser capacity of a secondary containment system for above ground stationary containers given under clause 3 of Schedule 9 of the 2004 Transfer Notice and in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was given; and
- (b) must be treated as an equivalent approval under regulation 17.100.

**48 Approvals of increased aggregate capacity of containers holding class 3.1 substances**

- (1) An approval of an increased capacity of stationary containers given under clause 2A of Schedule 9 of the 2004 Transfer Notice and in force immediately before the commencement date—

- (a) continues in force on and after that date for the balance of the period (if any) for which it was given; and
  - (b) must be treated as an equivalent approval under regulation 17.103.

- (2) In this clause,—

**capacity of stationary containers** means the capacity of stationary containers to hold class 3.1 substances in a secondary containment system under clause 1(2) of Schedule 9 of the 2004 Transfer Notice.

Compare: *Gazette* 2004, p 885, Schedule 9, clause 2A

**49 Approvals of increased aggregate capacity of groups of containers holding class 3.1 substances**

- (1) An approval of an increased aggregate capacity of stationary containers given under clause 2 of Schedule 9 of the 2004 Transfer Notice and in force immediately before the commencement date—
  - (a) continues in force on and after that date for the balance of the period (if any) for which it was given; and
  - (b) must be treated as an equivalent approval under regulation 17.104.

- (2) In this clause,—

**aggregate capacity of stationary containers** means the aggregate capacity of stationary containers that may be in a group within a secondary containment system under clause 1(4) of Schedule 9 of the 2004 Transfer Notice.

Compare: *Gazette* 2004, pp 884, 885, Schedule 9, clause 2

**50 Approved compliance plans for existing secondary containment systems**

- (1) An existing secondary containment system that complies with an approved compliance plan is not required to comply with subpart 18 of Part 17 while the compliance plan is in force.
- (2) A compliance plan for a secondary containment system approved under clause 5 of Schedule 9 of the 2004 Transfer Notice and in force immediately before the commencement date must be treated as an approved compliance plan for the purposes of subclause (1) for the balance of the period (if any) for which it was approved.

- (3) In this clause,—

**existing secondary containment system** means the secondary containment system for an existing stationary tank or process container

**existing stationary tank or process container** means a stationary tank or process container to which Part 17 applies and that—

- (a) was being used to contain a hazardous substance immediately before 1 April 2004 and is being used for the same purpose on and after that date; or
- (b) immediately before 1 April 2004, was being constructed to contain a hazardous substance in accordance with its design, and on and after 1 April 2004, is being used for the purpose for which it was designed.



## Schedule 2

### Hazardous substances compliance fees

Provision	Activity	Fee (\$ incl GST)
6.5	Application for authorisation as compliance certifier	830
6.13	Application to vary scope or conditions of compliance certifier authorisation	583
6.14	Renewal of compliance certifier authorisation	415
6.34	Application for exemption from compliance certificate requirement	259
6.41	Cost of compliance certifier audit	976
6.41	Compliance certifier audit hourly rate (for audit exceeding 8 hours)	137
7.1	Application for controlled substance licence	201
7.11	Application for replacement controlled substance licence document	57.50
8.2	Application for extension of renewal period for compliance certificate for hazardous substance location (classes 1 to 5)	525
11.40	Application for exemption from separation distance or other matter in subpart 1 or 2 of Part 11	870
15.4	Application for alteration of design to withstand maximum developed pressure	870
15.18	Application for exemption from requirement to obtain design verification certificate, compliance certificate for imported cylinder, or pre-commissioning certificate	259
15.39	Application for exemption from requirement to obtain compliance certificate for imported or manufactured cylinder fittings	259
15.52	Application for authorisation as test station	369
16.44	Application for exemption from requirement for fire-fighting facilities for LPG, propane, butane, or isobutane tank wagons with capacity of at least 12 000 L	870
17.39	Application for approval of disused below ground stationary tank (so it need not be removed)	525
17.41	Application for exemption from fire-fighting equipment and facilities requirements	525
17.48	Application for approval of type of dispenser	525
17.53	Application for approval of type of vapouriser	525
17.67	Application for approval of type of burner	525
17.92	Application to increase validity period of compliance certificate for stationary container system	525
17.100	Application for approval of lesser capacity for secondary containment system	525

<b>Provision</b>	<b>Activity</b>	<b>Fee (\$ incl GST)</b>
17.103	Application to increase aggregate capacity of stationary tanks within secondary containment system	870
17.104	Application to increase aggregate capacity of group of stationary tanks within intermediate secondary containment system	870
Schedule 1, clause 43	Approval of compliance plan for stationary container system	870

### Schedule 3

#### Quantities of hazardous substances that require signage

r 2.5(1)

Hazard classification	Description	Quantity
1	Fireworks subject to the Hazardous Substances (Fireworks) Regulations 2001	1 000 kg (gross weight)
	Safety ammunition, including pre-primed cartridges and primers, of class 1.4S	10 000 kg (gross weight)
	Airbag initiators and seatbelt pretensioners of classes 1.4G and 1.4S	5 000 kg (gross weight)
	Cable cutters of class 1.4S (UN 0070)	5 000 kg (gross weight)
	Power device cartridges of class 1.4S (UN 0323)	5 000 kg (gross weight)
	Signal or shock tubes of class 1.4S (UN 0349)	5 000 kg (gross weight)
	Cassette degradation devices of class 1.4S (UN 0432)	5 000 kg (gross weight)
	Propellants of class 1.1C (UN 0160) and 1.3C (UN 0161 and UN 0499), gun-powder of class 1.1D (UN 0027), and substances of classes 1.3G, 1.4G, and 1.4S not listed above	50 kg
	All remaining explosive hazardous classifications	Any quantity
2.1.1A	Non-permanent gas	250 kg
	Permanent gas	100 m <sup>3</sup>
2.1.1B	Non-permanent gas	500 kg
	Permanent gas	200 m <sup>3</sup>
2.1.2A	Aerosol	3 000 L aggregate water capacity
3.1A, 3.2A, 4.1.3A, 4.2A, 4.3A	Liquid	50 L
	Solid	50 kg
(HRC000003, HSR000073, HSR001442) petrol, E10, aviation gasoline, and racing gasoline	Liquid	250 L
(HRC000003, HRC000073, HSR001442) petrol, E10, aviation gasoline, and racing gasoline on a farm equal to or more than 4 ha in area	Liquid	2 000 L

<b>Hazard classification</b>	<b>Description</b>	<b>Quantity</b>
3.1B, 3.2B, 4.1.3B,	Liquid	250 L
4.2B, 4.3B	Solid	250 kg
3.1C, 3.2C, 4.1.3C,	Liquid	1 000 L
4.2C, 4.3C	Solid	1 000 kg
3.1D	Liquid	10 000 L
4.1.1A	Solid	250 kg
4.1.1B	Solid	1 000 kg
4.1.2A, 4.1.2B	Liquid	50 L
	Solid	50 kg
4.1.2C, 4.1.2D	Liquid	250 L
	Solid	250 kg
4.1.2E, 4.1.2F,	Liquid	1 000 L
4.1.2G	Solid	1 000 kg
5.1.1A	Liquid	50 L
	Solid	50 kg
5.1.1B	Liquid	500 L
	Solid	500 kg
5.1.1C	Liquid	1 000 L
	Solid	1 000 kg
(HSR002570)	Liquid	3 000 L
5.1.1C fertiliser on a farm equal to or more than 4 ha in area	Solid	3 000 kg
5.1.2A	Non-permanent gas	250 kg
	Permanent gas	500 m <sup>3</sup>
5.2A, 5.2B	Liquid	1 L
	Solid	1 kg
5.2C, 5.2D, 5.2E,	Liquid	10 L
5.2F	Solid	10 kg
6.1A	Liquid	50 L
	Solid	50 kg
(HSR100557) micro-encapsulated zinc phosphide containing 275/kg zinc phosphide	Solid	50 kg
6.1B	Liquid	250 L
	Solid	250 kg
6.1C	Liquid	1 000 L
	Solid	1 000 kg
6.1D	Liquid	10 000 L
	Solid	10 000 kg
	Aerosol	3 000 L aggregate water capacity
6.1A, 6.1B, 6.1C	Non-permanent gas	5 kg

Hazard classification	Description	Quantity
8.1A	Permanent gas	2.5 m <sup>3</sup>
	Liquid	1 000 L
	Solid	1 000 kg
	Aerosol	3 000 L aggregate water capacity
8.2A	Non-permanent gas	5 kg
	Permanent gas	2.5 m <sup>3</sup>
	Liquid	50 L
	Solid	50 kg
8.2B	Non-permanent gas	50 kg
	Permanent gas	25 m <sup>3</sup>
	Liquid	250 L
	Solid	250 kg
	Aerosol	3 000 L aggregate water capacity
8.2C, 8.3A	Liquid	1 000 L
	Solid	1 000 kg
	Aerosol	3 000 L aggregate water capacity
9.1A	Liquid	100 L
	Solid	100 kg
9.1B, 9.1C	Liquid	1 000 L
	Solid	1 000 kg
(HSR000074) Roundup Transorb	Liquid	1 000 L
(HSR001551) Tetrachloroethylene [Perchloroethylene]	Liquid	1 000 L
(HSR002571) 9.1A fertiliser on a farm equal to or more than 4 ha in area	Liquid	1 000 L
	Solid	1 000 kg
9.1D	Liquid	10 000 L
	Solid	10 000 kg

**Note:** In this schedule, a reference to a class 9 substance is for information only. The EPA is responsible for setting the controls on class 9 substances.

Compare: SR 2001/123 Schedule 5

## Schedule 4

### Quantities of hazardous substances that require fire extinguishers

rr 5.2, 5.3

Hazard classification	Description	Quantity	No
1.1A, 1.1B, 1.2B	Solid	1 kg	1
1.1C, 1.1D, 1.1E, 1.1F, 1.1G, 1.1J, 1.1L, 1.2C, 1.2D, 1.2E, 1.2F, 1.2G, 1.2H, 1.2J, 1.2K, 1.2L, 1.3C, 1.3F, 1.3G, 1.3H, 1.3J, 1.3K, 1.3L	Liquid	25 L	1
	Solid	25 kg	1
1.4B, 1.4C, 1.4D, 1.4E, 1.4F, 1.4G, 1.4S, 1.5D, 1.6N	Solid	50 kg	1
Fireworks subject to the Hazardous Substances (Fireworks) Regulations 2001	Solid	300 kg (gross weight)	1
Safety ammunition, including pre-primed cartridges and primers of class 1.4S	Solid	500 kg (gross weight)	1
2.1.1A	Non-permanent gas	50 kg	1
	Permanent gas	30 m <sup>3</sup>	1
2.1.1B	Non-permanent gas	200 kg	2
	Permanent gas	120 m <sup>3</sup>	2
2.1.2A	Aerosol	3 000 L aggregate water capacity	1
3.1A	Liquid	50 L	1
		200 L	2
3.1B	Liquid	250 L	2
3.1C, 3.1D	Liquid	500 L	2
3.2A, 3.2B, 3.2C	Liquid	50 L	1
		200 L	2
4.1.1A	Solid	250 kg	2
4.1.1B	Solid	500 kg	2
4.1.2A, 4.1.2B, 4.1.2C, 4.1.2D, 4.1.2E, 4.1.2F, 4.1.2G	Liquid	50 L	1
		200 L	2
	Solid	50 kg	1
		200 kg	2
4.1.3A, 4.1.3B, 4.1.3C	Solid	50 kg	1
		200 kg	2
4.2A	Liquid	50 L	1
		200 L	2
	Solid	50 kg	1
		200 kg	2
4.2B	Liquid	250 L	2
	Solid	250 kg	2
4.2C	Liquid	500 L	2
	Solid	500 kg	2
4.3A	Liquid	50 L	1
		200 L	2
	Solid	50 kg	1

<b>Hazard classification</b>	<b>Description</b>	<b>Quantity</b>	<b>No</b>
		200 kg	2
4.3B	Liquid	250 L	2
	Solid	250 kg	2
4.3C	Liquid	500 L	2
	Solid	500 kg	2
5.1.1A	Liquid	5 L	1
	Liquid	25 L	2
	Solid	5 kg	1
	Solid	25 kg	2
5.1.1B	Liquid	200 L	1
	Liquid	500 L	2
	Solid	200 kg	1
	Solid	500 kg	2
5.1.1C	Liquid	500 L	2
	Solid	500 kg	2
5.1.2A	Non-permanent gas	10 kg	1
		50 kg	2
	Permanent gas	10 m <sup>3</sup>	1
		50 m <sup>3</sup>	2
5.2A, 5.2B	Liquid	1 L	1
	Solid	1 kg	1
5.2C, 5.2D	Liquid	10 L	1
	Solid	10 kg	1
5.2E, 5.2F	Liquid	50 L	1
	Solid	50 kg	1

Compare: SR 2001/123 Schedule 3

## Schedule 5

### Threshold quantities for emergency response plan

r 5.6

Hazard classification	Description	Quantity
1.1A, 1.1B, 1.1C, 1.1D 1.1E, 1.1F	Liquid	50 L
1.1G, 1.1J, 1.1L, 1.2B, 1.2C, 1.2D, 1.2E, 1.2F, 1.2G, 1.2H, 1.2J, 1.2K, 1.2L	Solid	50 kg
1.3C, 1.3F, 1.3G, 1.3H, 1.3J, 1.3K	Liquid	100 L
1.3L	Solid	100 kg
1.4B, 1.4C, 1.4D, 1.4E, 1.4F, 1.4G	Liquid	200 L
1.4S, 1.5D, 1.6N except—	Solid	200 kg
<ul style="list-style-type: none"> <li>(a) fireworks subject to the Hazardous Substances (Fireworks) Regulations 2001; and</li> <li>(b) safety ammunition, including pre-primed cartridges and primers of class 1.4S; and</li> <li>(c) airbag initiators and seatbelt pretensioners of classes 1.4G and 1.4S; and</li> <li>(d) cable cutters of class 1.4S (UN 0070); and</li> <li>(e) power device cartridges of class 1.4S (UN 0323); and</li> <li>(f) signal or shock tubes of class 1.4S (UN 0349); and</li> <li>(g) cassette degradation devices of class 1.4S (UN 0432); and</li> <li>(h) emergency flares and signalling devices of classes 1.3G, 1.4G, and 1.4S.</li> </ul>		
2.1.1A	Permanent gas	200 m <sup>3</sup>
	Non-permanent gas	300 kg
2.1.1B	Permanent gas	600 m <sup>3</sup>
	Non-permanent gas	1 000 kg
2.1.2A	Aerosol	3 000 L aggregate water capacity
3.1A	Liquid	100 L
(HSR008039) E85	Liquid	1 000 L
3.1B	Liquid	1 000 L
3.1C, 3.1D	Liquid	10 000 L
3.2A, 3.2B, 3.2C	Liquid	100 L
4.1.1A	Solid	1 000 kg
4.1.1B	Solid	10 000 kg
4.1.2A, 4.1.2B	Liquid	50 L
	Solid	50 kg
4.1.2C, 4.1.2D	Liquid	100 L



Hazard classification	Description	Quantity
4.1.2E, 4.1.2F, 4.1.2G	Solid	100 kg
	Liquid	200 L
	Solid	200 kg
4.1.3A, 4.1.3B, 4.1.3C	Liquid	100 L
	Solid	100 kg
4.2A	Liquid	100 L
	Solid	100 kg
4.2B	Solid	1 000 kg
4.2C	Solid	10 000 kg
4.3A	Liquid	100 L
	Solid	100 kg
4.3B	Liquid	1 000 L
	Solid	1 000 kg
4.3C	Liquid	10 000 L
	Solid	10 000 kg
5.1.1A	Liquid	50 L
	Solid	50 kg
5.1.1B	Liquid	500 L
	Solid	500 kg
5.1.1C	Liquid	5 000 L
	Solid	5 000 kg
5.1.2A	Permanent gas	100 m <sup>3</sup>
	Non-permanent gas	100 kg
5.2A, 5.2B	Liquid	10 L
	Solid	10 kg
5.2C, 5.2D	Liquid	25 L
	Solid	25 kg
5.2E, 5.2F	Liquid	100 L
	Solid	100 kg
6.1A, 6.1B, 6.1C	Permanent gas	2.5 m <sup>3</sup>
	Non-permanent gas	5 kg
	Liquid	100 L
	Solid	100 kg
Ripper range, 30–55% iodomenthane and 45–70% chloropicrin, HSNO approval number HSR100349	Liquid	50 L
Ripper 980, HSNO approval number HSR100350	Liquid	50 L
6.1D, 6.5A, 6.5B, 6.7A	Permanent gas	25 m <sup>3</sup>
	Non-permanent gas	50 kg
	Liquid	1 000 L
	Solid	1 000 kg
	Aerosol	3 000 L aggregate water capacity
6.6A, 6.7B, 6.8A, 6.9A	Liquid	10 000 L

Hazard classification	Description	Quantity
8.2A	Solid	10 000 kg
	Aerosol	3 000 L aggregate water capacity
	Permanent gas	2.5 m <sup>3</sup>
	Non-permanent gas	5kg
	Liquid	100 L
8.2B	Solid	100 kg
	Permanent gas	25 m <sup>3</sup>
	Non-permanent gas	50 kg
	Liquid	1 000 L
	Solid	1 000 kg
8.2C, 8.3A	Aerosol	3 000 L aggregate water capacity
	Liquid	10 000 L
	Solid	10 000 kg
	Aerosol	3 000 L aggregate water capacity
	Liquid	100 L
9.1A	Solid	100 kg
	Liquid	1 000 L
9.1B, 9.1C	Solid	1 000 kg
	Liquid	1 000 L
HSR000074 (Roundup Transorb) (HSR002571) 9.1A fertiliser on a farm equal to or more than 4 ha in area	Liquid	1 000 L
	Liquid	1 000 L
	Solid	1 000 kg
9.1D	Liquid	10 000 L
	Solid	10 000 kg

**Note:** In this schedule, a reference to a class 9 substance is for information only. The EPA is responsible for setting the controls on class 9 substances.

Compare: SR 2001/123 Schedule 4

## Schedule 6

### Maximum quantities of certain class 1 to 5 substances permitted on passenger service vehicles

r 8.3

Property of substance	Hazard classification	Maximum quantity per package for each classification
Explosive	Emergency distress signals of hazard classifications 1.3G (UN 0092, 0195), 1.4G (UN 0191, 0197, 0312), and 1.4S (UN 0373, 0405)	5 kg (gross weight)
	Model rocket motors of hazard classification 1.4S (UN 0349, 0432)	5 kg (gross weight)
	Safety ammunition of hazard classification 1.4S (UN 0012, 0014, 0044, 0055)	15 kg (gross weight)
Flammable	2.1.1A, 2.1.1B	1 L
	2.1.2A	1 L (aggregate water capacity)
	3.1B	1 L
	3.1C or 3.1D	10 L
	4.1.1A	0.5 kg
	4.1.1B	3 kg
	4.1.2B	0.1 kg
	4.1.2C, 4.1.2D, 4.1.2E, 4.1.2F	0.5 kg
	4.1.2G	5 kg
	4.2B	0.5 kg
	4.2C	3 kg
	4.3B	0.5 kg
	4.3C	1 kg
	5.1.1B	0.5 kg
	5.1.1C	1 kg
Oxidising	5.1.2A	1 L (aggregate water capacity)
	5.2B	25 ml (or 0.2 kg if a solid)
	5.2C, 5.2D, 5.2E, 5.2F	125 ml (or 0.5 kg if a solid)
Oxidising (organic peroxides)	5.2G	1 L (or 1 kg if a solid)

Compare: SR 2001/116 Schedule 1

## Schedule 7

### Licensing requirements for class 1 substances

rr 9.4, 9.5, 9.6, 9.7, 9.8

### Table 1

#### Substances that require controlled substance licence

rr 9.4, 9.5, 9.7, 9.8

<b>Hazardous classification</b>	<b>UN number</b>	<b>Description</b>
1.1A	UN0114	Guanyl nitrosaminoguanyltetrazene (Tetrazene) wetted with not less than 30% (by mass) being water or a mixture of alcohol and water
1.1A	UN0129	Lead azide wetted with not less than 20% (by mass) being water or a mixture of alcohol and water
1.1A	UN0130	Lead styphnate (lead trinitroresorcinate) wetted with not less than 20% (by mass) being water or a mixture of alcohol and water
1.1A	UN0135	Mercury fulminate wetted with not less than 20% (by mass) being water or a mixture of alcohol and water
1.1B	UN0029	Detonators, non-electric for blasting. Articles consisting of a small metal or plastic tube containing explosives such as lead azide, PETN, or combinations of explosives. They are designed to start a detonation train. They may be constructed to detonate instantaneously or may contain a delay element.
1.1B	UN0030	Detonators, electric for blasting. Articles consisting of a small metal or plastic tube containing explosives such as lead azide, PETN, or combinations of explosives. They are designed to start a detonation train. They may be constructed to detonate instantaneously or may contain a delay element.
1.1B	UN0030	Detonators, electric for blasting (permitted). Articles consisting of a small metal or plastic tube containing explosives such as lead azide, PETN, or combinations of explosives. They are designed to start a detonation train. They may be constructed to detonate instantaneously or may contain a delay element.
1.1B/1.4B	UN0030/0255	Detonators, electric for blasting. Articles consisting of a small metal or plastic tube containing explosives such as lead azide, PETN, or combinations of explosives. They are designed to start a detonation train. They may be constructed to detonate instantaneously or may contain a delay element.
1.1B/1.4S	UN0030/0456	Detonators, electric for blasting. Articles consisting of a small metal or plastic tube containing explosives such as lead azide, PETN, or combinations of explosives. They are designed to start a detonation train. They may be constructed to detonate instantaneously or may contain a delay element.
1.1B	UN0360	Detonator assemblies, non-electric for blasting. Non-electric detonators assembled with, and activated by, such means as safety fuse, shock tube, flash tube, or detonating cord. They may be of instantaneous design or incorporate delay elements. Detonating relays incorporating detonating cord

Hazardous classification	UN number	Description
		are included. Other detonating relays are included in detonators, non-electric UN0029.
1.1D	UN0027	Black powder (gunpowder), meal or granular. Substances consisting of a mixture of charcoal, potassium nitrate, and sulphur
1.1D	UN0027	Black powder (gunpowder), meal or granular. Substances consisting of a mixture of charcoal, potassium nitrate, and sulphur
1.1D	UN0042	Boosters without detonators. Articles consisting of a plastic or cardboard shell filled with a mixture of PETN and TNT (Pentolite) and the following optional ingredients: RDX, ammonium nitrate, sodium nitrate, potassium nitrate, barium sulphate, plasticisers, and other insert materials.
1.1D	UN0048	Charges, demolition. Articles containing a charge of a detonating explosive in a casing of fibreboard, plastics, metal, or other material.
1.1D	UN0059	Charges, shaped, without detonators. Articles consisting of a casing containing a charge of detonating explosive with a cavity lined with rigid material, without means of initiation. They are designed to produce a powerful, penetrating jet effect.
1.1D/1.4S	UN0059/0349	Charges, shaped, without detonator
1.1D/1.4S	UN0059/0441	Charges, shaped, without detonator
1.1D	UN0065	Cord, detonating, flexible. Articles consisting of a core of detonating explosive enclosed in spun fabric, with plastics or other covering unless the spun fabric is sift proof.
1.1D/1.4D	UN0065/0289	Cord, detonating, flexible. Articles consisting of a core of detonating explosive enclosed in spun fabric, with plastics or other covering unless the spun fabric is sift proof.
1.1D/1.4S	UN0065/0349	Cord, detonating, flexible. Articles consisting of a core of detonating explosive enclosed in spun fabric, with plastic, or other covering unless the spun fabric is sift proof.
1.1D	UN0081	Blasting explosives, Type A. Substances consisting of liquid organic nitrates such as nitroglycerin or a mixture of such ingredients with 1 or more of the following: nitrocellulose; ammonium nitrate or other inorganic nitrates; or aromatic nitro-derivatives or combustible materials, such as wood-meal and aluminium powder.
1.1D	UN0081	Blasting explosives, Type A (permitted)
1.1D	UN0082	Blasting explosives, Type B. Substances consisting of a mixture of ammonium nitrate, sodium nitrate, and trinitrotoluene, with or without other substances such as wood-meal and aluminium powder
1.1D	UN0082	Blasting explosives, Type B. Substances consisting of a mixture of ammonium nitrate and fuel oil with or without aluminium powder.
1.1D	UN0084	Blasting explosives, Type D. Substances consisting of a mixture of organic nitrated compounds and combustible materials such as hydrocarbons and aluminium powder. These explosives do not contain nitroglycerin, similar liquid organic nitrates, chlorates, or ammonium nitrate.

Hazardous classification	UN number	Description
1.1D	UN0150	Pentaerythrite tetranitrate (pentaerythritol tetranitrate; PETN) wetted with not less than 25% (by mass) being water, or Pentaerythrite tetranitrate (pentaerythritol tetranitrate; PETN), desensitised with not less than 15% (by mass) being phlegmatiser
1.1D	UN0154	Picric acid—trinitrophenol
1.1D	UN0208	Trinitrophenylmethylnitramine(tetryl)
1.1D	UN0209	Trinitrotoluene (TNT)
1.1D	UN0241	Blasting explosives, Type E. Substances consisting of water as an essential ingredient and high proportions of ammonium nitrate or other oxidisers, some or all of which are in solution. The other constituents may include nitro-derivatives such as trinitrotoluene, hydrocarbons or aluminium powder, stabilisers and plasticisers, glass micro-balloons, and different oil blends.
1.1D	UN0288	Charges, shaped, flexible, linear. Articles consisting of a V-shaped core of a detonating explosive clad by a flexible metal sheath.
1.1D/1.4D	UN0290/0289	Cord (fuse), detonating, metal clad/cord, flexible. Article consisting of a core of detonating explosive clad by a soft metal tube with or without protective covering.
1.1D/1.4D	UN0442/0444	Charges, explosive, commercial, without detonator. Articles consisting of a charge of detonating explosive without means of initiation, used for explosive welding, jointing, forming, and other metallurgical processes.
1.1G	UN0333	Fireworks. Display pyrotechnics designed for entertainment and not covered by the Hazardous Substances (Fireworks) Regulations 2001: Bouquets, coloured fires and lights, crackers, fountains, gerbs, lances, maroons, mines, port fires, rockets, roman candles, saxons, scintillettes, serpents, squibs (with or without reports), tourbillions, wheels, and other manufactured fireworks, being in each case fireworks intended for display or entertainment purposes.
1.2C	UN0328	Cartridges for weapons, inert projectile. Ammunition consisting of a projectile without a bursting charge but with a propelling charge.
1.2G	UN0314	Igniters. Articles containing 1 or more explosive substances used to start deflagration in an explosive train. They may be actuated chemically, electrically, or mechanically.
1.2G	UN0334	Fireworks. Display pyrotechnics designed for entertainment and not covered by the Hazardous Substances (Fireworks) Regulations 2001: bouquets, coloured fires and lights, crackers, fountains, gerbs, lances, maroons, mines, port fires, rockets, roman candles, saxons, scintillettes, serpents, squibs (with or without reports), tourbillions, wheels, and other manufactured fireworks, being in each case fireworks intended for display or entertainment purposes.
1.3C	UN0186	Rocket motors. Articles consisting of a solid, liquid, or hypergolic fuel contained in a cylinder fitted with 1 or more nozzles.

Hazardous classification	UN number	Description
1.3C	UN0277	Cartridges, oil well. Articles consisting of a casing of thin fibre, metal, or other material, and containing only propellant that projects a hardened projectile.
1.3G	UN0101	Fuse, instantaneous non-detonating (Quickmatch). Articles consisting of cotton yarns impregnated with a fine black powder.
1.3G	UN0335	Fireworks. Display pyrotechnics designed for entertainment and not covered by the Hazardous Substances (Fireworks) Regulations 2001: bouquets, coloured fires and lights, crackers, fountains, gerbs, lances, maroons, mines, port fires, rockets, roman candles, saxons, scintillettes, serpents, squibs (with or without reports), tourbillions, wheels, and other manufactured fireworks, being in each case fireworks intended for display or entertainment purposes.
1.3G	UN0430	Articles, pyrotechnic (for technical purposes). Articles that contain pyrotechnic substances and are used for technical purposes such as heat generation, gas generation, theatrical effects, and the like.
1.3G	UN0488	Ammunition, practice. Ammunition without a main bursting charge, containing a burster or expelling charge. Normally, it also contains a fuse and a propelling charge.
1.4B	UN0255	Detonators, electric (for blasting). Articles consisting of a small metal or plastic tube containing explosives such as lead azide, PETN, or combinations of explosives.
1.4B	UN0267	Detonators, non-electric (for blasting). Articles consisting of a small metal or plastic tube containing explosives such as lead azide, PETN, or combinations of explosives. They are designed to start a detonation train. They may be constructed to detonate instantaneously or may contain a delay element.
1.4B	UN0361	Detonator assemblies, non-electric (for blasting) as listed under UN0360 detonator assemblies, 1.1B. Articles consisting of a small metal or plastic tube containing explosives such as lead azide, PETN, or combinations of explosives.
1.4C	UN0276	Cartridges, power device. Articles that consist of a casing with a charge of deflagrating explosive and a means of ignition.
1.4C	UN0338	Cartridges for weapons, blank or cartridges, small arms, blank. Articles that consist of a cartridge case with a centre or rim fire primer and a confined charge of smokeless or black powder but no projectile. Used for training, saluting, and in starter pistols, and the like.
1.4C	UN0339	Cartridges for weapons, inert projectile or cartridges, small arms. Ammunition that consists of a projectile without a bursting charge but with a propelling charge.
1.4D	UN0410	Fuses, detonating with protective features. Articles designed to start a detonation or a deflagration in ammunition. They incorporate mechanical, electrical, chemical, or hydrostatic components and generally protective features.
1.4E	UN0412	Cartridge for weapons with bursting charges. Fixed (assembled) or semi-fixed (partially assembled) ammunition designed to be fired from weapons. Each cartridge includes

Hazardous classification	UN number	Description
		all the components necessary to function the weapon once. The name and description is used for small arms cartridges that cannot be described as cartridges, small arms. Separate loading ammunition is included under this name and description when the propelling charge and projectile are packed together.
1.4G	UN0066	Cord, igniter. Articles that consist of textile yarns covered with black powder or another fast burning pyrotechnic composition and with a flexible protective covering, or it consists of a core of black powder surrounded by a flexible woven fabric.
1.4G	UN0297	Ammunition, illuminating with or without burster, expelling charge, or propelling charge. Ammunition designed to produce a single source of intense light for lighting up an area.
1.4G	UN0301	Ammunition, tear-producing. Ammunition that contains toxic agent. It also contains 1 or more of the following: a pyrotechnic substance, a propelling charge with primer and igniter charge, a fuse with burster or expelling charge.
1.4G	UN0303	Ammunition, smoke with or without burster, expelling charge, or propelling charge (other than water-activated ammunition with white phosphorus or phosphides)
1.4G	UN0320	Primers, tubular. Articles that consist of a primer for ignition and an auxiliary charge of deflagrating explosive such as black powder used to ignite the propelling charge in a cartridge case for cannon, and the like.
1.4G	UN0325	Igniters. Articles that contain 1 or more explosive substances used to start deflagration in an explosive train.
1.4G	UN0336	Fireworks. Display pyrotechnics designed for entertainment and not covered by the Hazardous Substances (Fireworks) Regulations 2001: Bouquets, coloured fires and lights, crackers, fountains, gerbs, lances, maroons, mines, port fires, rockets, roman candles, saxons, scintillettes, serpents, squibs (with or without reports), tourbillions, wheels, and other manufactured fireworks, being in each case fireworks intended for display or entertainment purposes.
1.4G	UN0362	Ammunition, practice. Ammunition without a main bursting charge, containing a burster or expelling charge. Normally, it also contains a fuse and a propelling charge.
1.4G	UN0431	Articles, pyrotechnic (for technical purposes). Articles that contain pyrotechnic substances and are used for technical purposes such as heat generation, gas generation, theatrical effects.
1.4S	UN0105	Fuse, safety. Article that consists of a core of fine grained black powder (typically 65% potassium nitrate, 24% sulphur, and 11% carbon), 5 g/m surrounded by a flexible woven fabric with 1 or more protective outer coverings (bitumen, plastic, or yarn and wax). In some cases, sodium nitrate may be substituted for potassium nitrate.
1.4S	UN0131	Lighters, fuse. Articles of various designs actuated by friction, percussion, or electricity and used to ignite safety fuse.
1.4S	UN0349	Articles, explosive, not otherwise specified



<b>Hazardous classification</b>	<b>UN number</b>	<b>Description</b>
1.4S	UN0337	Firework. Display pyrotechnics designed for entertainment and not covered by the Hazardous Substances (Fireworks) Regulations 2001: bouquets, coloured fires and lights, crackers, fountains, gerbs, lances, maroons, mines, port fires, rockets, roman candles, saxons, scintillettes, serpents, squibs (with or without reports), tourbillions, wheels, and other manufactured fireworks.
1.5D	UN0332	Blasting explosives, Type E. Substances consisting of water as an essential ingredient and high proportions of ammonium nitrate or other oxidisers, some or all of which are in solution. The other constituents may include vitro-derivatives such as trinitrotoluene, hydrocarbons, or aluminium powder.

**Table 2**  
**Substances that do not require controlled substance licence**

nr 9.4, 9.5

<b>Hazardous classification</b>	<b>UN number</b>	<b>Description</b>
1.1D	UN0027	Gunpowder only in quantities not exceeding 15 kg if the person has a firearms licence
1.3G, 1.4G, 1.4S	UN0335, UN0336, UN0337	Fireworks in classes subject to the Hazardous Substances (Fireworks) Regulations 2001
1.4G, 1.4S	UN0349, UN0432	Model rocket motors
1.4G, 1.4S	UN0503	Airbag initiators and seat-belt pretensioners
1.4G	UN0317	Igniting fuses
1.4S	UN0012, UN0014, UN0044, UN0055	Safety ammunition, including pre-primed cartridges and primers
1.4S	UN0070	Cable cutters
1.4S	UN0323	Power device cartridges
1.4S	UN0349	Signal or shock tubes
1.4S	UN0432	Cassette degradation devices
1.4S	UN0454	Igniters
1.2G, 1.3G, 1.4G, 1.4S	UN0092, UN0195, UN0191, UN0197, UN0312, UN0373, UN0405, UN0419, UN0421	Emergency flares and signalling devices
1.4S	UN0192, UN0193	Signals, railway track, explosive. Articles that contain pyrotechnic substances designed to produce signals by means of sound, flame, or smoke, or any combination of them.
1.2G	UN0238	Rockets, line throwing

**Table 3**  
**Smokeless powders and other propellants that require controlled substance licence, firearms licence, or firearms dealer's licence**

rr 9.6, 9.7, 9.8

<b>Hazardous classification</b>	<b>UN number</b>	<b>Description</b>
1.1C, 1.3C	UN0160, UN0161	Smokeless powder (single base, double base, triple base)
1.3C	UN0499	Propellants (solid substances consisting of deflagrating solid explosive used for propulsion)

**Note:** Smokeless powder contained in total quantities more than 500 kg is classified as class 1.1C.

**Table 4**  
**Substances that do not require controlled substance licence for transportation**

r 9.7

<b>Hazardous classification</b>	<b>UN number</b>	<b>Description</b>
1.1C/1.3C	UN0160/UN0161	Smokeless powder (single base, double base, triple base)
1.3C	UN0499	Propellants (solid substances consisting of deflagrating solid explosive used for propulsion)
1.1D	UN0027	Black powder (gunpowder). Meal or granular. Substance consisting of a mixture of charcoal, potassium nitrate, and sulphur

**Note:** Smokeless powder contained in total quantities more than 500 kg is classified as class 1.1C.

## Schedule 8

### Matters relevant to class 1 substances

**Table 1**  
**Segregation requirements, by category, for class 1 substances**

r 9.17

The unmarked cells in the following table identify the categories of class 1 substances (shown by the letters at top and left of the table) that must be segregated as required by regulation 9.17. The marked cells relax the requirement to the extent specified in the keys below.

	A	B	C	D	E	F	G	H	J	K	L	N	S
A	✓												
B		✓	①	①	①	①	①						✓
C		①	✓	✓	✓	②	③					✓	✓
D		①	✓	✓	✓	②	③					✓	✓
E		①	✓	✓	✓	②	③					✓	✓
F		①	②	②	②	✓	②						✓
G		②	③	③	③	②	✓	④					✓
H							④	✓					✓
J									✓				✓
K													
L													
N			✓	✓	✓							✓	✓
S		✓	✓	✓	✓	✓	✓	✓	✓			✓	✓

#### Key

- ✓ The 2 categories indicated by a cell so marked may be stored and transported together without the segregation required by regulation 9.17.
- ① The 2 categories indicated by a cell so marked may be stored together without the segregation required by regulation 9.17, provided the category B explosive articles are held in a manner (achieved through containment, internal barricading, or separation distance, or any combination of them) that will prevent their accidental initiation propagating to explosive substances of the other category.

**Table 2**  
**Quantities of substances that require 250 m separation from**  
**boundary of discharge area for outdoor pyrotechnic display**

r 9.33

Property of substance	Hazard classification	Quantity
Explosive	1.1	5 kg
	1.2	50 kg
	1.3	100 kg
	1.4	1 000 kg
Flammable liquids where held above ground	3.1A	50 L
	3.1B	250 L
	3.1C	1 000 L
Flammable solids and oxidising substances	4.1.3A, 4.2A, 4.3A, 5.1.1A	50 kg
	4.1.1A, 4.1.3B, 4.2B, 4.3B, 5.1.1B	500 kg
	4.1.1B, 4.1.3C, 4.2C, 4.3C, 5.1.1C	5 000 kg
	4.1.2A, 4.1.2B, 5.2A, 5.2B	10 kg
Self-reactive flammables and organic peroxides	4.1.2C, 4.1.2D, 5.2C, and 5.2D	25 kg
	4.1.2E, 4.1.2F, 5.2E, and 5.2F	100 kg

**Table 3**  
**Exclusion zones for outdoor pyrotechnic display firings over 60 m:**  
**minimum distance from point of firing, at right angles to line of**  
**flight**

r 9.34

Shell diameter (mm)	Minimum distance (m) from firing point
<75	50
75	50
100	50
125	50
150	100
175	150
200	170
250	215
300	250

**Note:** For shell diameters between those listed, the minimum distance is to be adjusted proportionately.

**Table 4**  
**Exclusion zones outdoor pyrotechnic display firings over 60 m:**  
**minimum distances from point of firing, along line of flight**

r 9.34

Shell diameter (mm)	Minimum distance (m) from firing point
<75	50
75	100
100	100
125	125
150	150
175	150
200	170
250	215
300	250

**Note:** For shell diameters between those listed, the minimum distance is to be adjusted proportionately.

**Table 5**  
**Quantities of class 1 substances that require hazardous substance location**

rr 3, 9.22

Hazard classification	Quantity (kg)
1.1B, 1.2B, 1.4B	1
1.1 (other than 1.1B or 1.1C and gunpowder of 1.1D), 1.2, 1.5	5
1.1C, 1.3 (other than 1.3G) and gunpowder of 1.1D	15
1.3G, 1.4 (other than 1.4S)	100
1.4S	200
Retail fireworks	1 000 (gross weight)

**Table 6**  
**Quantities of class 1 substances that do not require compliance certificate for hazardous substance location, require compliance certificate instead of designated use zone, do not require designated transfer zone, or are excluded from certain transportation requirements**

rr 9.26, 9.28, 9.44, 9.48

Hazard classification	Quantity (kg)
1.1B, 1.2B, and 1.4B	5
1.1 (other than 1.1B or 1.1C), 1.2, and 1.5	50
1.1C and 1.3 (other than 1.3G)	100
1.3G and 1.4 (other than 1.4S)	200
1.4S	1 000
Retail fireworks	10 000 (gross weight)
Safety ammunition including pre-primed cartridges and primers of class 1.4S	25 000 (gross weight)

**Table 7**  
**Quantities of class 1 substances that must be secured**

r 9.18

<b>Hazard classification</b>	<b>Lock and key only, when not for sale</b>	<b>Readily movable containers, when held for sale</b>	<b>Magazines, when not for sale</b>	<b>Magazines, when held for sale</b>
1.1B, 1.2B, 1.4B	≤0.2 kg	≤1 kg	>0.2 kg	>1 kg
1.1 (other than 1.1B or 1.1C and gunpowder of 1.1D), 1.2, 1.5	≤2.5 kg	≤25 kg	>2.5 kg	>25 kg
1.1C, 1.3 (other than 1.3G), gunpowder of 1.1D	≤15 kg	≤50 kg	>15 kg	>50 kg
1.3G, 1.4 (other than 1.4S)	≤15 kg	≤100 kg	>15 kg	>100 kg
1.4S	≤25 kg	≤200 kg	>25 kg	>200 kg

Compare: SR 2001/116 Schedule 2

## Schedule 9

### Matters relevant to class 2, 3, and 4 substances

rr 3, 10.1, 10.3, 10.4, 10.5, 10.12, 10.13,  
10.14, 10.17, 10.19, 10.20, 10.22, 10.24,  
10.26, 10.28, 10.30, 10.36, 10.37, 11.32,  
16.4, 17.99

### Table 1

#### Substances and materials incompatible with class 2, 3, and 4 substances

rr 10.1, 10.5, 16.4

Hazard classification	Incompatible substances and materials
2.1.1	All class 1 substances Class 2.1.2 substances All class 3 substances All class 4 substances All class 5 substances
2.1.2	All class 1 substances Class 2.1.1 substances All class 3 substances All class 4 substances All class 5 substances
3.1	All class 1 substances All class 2 substances Class 3.2 substances All class 4 substances All class 5 substances
3.2	All class 1 substances All class 2 substances Class 3.1 substances Class 4.1.2, 4.2, and 4.3 substances All class 5 substances
4.1.1 (readily combustible solids)	All class 1 substances All class 2 substances Class 4.1.2, 4.1.3, 4.2, and 4.3 substances All class 5 substances
4.1.1 (those solids that may cause fire through friction only)	Any substance likely to cause a spark when struck against such a class 4.1.1 substance



<b>Hazard classification</b>	<b>Incompatible substances and materials</b>
4.1.2	All class 1 substances All class 2 substances Class 3.1 and 3.2 substances Class 4.1.3 and 4.2 substances All class 5 substances Catalytic impurities that have a detrimental influence on the thermal stability and the hazard presented by class 4.1.2 substances
4.1.3	All class 1 substances All class 2 substances Class 3.1 substances Class 4.2 substances All class 5 substances
4.2	All class 1 substances All class 2 substances All class 3 substances Class 4.1.1, 4.1.2, 4.1.3, and 4.3 substances All class 5 substances Air Oxygen
4.3	All class 1 substances All class 2 substances All class 3 substances Class 4.1.1, 4.1.2, 4.1.3, and 4.2 substances All class 5 substances All class 8 substances Water

**Table 2**  
**Quantities of class 2, 3, and 4 substances that must be secured if left unattended**

<b>Hazard classification</b>	<b>Quantity</b>
2.1.1A	100 kg (for non-permanent gas) 100 m <sup>3</sup> (for permanent gas)
2.1.2A	3 000 L aggregate water capacity
3.1A	Any amount
3.1B	250 L (when in containers of more than 5 L) 500 L (when in containers of 5 L or less)
3.2A	Any amount
3.2B	100 L

r 10.4

Hazard classification	Quantity
4.1.1A	100 kg
4.1.2A, 4.1.2B	Any amount
4.1.2C, 4.1.2D	25 kg
4.1.2E, 4.1.2F	50 kg
4.1.3A	Any amount
4.1.3B	100 kg
4.2A	Any amount
4.2B	100 kg
4.3A	Any amount
4.3B	100 kg

**Table 3**  
**Quantities of class 2 and 3 substances requiring equipment or container to be electrically bonded and earthed**

rr 10.13, 10.17, 10.19

Hazard classification	Minimum quantity of flammable substance
2.1.1A, 2.1.1B	30 m <sup>3</sup> (for a permanent gas) 100 kg (for a non-permanent gas)
2.1.2A	3 000 L aggregate water capacity
3.1A, 3.1B, 3.1C	100 L (if closed) 25 L (if decanting) 5 L (if open occasionally) 1 L (if in open container for continuous use)

**Table 4**  
**Quantities of class 2, 3, and 4 substances that activate hazardous substance location and transit depot requirements**

rr 3, 10.3, 10.24, 10.26, 10.37, 11.32

Hazard classification	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in open containers
2.1.1A, 2.1.1B	100 kg (or 100 m <sup>3</sup> for a permanent gas)	100 kg (or 100 m <sup>3</sup> for a permanent gas)
2.1.2A	3 000 L (aggregate water capacity)	3 000 L (aggregate water capacity)
3.1A	20 L	20 L
3.1A (petrol, aviation gasoline, and racing gasoline)	50 L	50 L
3.1B	100 L in containers more than 5 L	50 L
	250 L in containers up to 5 L	50 L
3.1C	500 L in containers more than 5 L	250 L

<b>Hazard classification</b>	<b>Quantity beyond which controls apply for closed containers</b>	<b>Quantity beyond which controls apply when use occurring in open containers</b>
	1 500 L in containers up to 5 L	250 L
3.2A, 3.2B, and 3.2C	1 L	1 L
4.1.1A	1 kg	1 kg
4.1.1B	100 kg	100 kg
4.1.2A, 4.1.2B	1 kg	1 kg
4.1.2C, 4.1.2D	25 kg	25 kg
4.1.2E, 4.1.2F, 4.1.2G	50 kg	50 kg
4.1.3A, 4.1.3B, 4.1.3C	1 kg	1 kg
4.2A	1 kg	1 kg
4.2B, 4.2C	25 kg	25 kg
4.3A	1 kg	1 kg
HSNO approval number HSR001636 (for pellets containing 570 g/kg aluminium phosphide)	3 kg	3 kg
HSNO approval number HSR001634 (for pellets containing 660 g/kg magnesium phosphide)	3 kg	3 kg
4.3B	25 kg	25 kg
4.3C	50 kg	50 kg

**Table 5**

**Maximum surface temperature of equipment that may contact class 2 and 3 substances of known auto-ignition temperatures**

rr 10.12, 10.14, 10.20

<b>Auto-ignition temperature of substance (A)</b>	<b>Required temperature of surfaces in contact with mixture of flammable vapour evolving from substance and air</b>
$A \geq 562.5^{\circ}\text{C}$	$< 450^{\circ}\text{C}$
$375^{\circ}\text{C} < A < 562.5^{\circ}\text{C}$	$< 300^{\circ}\text{C}$
$250^{\circ}\text{C} < A < 375^{\circ}\text{C}$	$< 200^{\circ}\text{C}$
$169^{\circ}\text{C} < A < 250^{\circ}\text{C}$	$< 135^{\circ}\text{C}$
$125^{\circ}\text{C} < A < 169^{\circ}\text{C}$	$< 100^{\circ}\text{C}$
$A < 125^{\circ}\text{C}$	$< 85^{\circ}\text{C}$

**Note:** This table applies if the substance is maintained at an average temperature of below  $40^{\circ}\text{C}$ .

**Table 6**  
**Control and emergency temperatures for class 3.2 and 4 substances**

r 10.22

Hazard classification	SADT	Control temperature	Emergency temperature
3.2A, 3.2B, 3.2C		50°C	
4.1.2A, 4.1.2B, 4.1.2C, 4.1.2D, 4.1.2E, 4.1.2F, 4.1.2G	20°C or less	20°C less than the SADT	10°C less than the SADT
	Between 20°C and 35°C	15°C less than the SADT	10°C less than the SADT
	35°C and above	Lesser of 10°C less than the SADT and 55°C	5°C less than the SADT
4.1.3A, 4.1.3B, 4.1.3C		50°C	
4.2A, 4.2B, 4.2C		50°C	

**Table 7**  
**Separation distances for class 3.2, 4.1.2 and 4.1.3 substances**

rr 10.28, 10.36

Aggregate quantity (kg or L)	Minimum separation distance between hazardous substance location and place (m)	
	Protected place	Public place
≤2 000	16	8
>2 000, ≤10 000	20	10
>10 000, ≤100 000	25	12.5
>100 000, ≤500 000	30	15
>500 000	As determined by risk assessment in accordance with section 3.4.2.2 and Appendix C Fifth Committee Draft AS/NZ Draft Standard 9832.CDR and AS/NZS 4360:2004	

**Table 8**  
**Separation distances for class 4.1.1, 4.2, and 4.3 substances**

rr 10.28, 10.36

Quantity (kg)	Minimum separation distance between hazardous substance location and place (m)					
	Protected place			Public place		
	4.2A	4.1.1A	4.1.1B	4.2A	4.1.1A	4.1.1B
	4.3A	4.2B	4.2C	4.3A	4.2B	4.2C
		4.3B	4.3C		4.3B	4.3C
≤2 000	10	6	6	5	3	3
>2 000, ≤10 000	12	10	6	6	5	3

Quantity (kg)	Minimum separation distance between hazardous substance location and place (m)					
	Protected place			Public place		
>10 000, ≤100 000	16	12	8	8	6	4
>100 000, ≤500 000	20	16	10	10	8	5
>500 000	As determined by risk assessment in accordance with section 3.4.2.2 and Appendix C Fifth Committee Draft AS/NZ Draft Standard 9832.CDR and AS/NZS 4360:2004					

**Table 9**  
**Threshold quantities for secondary containment**

r 10.30, 17.99

Hazard classification	Quantity (L)
3.1A	100
3.1B	1 000
3.1C, 3.1D	10 000
3.2A, 3.2B, 3.2C	100
4.1.2A, 4.1.2B	50
4.1.2C, 4.1.2D	100
4.1.2E, 4.1.2F, 4.1.2G	200
4.1.3A, 4.1.3B, 4.1.3C	100
4.2A	100
4.3A	100
4.3B	1 000
4.3C	10 000
9.1A	100
9.1B, 9.1C	1 000
9.1D	10 000

**Note:** In this schedule, a reference to a class 9 substance is for information only. The EPA is responsible for setting the controls on class 9 substances.

Compare: SR 2001/116 Schedule 3

## Schedule 10

### Matters relevant to class 5.1.1 and 5.1.2 substances

rr 3, 12.2, 12.3, 12.8, 12.9, 12.10, 12.13,  
12.20, 17.99

#### Table 1

#### Quantities of class 5.1.1 and 5.1.2 substances that activate hazardous substance location or transit depot requirements (except where regulation 12.10 applies)

rr 3, 12.2, 12.8, 12.20

Hazard classification	Hazardous substance location or transit depot where package to be kept closed at all times
5.1.1A	50 kg or 50 L
5.1.1B	500 kg or 500 L
5.1.1C	1 000 kg or 1 000 L
5.1.2A	100 kg (where a non-permanent gas) or 200 m <sup>3</sup> (where a permanent gas)
HSR001029	Oxygen in discrete cylinder or tank 200 m <sup>3</sup>
HSR001058	Chlorine 150 kg

#### Table 2

#### Quantities of class 5.1.1 and 5.1.2 substances that activate hazardous substance location requirements where substances manufactured or used

rr 3, 12.2, 12.8

Hazard classification	Hazardous substance location where substances manufactured or used
5.1.1A	5 kg or 5 L
5.1.1B	50 kg or 50 L
5.1.1C	100 kg or 100 L
5.1.2A	50 m <sup>3</sup> or 50 kg
HSR001029	Oxygen in discrete cylinder or tank 200 m <sup>3</sup>
HSR001058	Chlorine 150 kg

**Note:** The quantity refers to the total quantity present at, or within, the hazardous substance location even if some of the substance is held in closed containers.

**Table 3**  
**Hazardous substance location requirements—Minimum separation distances from incompatible substances**

r 12.9

Hazard classification	Quantity	Minimum distance from incompatible substance (m)
5.1.1A	Up to 1 000 kg or L	5
	More than 1 000 kg or L and up to 10 000 kg or L	8
	More than 10 000 kg or L	10
5.1.1B	Up to 1 000 kg or L	3
	More than 1 000 kg or L and up to 10 000 kg or L	5
	More than 10 000 kg or L	8
5.1.1C	More than 1 000 kg or L and up to 10 000 kg or L	3
	More than 10 000 kg or L	5
5.1.2A	Up to 200 m <sup>3</sup> or 250 kg	3
	More than 200 m <sup>3</sup> or 250 kg	5

**Table 4**  
**Hazardous substance location requirements—Minimum separation distances from ignition sources and from other hazardous substance locations**

rr 12.9, 12.10

Hazard classification	Minimum separation distance where packages kept closed (m)	Minimum separation distance where substances manufactured or used (m)
5.1.1A, 5.1.1B, 5.1.1C	5	8
5.1.2A	3	5

**Table 5**  
**Threshold quantities for secondary containment**

r 12.13, 17.99

Hazard classification	Quantity
5.1.1A	50 L
5.1.1B	500 L
5.1.1C	5 000 L

**Table 6**  
**Quantities of class 5.1.1 or 5.1.2 substances that must be secured if**  
**left unattended**

r 12.3	
<b>Hazard classification</b>	<b>Quantity</b>
5.1.1A	Any amount
5.1.1B	500 kg or 500 L
5.1.1C	1 000 kg or 1 000 L
5.1.2A	250 kg or 200 m <sup>3</sup>

Compare: SR 2001/116 Schedule 4



## Schedule 11

### Matters relevant to class 5.2 substances

rr 3, 12.23, 12.24, 12.27, 12.33, 12.34,  
12.35, 12.36, 12.38, 12.46, 17.99

#### Table 1

#### Quantities of class 5.2 substances that activate hazardous substance location or transit depot requirements

rr 3, 12.23, 12.34, 12.46

Hazard classification	Quantity
5.2A	Any quantity
5.2B	More than 1 kg
5.2C, 5.2D	More than 10 kg
5.2E, 5.2F	More than 25 kg

#### Table 2

#### Temperature limits for class 5.2 substances that activate temperature control requirements

r 12.27

SADT	Control temperature	Emergency temperature
20°C or less	20°C less than the SADT	10°C less than the SADT
Over 20°C and up to 35°C	15°C less than the SADT	10°C less than the SADT
Over 35°C	10°C less than the SADT	5°C less than the SADT

#### Table 3

#### Maximum size of transportable container for class 5.2 substances

r 12.33

Hazard classification	Maximum size of transportable container
5.2B	25 kg or 25 L
5.2C, 5.2D	50 kg or 50 L
5.2E	450 kg or 400 L
5.2F	Up to 3 000 L aggregate water capacity

**Note:** Class 5.2A substances may not be transported and there are no restrictions for class 5.2G substances.

**Table 4**  
**Separation distances for class 5.2A and 5.2B substances**

rr 12.35, 12.36

Quantity of class 5.2A or 5.2B substance (kg)	Minimum distance to public place (m)	Minimum distance to protected place (m)	Minimum distance to incompatible substances or materials or other hazardous substance locations (m)
≤10	3	5	8
25	5	10	8
50	7	15	9
100	10	20	9
200	12	25	10
500	15	35	12
1 000	20	45	15
2 000	25	55	19
3 000	35	80	21

**Note:** For quantities of substance, intermediate between those listed, the minimum separation distances are to be adjusted proportionately and rounded to the nearest metre (with 0.5 of a metre being rounded up).

**Table 5**  
**Separation distances for class 5.2C, 5.2D, 5.2E, and 5.2F substances**

rr 12.35, 12.36

Hazard classification	Quantity (kg)	Minimum distance to public place (m)	Minimum distance to protected place (m)	Minimum distance to incompatible substances or materials or other hazardous substance locations (m)
5.2C, 5.2D, 5.2E	≤250	3	5	5
	500	3	7	5
	1 000	4	8	5
	1 500	5	9	6
	2 500	6	10	7
	5 000	9	12	8
	10 000	10	15	10
5.2F	≤1 000	3	3	3
	2 000	4	4	3
	4 000	5	5	3
	10 000	6	7	5
	20 000	6	9	5

**Note:** For quantities of substance, intermediate between those listed, the minimum separation distances are to be adjusted proportionately and rounded to the nearest metre (with 0.5 of a metre being rounded up).

**Table 6**  
**Hazardous substance location requirements—Minimum separation distance from ignition sources**

r 12.35

Hazard classification	Minimum distance where packages kept closed (m)	Minimum distance where substances manufactured or used (m)
5.2, 5.2B	5	8
5.2C, 5.2D, 5.2E, 5.2F	3	5

**Table 7**  
**Threshold quantities for secondary containment**

r 12.38, 17.99

Hazard classification	Quantity
5.2A, 5.2B	10 L
5.2C, 5.2D	25 L
5.2E, 5.2F	100 L

**Table 8**  
**Quantities of class 5.2 substances that must be secured if left unattended**

r 12.24

Hazard classification	Quantity
5.2A, 5.2B	Any amount
5.2C, 5.2D, 5.2E, 5.2F	10 kg or 10 L

Compare: SR 2001/116 Schedule 5

## Schedule 12

### Calculation of separation distances

rr 11.5, 11.6, 11.7, 11.9, 11.12, 11.14,  
11.17, 11.19, 11.20, 11.21, 11.28, 11.30,  
11.33, 11.34, 11.37, 11.42, 17.40, 17.63

#### Table 1

rr 11.5, 11.19

Volume of permanent gas (m <sup>3</sup> )	Protected place (m)	Public place (m)
Column 1	Column 2	Column 3
Less than 100	5	5
100 to 499	10	5
500 or more	15	5

#### Table 2

rr 11.6, 11.20

Aggregate quantity of liquefiable gas in cylinders only (kg)	Protected place (m)	Public place (m)
Column 1	Column 2	Column 3
Up to 100	0	0
300	2	0
500	2	2
2 000	3	2
5 000	5	3
10 000	7	4
50 000	8	5
More than 50 000	15	8

#### Table 3

rr 11.7, 11.21

Water capacity of tank or container (L)	Protected place (m)	Public place (m)
Column 1	Column 2	Column 3
Up to 500	2	2
1 000	3	3
5 000	8	5
10 000	11	7
20 000	15	9
50 000	17	10
100 000	21	12
200 000 or more	28	14

**Table 4**

rr 11.7, 11.21

<b>Water capacity of tank or container (L)</b>	<b>Protected place (m)</b>	<b>Public place (m)</b>
<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>
Up to 500	1.5	1.5
1 000	3	2
2 000	6	4
5 000	8	5
8 000	10	6
10 000	11	7
15 000	14	8
20 000	15	9
50 000	17	10
100 000	20	11
200 000	25	12
500 000	45	22

**Table 5**

rr 11.9, 11.28, 17.40, 17.63

<b>Capacity (L)</b>	<b>Protected place (m)</b>		<b>Public place (m)</b>
<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>	<b>Column 4</b>
	<b>3.1A, 3.1B, 3.1C</b>	<b>3.1D</b>	<b>3.1A, 3.1B, 3.1C</b>
Up to 600	2	0	0
1 000	2	1.5	0
2 500	3	2	0
5 000	4	3	2
25 000	5	4	3
50 000	6	5	4
100 000	7	6	4
250 000	8	7	4.5
500 000	10	8	5
1 000 000	11	9	7
2 000 000	13	10	8
4 000 000	15	12	9
10 000 000	20	16	10
40 000 000 and over	30	25	15

**Table 6**

rr 11.12, 11.30

Aggregate quantity of class 3.1A, 3.1B, or 3.1C substance (L)			Protected place (m)
Column 1 Type A or B storage	Column 2 Type C storage	Column 3 Type D storage	Column 4
250	1 000	20 000	0
500			1
750	2 000		2
2 000		50 000	3
		100 000	4
	10 000	200 000	5
		400 000 or more	6
10 000	100 000		10
25 000	400 000 or more		15
40 000			17
60 000 or more			20

**Table 7**

rr 11.14, 11.34

Aggregate quantity of class 3.1A, 3.1B, or 3.1C substance (L)			Protected place (m)
Column 1 Type A or B storage	Column 2 Type C storage	Column 3 Type D storage	Column 4
		10 000	0
	500		2
250	2 000		3
		20 000	4
1 000		100 000	6
		200 000	8
	10 000	400 000 or more	10
10 000	25 000		15
	40 000		17
20 000	60 000		20
	200 000 or more		25
40 000			27
60 000 or more			30

**Table 8**

rr 11.17, 11.37

Column 1	Column 2	Protected place (m)	
		Column 3	Column 4
	Type 1 workroom	Type 2 workroom	Type 3 workroom
<b>Quantity of class 3.1A and class 3.1B hazardous substance (L)</b>			
450	0	0	0
1 750	5	0	0
3 000	8	5	0
7 500	15	8	5
<b>Quantity of class 3.1C hazardous substance (L)</b>			
750	0	0	0
2 500	5	0	0
4 000	8	5	0
10 000	15	8	5

**Table 9**

r 11.33

<b>Hazard classification</b>	<b>Maximum quantity</b>
Class 3.1B or 3.1C manufactured product	Maximum 8 000 L
(eg. oil based paints, primers, sealants, glues, adhesives)	Class 3.1B maximum container size 5 L Class 3.1C maximum container size 20 L
In addition to the 8 000 L of manufactured product, the following quantities of other flammable liquids may be stored in the building:	
Class 3.1B single component substances	Maximum 750 L
(eg. acetone, methylated spirit)	Up to 3 separated 250 L quantities One 250 L quantity may be stored with, and in addition to, the manufactured product, including any class 3.1C single component substance specified below, as permitted for storage with the manufactured product Other quantities must be separated from each other, from the manufactured product, and from class 3.1C substances by at least 20 m
Class 3.1C single component substances	Maximum 1 500 L
(eg. mineral turpentine, kerosene)	Up to 3 separated 500 L quantities One 500 L quantity may be stored with, and in addition to, the manufactured product, including any class 3.1B single component substance specified above, as permitted for storage with the manufactured product

**Hazard classification**

**Maximum quantity**

Other quantities must be separated from each other, from the manufactured product, and from class 3.1B substances by at least 20 m

**Table 10**

r 11.42

<b>Location</b>	<b>Maximum quantity of substances and size of cylinders</b>
Residential properties comprising—	20 kg per dwelling
<ul style="list-style-type: none"> <li>• a detached house or single storey attached dwelling; or</li> <li>• multi-storey attached dwellings, up to 3 storeys</li> </ul>	Maximum cylinder size 10 kg
Residential properties comprising—	10 kg per dwelling
<ul style="list-style-type: none"> <li>• multi-storey attached dwellings over 3 storeys</li> </ul>	Maximum cylinder size 10 kg
Areas of regular habitation (excluding dwellings, factories, or warehouses) within buildings with a roof and 3 or more walls that are not attached to residential or other occupancies, eg, hotels, bars, restaurants, public buildings, places of worship, shops, offices, and laboratories	10 kg per 10 m <sup>2</sup> of the indoor floor area, up to a maximum total quantity of 100 kg Maximum cylinder size 10 kg
Areas of regular habitation (excluding dwellings, factories, or warehouses) within buildings with a roof and 3 or more walls that are attached to residential or other occupancies, eg, hotels, bars, restaurants, public buildings, places of worship, shops, offices, and laboratories	20 kg per premises Maximum cylinder size 10 kg
Factories and warehouses	45 kg per 50 m <sup>2</sup> of the indoor floor area, up to a maximum total quantity of 180 kg per occupancy Maximum cylinder size 45 kg



**Schedule 13****Class 6.1 substances that require controlled substance licence**

rr 13.12, 13.13

<b>Item</b>	<b>Class 6.1 substance</b>
1	Powder containing 970–980 g/kg 3-chloro-p-toluidine hydrochloride, HSNO approval number HSR1611
2	Paste containing 4.5–5 g/kg yellow phosphorus, HSNO approval number HRC000019
3	Paste containing 9.5–10 g/kg yellow phosphorus, HSNO approval number HRC000021
4	Paste containing 0.6–0.8 g/kg sodium fluoroacetate, HSNO approval number HSR002420
5	Pellets containing 0.4–0.8 g/kg sodium fluoroacetate, HSNO approval number HSR002422
6	Pellets containing 1.0 g/kg sodium fluoroacetate, HSNO approval number HSR002423
7	Paste containing 15 g/kg para-aminopropiophenone (PAPP Paste B), HSNO approval number HSR100495
8	Bait containing 0.55–1.84% w/w encapsulated cyanide, HSNO approval number HSR007628
9	Ferafeed Paste, HSNO approval number HSR100752

Compare: SR 2001/117 Schedule 1

## Schedule 14

### Quantities of certain class 6 and 8 substances that must be secured if left unattended

	r 13.10
<b>Hazard classification</b>	<b>Quantity</b>
6.1C (except for propellant powders of classes 1.1C (UN 0160) and 1.3C (UN 0161))	Any quantity
Anhydrous ammonia, HSNO approval number HSR001035	100 kg
6.7A	10 kg, if solid 10 L, if liquid
8.2A	Any quantity
Propellant powders of classes 1.1C (UN 0160) and 1.3C (UN 0161)	50 kg
Compare: SR 2001/117 Schedule 1	

## Schedule 15

### Incompatible substances and materials

rr 10, 13.1, 13.29

Hazard classification	Incompatible substances and materials
6.1A, 6.1B, 6.1C	All class 1 substances All class 5 substances
6.1A, 6.1B, 6.1C (toxic cyanides)	All class 1 substances All class 5 substances All class 8.2 substances corrosive acids
8.2A and 8.2B corrosive acids	All class 1 substances Class 4.3A, 4.3B, 4.3C substances All class 5 substances Class 6.1A, 6.1B, 6.1C substances toxic cyanides Class 8.2A and 8.2B substances corrosive alkalis
8.2A and 8.2B corrosive alkali	All class 1 substances Class 4.3A, 4.3B, 4.3C substances All class 5 substances Class 8.2A and 8.2B substances corrosive acids

**Schedule 16**  
**Threshold quantities for secondary containment of class 6, 8, and 9**  
**substances**

Hazard classification	Quantity (L)
6.1A, 6.1B, 6.1C	100
6.1D, 6.5A, 6.5B, 6.7A	1 000
6.6A, 6.7B, 6.8A, 6.9A	10 000
8.2A	100
8.2B	1 000
8.2C, 8.3A	10 000
9.1A	100
9.1B, 9.1C	1 000
9.1D	10 000

**Note:** In this schedule, a reference to a class 9 substance is for information only. The EPA is responsible for setting the controls on class 9 substances.

## Schedule 17

### Minimum separation distances for stores of packaged class 6.1 substances

rr 13.40, 13.41, 13.42, 17.28

### Table 1

#### Minimum separation distances from stores where packages are open to protected places

rr 13.40, 13.41

Quantity (kg or L)	Minimum distance from protected places (m)		
	Class 6.1A	Class 6.1B	Class 6.1C
>50 ≤ 250	10	N/A	N/A
>250 ≤ 1 000	10	6	N/A
>1 000 ≤ 10 000	16	10	10
>10 000 ≤ 20 000	18	12	12
>20 000 ≤ 50 000	20	16	16
>50 000 ≤ 100 000	30	20	20
>100 000 ≤ 200 000	40	30	30
>200 000 ≤ 500 000	50	35	35
>500 000	Risk assessment to be carried out to determine appropriate separation distance		

### Table 2

#### Minimum separation distances from stores where packages remain closed to protected places

rr 13.40, 13.41, 17.28

Quantity (kg or L)	Minimum distance from protected places (m)		
	Class 6.1A	Class 6.1B	Class 6.1C
>50 ≤ 250	5	N/A	N/A
>250 ≤ 1 000	5	3	N/A
>1 000 ≤ 10 000	8	5	5
>10 000 ≤ 20 000	9	6	6
>20 000 ≤ 50 000	10	8	8
>50 000 ≤ 100 000	15	10	10
>100 000 ≤ 200 000	20	15	15
>200 000 ≤ 500 000	25	17.5	17.5
>500 000	Risk assessment to be carried out to determine appropriate separation distance		

**Table 3**  
**Minimum separation distances from stores where packages are open to public places**

rr 13.40, 13.42

Quantity (kg or L)	Minimum distance from public places (m)		
	Class 6.1A	Class 6.1B	Class 6.1C
>50 ≤ 250	5	N/A	N/A
>250 ≤ 1 000	5	3	N/A
>1 000 ≤ 10 000	8	5	5
>10 000 ≤ 20 000	9	6	6
>20 000 ≤ 50 000	10	8	8
>50 000 ≤ 100 000	15	10	10
>100 000 ≤ 200 000	20	15	15
>200 000 ≤ 500 000	25	17.5	17.5
>500 000	Risk assessment to be carried out to determine appropriate separation distance		

**Table 4**  
**Minimum separation distances from stores where packages remain closed to public places**

rr 13.40, 13.42, 17.28

Quantity (kg or L)	Minimum distance from protected places (m)		
	Class 6.1A	Class 6.1B	Class 6.1C
>50 ≤ 250	5	N/A	N/A
>250 ≤ 1 000	5	3	N/A
>1 000 ≤ 10 000	5	3	3
>10 000 ≤ 20 000	5	3	3
>20 000 ≤ 50 000	5	4	4
>50 000 ≤ 100 000	7.5	5	5
>100 000 ≤ 200 000	10	7.5	7.5
>200 000 ≤ 500 000	12.5	8.75	8.75
>500 000	Risk assessment to be carried out to determine appropriate separation distance		

## Schedule 18

### Matters relevant to fumigants

r 14.7, 14.22, 14.32, 14.38,

**Table 1**  
**Notification requirements for fumigants**

r 14.7

Column 1	Column 2
Space fumigation	Nearest communications centre of Fire and Emergency New Zealand; and
Fumigation in a glasshouse	PCBU with management or control of workplace
Fumigation of soil or compost in a glasshouse, building, or other enclosed structure	
Fumigation of commodities on a ship	Nearest communications centre of Fire and Emergency New Zealand; and
Fumigation of a ship or aircraft	Port or Airport Authority (if on port or airport land); and
	PCBU with management or control of workplace
Fumigation of a silo	PCBU with management or control of workplace
Fumigation of grain or other loose material in small bins, or in bulk on the floor of a building or other structure	
Fumigation in a fumigation cell	Port or Airport Authority (if on port or airport land); and
Fumigation in a shipping container	PCBU with management or control of workplace
Fumigation under sheets	Nearest communications centre of Fire and Emergency New Zealand (if fumigation is in area where public may lawfully be present); and
	Port or Airport Authority (if on port or airport land); and
	PCBU with management or control of workplace
Fumigation of mammals underground	Nearest communications centre of Fire and Emergency New Zealand (if fumigation is in area where public may lawfully be present); and
	PCBU with management or control of workplace

<b>Column 1</b>	<b>Column 2</b>
Soil fumigation outdoors	<p>Nearest communications centre of Fire and Emergency New Zealand if—</p> <p>(a) fumigation is undertaken on, or adjacent to, land that is close to or adjoins private dwelling, school, playing field or reserve, or other amenity area, or area where the public may lawfully be present; or</p> <p>(b) risk area may encroach on any such land or area; and</p> <p>PCBU with management or control of workplace</p>

**Table 2**

**Buffer zone distances for Ripper range (30–55% iodomethane and 45–70% chloropicrin)**

r 14.22

Application block area/ha	Distance to perimeter of buffer zone (m)	
	Maximum broadcast equivalent application rates	
	200 kg/ha	250 kg/ha
Below 0.5	30	40
Between 0.5 and 1.0	50	65
Between 1.0 and 3.0	70	100

**Table 3**

**Buffer zone distances for Tri-Form 60**

r 14.22

The following table states the minimum distance (in metres) between the perimeter of the Application Block and any point of the perimeter of the buffer zone for all applications.

In this table, **BEAR** means broadcast equivalent application rate (kg Tri-Form 60/ha).

	Application block size (ha)																	
BEAR	1	2	3	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32
< 150	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
150	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9
160	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9
170	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9
180	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	9
190	8	8	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9
200	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	9	9
210	8	8	8	8	8	8	8	8	8	8	8	9	9	9	9	9	10	10



	Application block size (ha)																	
BEAR	1	2	3	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32
220	8	8	8	8	8	8	8	8	8	8	8	9	9	9	10	10	10	11
230	8	8	8	8	8	8	8	8	8	8	8	9	9	9	10	10	11	12
240	8	8	8	8	8	8	8	8	8	8	8	10	11	12	12	14	14	16
250	8	8	8	8	8	8	8	9	9	9	11	13	15	17	18	19	20	21
260	8	8	8	8	8	8	9	11	11	12	15	19	19	20	21	22	23	24
270	8	8	8	8	8	9	10	11	12	13	16	21	21	21	22	23	24	25
280	8	8	8	8	8	10	11	12	14	16	19	22	22	24	25	27	28	29
290	8	8	8	8	8	11	12	13	16	19	21	23	25	27	28	30	32	34
300	8	8	8	8	8	13	13	14	18	21	23	24	27	30	32	34	36	38
310	8	8	8	8	9	13	14	16	19	23	25	27	30	33	35	37	39	41
320	8	8	8	9	12	13	16	17	20	27	29	32	35	37	39	41	44	46
330	8	8	8	10	14	17	20	25	28	31	33	36	39	42	44	46	48	51
340	8	8	8	12	17	21	22	28	29	36	38	41	43	46	48	51	52	53
350	8	8	8	14	20	23	26	31	36	40	43	45	47	51	53	54	55	56
360	8	8	8	16	23	26	28	34	39	42	45	48	50	53	55	56	57	58
370	8	8	9	19	26	29	31	37	43	46	49	52	55	57	60	63	64	64
380	8	8	10	21	29	32	34	41	48	51	53	56	59	61	64	68	69	69
390	8	9	12	23	32	35	37	45	52	55	58	60	63	66	69	73	74	75
400	9	9	12	23	32	36	39	47	53	56	59	61	64	67	71	75	77	78
410	9	9	12	23	32	37	43	49	55	58	60	63	66	69	74	78	80	81
420	9	10	12	23	34	40	43	51	57	59	62	65	68	71	75	80	82	84
430	9	10	12	23	34	44	47	53	59	61	64	67	70	73	78	82	84	87
440	9	10	12	23	34	48	51	55	60	62	66	69	72	75	80	84	86	90
450	10	11	13	23	35	48	51	57	62	64	68	71	74	77	82	87	89	93
460	10	11	13	28	35	51	53	59	64	66	70	73	76	79	85	90	92	96
470	10	11	13	28	35	51	53	61	66	68	72	75	78	81	87	93	95	99
480	11	12	14	28	35	55	57	63	68	70	74	77	80	83	90	96	98	102
490	11	12	14	28	35	55	57	65	70	72	76	79	82	85	92	99	101	105
500	11	12	14	28	35	57	59	67	72	74	78	81	84	87	95	102	104	108
510	12	13	15	28	35	57	59	69	74	76	80	83	86	89	97	105	107	111
520	12	13	15	28	35	57	59	71	76	78	82	85	88	91	100	108	110	114
530	12	13	15	28	35	57	59	73	78	80	84	87	90	93	102	111	113	117
540	12	13	15	28	37	60	62	75	80	82	86	89	92	95	104	114	116	120
550	13	14	16	28	37	60	62	77	82	84	88	91	94	97	106	116	119	124
560	13	14	16	32	39	60	62	79	84	86	90	93	96	99	108	117	122	128
570	13	14	16	32	39	62	64	81	86	88	92	95	98	101	110	119	124	131
580	13	14	16	32	39	62	64	83	88	90	94	97	101	104	112	121	127	134
590	14	15	17	32	39	64	66	85	90	92	96	99	104	107	115	123	130	137
600	14	15	17	32	39	64	66	87	92	94	98	101	107	111	118	125	133	140

BEAR	Application block size (ha)																	
	1	2	3	4	6	8	10	12	14	16	18	20	22	24	26	28	30	32
610	14	15	17	35	42	65	67	89	94	96	100	103	110	115	121	127	136	143
620	15	16	18	35	42	65	67	91	96	98	104	108	113	117	123	129	139	145
630	15	16	18	35	42	66	68	93	98	102	108	112	116	119	125	131	142	147
640	16	17	18	35	42	68	70	95	100	105	112	116	119	122	127	132	145	148
650	16	18	18	37	44	70	74	97	102	110	116	120	123	126	129	133	148	150

**Table 4**  
**Buffer zones for methyl bromide**

r 14.32, 14.38

Use	Minimum buffer zones (m)
Ship's hold (1 000 kg or more of methyl bromide applied per site in any 24-hour period)	100
Ship's hold (less than 1 000 kg methyl bromide applied per site in any 24-hour period)	50
Fumigation under sheets	50
Containers (total volume of less than 77 m <sup>3</sup> in any 60-minute period)	10
Containers (total volume of 77 m <sup>3</sup> or more in any 60-minute period)	25

**Table 5**  
**Buffer zone reduction credits for certain fumigants**

r 14.22

Emission mitigation criteria	Buffer zone distance reductions (%)
<i>Plastic sheeting use</i>	
Metalised film with a mass transfer coefficient for chloropicrin of between 0.018–0.400 cm h <sup>-1</sup>	20%
Virtually impermeable film with a mass transfer coefficient for chloropicrin of between 0.00035–0.018 cm h <sup>-1</sup>	40%
Totally impermeable film with less than a mass transfer coefficient for chloropicrin of between 0.00035 cm h <sup>-1</sup>	60%
<i>Soil organic matter content (soil % OM)</i>	
1 ≤ soil % OM ≤ 2	10%
2 ≤ soil % OM ≤ 3	20%
3 ≤ soil % OM	30%
<i>Soil clay content (soil % CC)</i>	
27 ≤ soil ≤ CC	10%
<i>Reactive boundary layer (halogenated compound degradation accelerant)</i>	
Use of potassium thiosulfate	15%

## Schedule 19

### Compliance certificates for imported UN Model Regulations cylinders

r 15.3(3)

#### 1 Purpose of compliance certificate for imported UN Model Regulations cylinder

The purpose of a compliance certificate for an imported UN Model Regulations cylinder is to verify that the cylinder has foreign test markings that indicate that the cylinder has been designed and constructed, and has passed initial inspections and tests, in accordance with clause 6.2 of the UN Model Regulations (and is therefore safe to be filled in New Zealand).

#### 2 Verifying foreign design and construction certification

If the first interval following manufacture referred to in regulation 15.56(1) has not yet passed, a compliance certifier may issue the compliance certificate for the cylinder if the cylinder is marked in accordance with clauses 6.2.2.7.1 to 6.2.2.7.5 of chapter 6.2 of the UN Model Regulations—

- (a) by or on behalf of the Government of a country other than New Zealand; and
- (b) certifying that the cylinder has been designed and constructed, and has passed initial inspections and tests, in accordance with chapter 6.2 of the UN Model Regulations.

#### 3 Verifying foreign periodic testing

If the first interval following manufacture referred to in regulation 15.56(1) has passed, a compliance certifier may issue the compliance certificate for the cylinder if the cylinder is marked in accordance with clause 6.2.2.7 of chapter 6.2 of the UN Model Regulations—

- (a) by or on behalf of the Government of a country other than New Zealand; and
- (b) with current periodic inspection and test markings that certify that the cylinder complies with the periodic inspection and testing requirements of clauses 6.2.2.4 and 6.2.2.6 of chapter 6.2 of the UN Model Regulations.

#### 4 Exception

Despite clauses 2 and 3, a compliance certifier must not issue the compliance certificate for the cylinder if the certifier has reasonable grounds to believe that the cylinder—

- (a) is unsafe; or

- (b) despite its markings, does not comply with chapter 6.2 of the UN Model Regulations.

## Schedule 20

### Capacity of containers containing gases under pressure

rr 3, 15.1, 15.4, 15.11, 15.67

**Table 1**  
**Reference temperatures for gas containers**

rr 3, 15.1, 15.4, 15.11

Type of gas	Water capacity of container (L)	Reference temperatures (°C)
Permanent gas	Any size	65.0
High-pressure liquefied gas	≤500	55.0
	>500, ≤1000	55.0
	>1 000, ≤5 000	52.5
	>5 000	47.5
Low-pressure liquefied gas	≤250	57.5
	>250, ≤500	52.5
	>500, ≤1 000	52.5
	>1 000, ≤5 000	50.0
	>5 000, ≤26 000	45.0
	> 26 000	40.0
Cryogenic and dissolved acetylene	≤500	52.5

**Table 2**  
**Maximum temperatures for the purpose of determining filling ratios  
for low-pressure liquefied gases**

r 15.67

Water capacity of cylinder or stationary tank (L)	Temperature of liquid contents (°C)
<250	50.0
≥250, <5 000	47.5
≥5 000	45.0

**Table 3**  
**Maximum temperatures for the purpose of determining filling ratios  
for high-pressure liquefied gases**

r 15.67

Water capacity of cylinder or gas stationary tank (L)	Temperature of liquid contents (°C)
<1 000	60.0
≥1 000, <5 000	57.5
≥5 000	52.5

## Schedule 21

### Design standards for gas containers

rr 15.8, 15.9, 15.23, 15.25, 15.26

Item	Design standard reference	Name or title of design standard	Additional descriptions and information
<i>American and Canadian standards</i>			
1	ASME BPVC-VIII-1–2017	Boiler and Pressure Vessel Code— Section VIII—Rules for construction of pressure vessels— Division 1	
2	DOT 2P (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart B, Section 178.33)	Specification 2P; Inner non-refillable metal receptacles	Non-refillable aerosol dispensers
3	DOT 2Q (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart B, Section 178.33a)	Specification 2Q; Inner non-refillable metal receptacles	Non-refillable aerosol dispensers
4	DOT 3A and 3AX (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.36)	Specification 3A and 3AX; Seamless steel cylinders	Seamless steel cylinder with a water capacity not more than 1 000 pounds (453 kg) and a service pressure of at least 150 psig (1.03 MPa)
5	DOT 3AA and 3AAX (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.37)	Specification 3AA and 3AAX; Seamless steel cylinders	Seamless steel cylinder with a water capacity not more than 1 000 pounds (453 kg) and a service pressure of at least 150 psig (1.03 MPa)
6	DOT 3AL (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.46)	Specification 3AL; Seamless aluminum cylinders	Seamless aluminum cylinder with a water capacity not over 1 000 pounds (453 kg) and a minimum service pressure of 150 psig (1.03 MPa)
7	DOT 3B (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.38)	Specification 3B; Seamless steel cylinders	Seamless steel cylinder with a water capacity not more than 1 000 pounds (453 kg) and a service pressure of at least 150 psig (1.03 MPa) but not more than 500 psig (3.44 MPa)
8	DOT 3E (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.42)	Specification 3E; Seamless steel cylinders	Seamless steel cylinder with an outside diameter not greater than 2 inches (50 mm) nominal, a length less than 2 feet (600 mm), and a service pressure of 1 800 psig (12.4 MPa)
9	DOT 4AA480 (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.56)	Specification 4AA480; Welded steel cylinders	Welded steel cylinder with a water capacity not more than 1 000 pounds (453 kg) water capacity and a service pressure of 480 psig (3.3 MPa)

<b>Item</b>	<b>Design standard reference</b>	<b>Name or title of design standard</b>	<b>Additional descriptions and information</b>
10	DOT 4B (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.50)	Specification 4B; Welded or brazed steel cylinders	Welded or brazed steel cylinder with longitudinal seams that are forged lap-welded, or brazed and with water capacity not more than 1 000 pounds (453 kg) and a service pressure of at least 150 psig (1.03 MPa) but not more than 500 psig (3.44 MPa)
11	DOT 4BA (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.51)	Specification 4BA; Welded or brazed steel cylinders	Welded or brazed steel cylinder either spherical or cylindrical in shape, with a water capacity of 1 000 pounds or less and a service pressure of at least 225 psig but not more than 500 psig
12	DOT 4BW (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.61)	Specification 4BW; Welded steel cylinders with electric-arc welded longitudinal seam	Welded or brazed steel cylinder either spherical or cylindrical in shape, with 1 circumferential seam and a water capacity of 1 000 pounds (453 kg) or less and a service pressure of at least 225 psig (1.5 MPa) but not more than 500 psig (3.44 MPa)
13	DOT 4E (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.68)	Specification 4E; Welded aluminum cylinders	Welded aluminium cylinder with a water capacity not more than 1 000 pounds (453 kg) and a service pressure of at least 225 psig (1.5 MPa) but not more than 500 psig (3.44 MPa)
14	DOT 4L (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.57)	Specification 4L; Welded insulated cylinders	Fusion welded insulated cylinder with a water capacity not more than 1 000 pounds (453 kg) and a service pressure of at least 40 psig (0.27 MPa) but not more than 500 psig (3.44 MPa)
15	DOT 8 (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.59)	Specification 8; Steel cylinders with porous fillings for acetylene	Steel cylinders with a service pressure of 250 psig (1.7 MPa) with porous fillings for acetylene
16	DOT 8AL (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.60)	Specification 8AL; Steel cylinders with porous fillings for acetylene	Seamless steel cylinder with a service pressure of 250 psig (1.7 MPa). The attachment of heads by welding or by brazing by dipping process and a welded circumferential body seam is authorised. Longitudinal seams are not authorised
17	DOT 39 (CFR, Title 49, Subtitle B, Chapter 1, Part 178, Subpart C, Section 178.65)	Specification 39; Non-reusable (non-refillable) cylinders	Non-refillable seamless, welded, or brazed cylinder with a service pressure not to exceed 80 percent of the test pressure. Spherical pressure vessels are authorised

Item	Design standard reference	Name or title of design standard	Additional descriptions and information
18	DOT-SP 7235, 24th revision, published by the U.S. Department of Transportation		Fibre-reinforced plastic hoop-wrapped cylinders conforming to DOT FRP-2 Standard Revision 1 (dated 4 January 1987), with exceptions Expires 30 September 2018
19	DOT-SP 8725, 21st revision, published by the U.S. Department of Transportation		Fibre reinforced plastic hoop-wrapped aluminium cylinders conforming to DOT FRP-2 Standard Revision 1 (dated 4 January 1987) for transportation of certain non-liquefied compressed gases, with exceptions Expires 31 May 2018
20	DOT-SP 9634, 9th revision, published by the U.S. Department of Transportation		Fibre reinforced plastic full composite cylinders conforming to DOT FRP-1 Standard Revision 2 (dated 15 February 1987), with exceptions Expires 30 September 2018
21	DOT-SP 10945, 27th revision, published by the U.S. Department of Transportation		Fully wrapped carbon fibre reinforced aluminium lined cylinders conforming to DOT-CFFC, fifth revision, with exceptions Expires 31 December 2020
22	DOT-SP 11953, 7th revision, published by the U.S. Department of Transportation		Welded steel cylinder conforming to DOT 4BW for non-liquefied and liquefied compressed gases, with exception for increased water capacity Expires 31 March 2021
23	DOT-SP 12098, 8th revision, published by the U.S. Department of Transportation		Welded spherical cylinders for use in a re-breather unit, conforming to DOT 3HT, with exceptions Expires 31 May 2018
24	TC-3AAM (Specification TC-3AAM in CSA B339-08, published (English) in March 2008)	Cylinders, spheres, and tubes for the transportation of dangerous goods—Specification TC-3AAM	Seamless alloy steel cylinders with a minimum service pressure of 1.0 MPa
25	TC-3ALM (Specification TC-3ALM in CSA B339-08, published (English) in March 2008)	Cylinders, spheres, and tubes for the transportation of dangerous goods—Specification TC-3ALM	Seamless aluminum alloy cylinders with a minimum service pressure of 1.0 MPa



Item	Design standard reference	Name or title of design standard	Additional descriptions and information
26	TC-3AM (Specification TC-3AM in CSA B339-08, published (English) in March 2008)	Cylinders, spheres, and tubes for the transportation of dangerous goods—Specification TC-3AM	Seamless carbon steel, carbon manganese steel, or intermediate manganese steel cylinders with a minimum service pressure of 1.0 MPa
<i>Australian standards</i>			
27	AS 1777—2005	Aluminium cylinders for compressed gases—Seamless—0.1 kg to 130 kg	
28	AS 2469—2005 (R2016)	Steel cylinders for compressed gases—Welded two-piece construction—0.1 kg to 150 kg	
29	AS 2470—2005 (R2016)	Steel cylinders for compressed gases—Welded three-piece construction with longitudinal joint—11 kg to 150 kg	
30	AS 2527—2006	Cylinders for dissolved acetylene	
31	AS 3577—2006	Steel cylinders for compressed gases—Welded—150 kg to 500 kg	
<i>British standards</i>			
32	BS 5045-7:2000	Transportable gas containers—Specification for seamless steel gas containers of water capacity 0.5 L up to 15 L for special portable applications	
33	BS 5045-8:2000	Transportable gas containers—Specification for seamless aluminium alloy gas containers of water capacity 0.5 L up to 15 L and up to 300 bar charged pressure at 15°C for special portable applications	
34	BS EN 3-7:2004+A1:2007	Portable fire extinguishers—Characteristics, performance requirements and test methods	
35	BS EN 3-8:2006	Portable fire extinguishers—Additional requirements to EN 3-7 for the construction, resistance to pressure and mechanical tests for extinguishers with a maximum allowable pressure equal to or lower than 30 bar	
36	BS EN 3-9:2006	Portable fire extinguishers—Additional requirements to EN 3-7 for pressure resistance of CO <sub>2</sub> extinguishers	

Item	Design standard reference	Name or title of design standard	Additional descriptions and information
37	BS EN 3-10:2009	Portable fire extinguishers—Provisions for evaluating the conformity of a portable fire extinguisher to EN 3-7	
38	BS EN 1442:2006+A1:2008	LPG equipment and accessories—Transportable refillable welded steel cylinders for LPG—Design and construction	
39	BS EN 12862:2000	Transportable gas cylinders—Specification for the design and construction of refillable transportable welded aluminium alloy gas cylinders	
40	BS EN 13110:2012+A1:2017	LPG equipment and accessories—Transportable refillable welded aluminium cylinders for liquefied petroleum gas (LPG)—Design and construction	
<i>European standards</i>			
41	EN 417:2012	Non-refillable metallic gas cartridges for liquefied petroleum gases, with or without a valve, for use with portable appliances—Construction, inspection, testing and marking	
<i>ISO standards</i>			
42	ISO 7866:2012	Gas cylinders—Refillable seamless aluminium alloy gas cylinders—Design, construction and testing	
43	ISO 9809-2:2010	Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 2: Quenched and tempered steel cylinders with tensile strength greater than or equal to 1 100 MPa	Cylinders 0.5 litres up to and including 150 litres of seamless steel of tensile strength greater than or equal to 1 100 MPa
44	ISO 9809-3:2010	Gas cylinders—Refillable seamless steel gas cylinders—Design, construction and testing—Part 3: Normalized steel cylinders	Cylinders 0.5 litres up to and including 150 litres of seamless steel of tensile strength less than 1 100 MPa
45	ISO 11118:2015	Gas cylinders—Non-refillable metallic gas cylinders—Specification and test methods	
46	ISO 11119-1:2012	Gas cylinders—Refillable composite gas cylinders and tubes—Design, construction and testing—Part 1: Hoop wrapped fibre reinforced composite gas cylinders and tubes up to 450 L	

Item	Design standard	Name or title of design standard	Additional descriptions and information
	reference		
47	ISO 11119-2:2012	Gas cylinders—Refillable composite gas cylinders and tubes—Design, construction and testing—Part 2: Fully wrapped fibre reinforced composite gas cylinders and tubes up to 450 L with load-sharing metal liners	

**Note:** In this schedule, a description of a gas container in the fourth column is for information only. The description in the listed standard applies.

## Schedule 22

### Intervals from manufacture for periodic tests and certificates

r 15.56

Item	Type of cylinder	Interval (years)
1	Cylinder for LPG	10
2	Cylinder that is part of a self-contained breathing apparatus that is not designed for underwater use, other than a fibre-wrapped composite cylinder	5
3	Fibre-wrapped composite cylinder	5
4	Fire extinguisher	5
5	Cylinder with shrunk-on foot rings	2
6	Cylinder for any of the following gases: air (except for a self-contained underwater breathing apparatus (SCUBA)), argon, cyclopropane, ethylene, helium, hydrogen, krypton, neon, nitrogen, nitrous oxide, oxygen, xenon, and any mixture of these not containing more than 30% by volume of carbon dioxide and having a dew point below $-40^{\circ}\text{C}$ at 1 atmosphere	10 for up to 40 years of cylinder's age, then at 5-year intervals
7	The following cylinders for acetylene:	
	(a) monolithic mass	Visual inspection at 1 year after entering service, then at 10-year intervals
	(b) other porous mass	Visual inspection at 1-year intervals
8	Self-contained underwater breathing apparatus (SCUBA)	Visual inspection at 1-year intervals Hydrostatic tests at 2-year intervals
9	All other cylinders	5

**Note:** For cylinders for which more than 1 interval may apply, the lesser of the intervals is to apply.

**Schedule 23****Forces able to be resisted by attachment of tank to chassis**

rr 16.16, 16.30(2)(b)

<b>Forces</b>	<b>Road</b>	<b>Rails</b>
Vertically up	$1g \times M$	$0.8g \times M$
Vertically down	$2g \times M$	$1.8g \times M$
Lateral	$1g \times M$	$0.3g \times M$ (but $0.65 g \times M$ for sea transport)
Longitudinal	$2g \times M$	$2.8 \text{ MN} \times T/G$ $2g \times M$ (for transportable containers)

$g$  = acceleration constant due to gravity ( $9.81 \text{ m/s}^2$ )

$G$  = gross weight of tank, contents, chassis, and all associated equipment

$M$  = weight of tank, contents, and fittings (but excluding chassis)

$\text{MN}$  = meganewtons

$T$  = weight of tank and contents

## Schedule 24

### Requirements for design, pre-commissioning, and in-service compliance certification of tank wagon

rr 16.31(4)(a), (b), 16.34(4)(a), 16.36(4)

Regulation	Provision/component	Rail	Road ( $\geq$ 2 000 L)	Road ( $<$ 2 000 L)
16.4	Compatibility	D, PC	D, PC	D, PC
16.5	Marking	D, PC	D, PC, IS	D, PC, IS
16.7(1)(a)	Ability to withstand stress of load—tank upright	D, PC, IS	D, PC, IS	D, PC, IS
16.7(1)(b)	Ability to withstand stress of load—tank inverted	D, PC	D, PC	D, PC
16.8	Pressure resistance	D, PC	D, PC	D, PC
16.9	Fatigue resistance	D, PC	D, PC	
16.10	Corrosion resistance	D, PC, IS	D, PC, IS	D, PC, IS
16.11	Tank impact resistance	D, PC	D, PC	
16.12	Fittings impact resistance	D, PC	D, PC	
16.14	Emergency preparedness		D, PC, IS	
16.15	Loss minimisation during transfer of liquids or gases	D, PC, IS	D, PC, IS	
16.16	Attachment of tank to chassis	D, PC	D, PC	D, PC
16.17	Minimising risk of possible ignition		D, PC, IS	D, PC, IS
16.19	Fuel tank requirements		D, PC, IS	
16.20	Stability and manoeuvrability		D, PC	D, PC
16.21	Longitudinal surging		D, PC	
16.22	Rear-end collision protection		D, PC, IS	D, PC, IS
16.23	Rear run-under by small vehicles		D, PC, IS	
16.27	Fittings impact resistance			D, PC
16.28	Rear run-under			D, PC, IS
16.34(5)	Tank compartment pressure test	PC	PC	PC

D = design compliance certification

IS = in-service compliance certification

PC = pre-commissioning compliance certification

## Schedule 25

### Separation distances for above ground stationary tanks

rr 17.18, 17.25, 17.40

**Table 1**  
**Separation distances for above ground stationary tanks containing class 3 substances**

r 17.18

<b>Column 1</b>	<b>Column 2</b>	<b>Column 3</b>
<b>Capacity of tank A (000 L)</b>	<b>Distance (m) from tank containing class 3.1A, 3.1B, 3.1C, or 3.2 substances</b>	<b>Distance (m) from tank containing class 3.1D substances</b>
less than 5	1	0.5
50	1	1
100	1.5	1
250	3	2
500	5	3
1 000	8	5
2 000	11	8
4 000	13	9
10 000	14	10
40 000 or more	20	14

**Table 2**  
**Separation distances between above ground stationary tanks containing class 2.1.1 liquefied gas and transfer point of stationary container system**

r 17.25

<b>Column 1</b>	<b>Column 2</b>
<b>Water capacity of tank (L)</b>	<b>Distance (m)</b>
Less than 7.5	0
7.5 to less than 50	3
50 to less than 100	6
100 and over	9

**Table 3**  
**Separation distances that create cluster of above ground stationary tanks**

r 17.40	
<b>Column 1</b>	<b>Column 2</b>
<b>Water capacity (L) of tank A</b>	<b>Distance (m) from other tank in cluster</b>
Less than 500	2
1 000	3
5 000	5
10 000	7
20 000	9
50 000	10
100 000	12
200 000 or more	14



## Schedule 26

### Tracking of hazardous substances

rr 19.1, 19.3

**Table 1**  
**Hazardous substances that require tracking**

r 19.1

<b>Intrinsic property of substance</b>	<b>Hazard classifications as specified in Hazardous Substances (Classification) Notice 2017</b>
Explosiveness	<p>All class 1 substances, except the following:</p> <ul style="list-style-type: none"> <li>(a) safety ammunition, including pre-primed cartridges and primers, of class 1.4S; and</li> <li>(b) airbag initiators and seatbelt pretensioners of classes 1.4G and 1.4S; and</li> <li>(c) cable cutters of class 1.4S (UN0070); and</li> <li>(d) power device cartridges of class 1.4S (UN0323); and</li> <li>(e) signal or shock tubes of class 1.4 (UN0349); and</li> <li>(f) cassette degradation devices of class 1.4S (UN0432); and</li> <li>(g) beyond their point of sale to the public,— <ul style="list-style-type: none"> <li>(i) fireworks of classes 1.3G, 1.4G, and 1.4S that are subject to the Hazardous Substances (Fireworks) Regulations 2001; and</li> <li>(ii) emergency flares and signalling devices of classes 1.3G, 1.4G, and 1.4S; and</li> <li>(iii) model rocket motors of classes 1.4G and 1.4S; and</li> <li>(iv) propellants of classes 1.3C (UN0161 and UN0449) and 1.1C (UN0160), in a quantity not exceeding 15 kg; and</li> <li>(v) gunpowder of class 1.1D (UN 0027), in a quantity not exceeding 15 kg; and</li> <li>(vi) igniting fuses of class 1.4G (UN0317); and</li> <li>(vii) igniters of class 1.4S (UN0454)</li> </ul> </li> </ul>
Flammability	<p>3.1A, 3.2A 4.1.2A, 4.1.2B 4.1.3A 4.2A 4.3A</p>
Capacity to oxidise	<p>5.1.1A</p>
Toxicity	<p>5.2A, 5.2B 6.1A, 6.1B</p>

**Table 2**  
**Other hazardous substances that require tracking**

r 19.1

Item	Substance
1	Paste containing 15 g/kg para-aminopropenone (PAPP Paste B), HSNO approval number HSR 100495
2	Paste containing 4.5–5 g/kg yellow phosphorus, HSNO approval number HSR001610
3	Paste containing 9.5–10 g/kg yellow phosphorus, HSNO approval number HSR001609
4	Soluble concentrate containing 34 g/litre pindone as sodium salt, HSNO approval number HSR001597
5	Pindone liquid concentrate, HSNO approval number HSR100544
6	Apple-based paste containing 0.6–0.8g sodium fluoroacetate/kg, HSNO approval number HSR002420
7	Cereal-based pellets containing 0.4–0.8g sodium fluoroacetate/kg, HSNO approval number HSR002422
8	Fishmeal pellets containing 1.0g sodium fluoroacetate/kg, HSNO approval number HSR002423
9	MZP paste containing 15 g/kg zinc phosphide, HSNO approval number HSR100557
10	Bait containing 0.55–1.84% weight for weight (w/w) encapsulated cyanide, HSNO approval number HSR007628
11	Ripper 980, HSNO approval number HSR100350
12	Hydrofluoric acid, >1–7% aqueous solution, HSNO approval number HSR001589
13	Gas containing 20g/kg phosphine, HSNO approval number HSR001632
14	Liquid containing 1153g/litre 1,3-dichloropropene, HSNO approval number HSR001639

**Table 3**  
**Hazardous substances that do not require tracking**

rr 19.1, 19.3

Item	Substance
1	Capsule containing 400–500 g/kg monensin sodium, HSNO approval number HSR002017
2	Liquid containing 50–70 g/L monensin sodium, HSNO approval number HSR002315
3	Solid containing 100–250 g/kg monensin sodium, HSNO approval number HSR002317
4	Solid containing 100–150 g/kg narasin, HSNO approval number HSR002021
5	Solid containing 75–95 g/kg narasin and 75–95 g/kg nicarbazin, HSNO approval number HSR002035
6	Solid containing 10–15% selenium and compounds, HSNO approval number HSR002377
7	OZ Foam Marine/Sika Boom, HSNO approval number HSR007613
8	Zinc powder pyrophoric, HSNO approval number HSR001477
9	VBPOC, HSNO approval number HSR000023

<b>Item</b>	<b>Substance</b>
10	Petrol-ethanol blends containing 1–10% ethanol by volume, HSNO approval number HSR000073
11	Petrol (unleaded), HSNO approval number HRC000003
12	Aviation gasoline and racing gasoline, HSNO approval number HSR001442
13	Max CI, HSNO approval number HSR000092
14	Interline 984 Part B, HSNO approval number HSR000127
15	2-Propenoic acid, 2-methyl-, 2-propenyl ester, HSNO approval number HSR001394
16	Cobra, HSNO approval number HSR001672
17	FM003NC, HSNO approval number HSR002429
18	Iminoctadine, HSNO approval number HSR005098
19	Climax, HSNO approval number HSR007625
20	TNL2165, HSNO approval number HSR007654
21	TCNZ807, HSNO approval number HSR007841
22	E85, HSNO approval number HSR008039
23	CBPTT-99, HSNO approval number HSR100010
24	Rumensin Max, HSNO approval number HSR100500
25	QANZ1201, HSNO approval number HSR100701
26	Oxirane (chloromethyl), HSNO approval number HSR000977:
27	Zinc powder or zinc dust, PG I, HSNO approval number HSR001301
28	Hydrobromic acid, 47-60% aqueous solution, HSNO approval number HSR001556
29	Hydrochloric acid, >25% aqueous solution, HSNO approval number HSR001557
30	Hydriodic acid, 57-67% aqueous solution, HSNO approval number HSR001560
31	A solid containing 900–1 000 g/kg alphachloralose (HSNO approval number HSR007750) mixed with food bait if—
	(a) the food bait is bread, cereal, or peas; and
	(b) after mixing or application—
	(i) the amount of alphachloralose in the food bait does not exceed 100g of alphachloralose per kg on average for each batch of food bait; and
	(ii) the alphachloralose-containing bait is used within 24 hours of being prepared
32	A class 6.1B substance that is imported or manufactured for use as a veterinary medicine to which the Veterinary Medicine (Limited Pack Size, Finished Dose) Group Standard 2012 applies, HSNO approval number HSR100757
33	A class 6.1B substance that is imported or manufactured for use as a veterinary medicine and administered using a non-dispersive closed system application method specified in the Veterinary Medicines (Non-dispersive Closed System Application) Group Standard 2012, HSNO approval number HSR100758

Compare: SR 2001/120 Schedule 1

## Schedule 27

### Information to be included in record of tracked substance

r 19.4

#### Identity of competent person

- 1 The identity of a competent person who is in control of the tracked substance, including—
  - (a) the name of the person; and
  - (b) the position of the person within his or her organisation; and
  - (c) the physical address of that person's workplace; and
  - (d) (if applicable) the hazard classifications of, and each phase of the life cycle of, those substances for which that person has a compliance certificate as a certified handler and the date on which that compliance certificate lapses or must be renewed.

#### Substance information

- 2 The product name or chemical name of the tracked substance.
- 3 The total amount of the tracked substance that the competent person is in control of at any one time.

#### Location of tracked substance

- 4 The location of the tracked substance, with sufficient particularity to enable an inspector to—
  - (a) identify the exact location of the substance within 2 minutes of having obtained the record; and
  - (b) physically locate the substance or its container at the place described in the record within 1 hour of arriving at the place or within the time specified in any emergency response plan required under Part 5, whichever is the shorter.

#### Transfer to another place

- 5 If a tracked substance is transferred to another workplace in accordance with regulation 19.7,—
  - (a) the product name or chemical name of the substance transferred; and
  - (b) the identity and address of the PCBU with management and control of the workplace to which the tracked substance is transferred; and
  - (c) the date on which the transfer occurred.

#### Disposal of tracked substance

- 6 If a tracked substance has been disposed of,—
  - (a) the manner of the disposal; and

- (b) the date on which the disposal occurred; and
- (c) the amount of the substance disposed of; and
- (d) the location where the substance was disposed of.

**Unique identifier for container containing certain vertebrate toxic agents**

- 7 In the case of a vertebrate toxic agent containing any of the following active ingredients, the unique identifier of the container that contains the agent:
- (a) zinc phosphide (MZP):
  - (b) para-aminopropiophenone (PAPP):
  - (c) potassium cyanide:
  - (d) sodium cyanide:
  - (e) sodium fluoroacetate:
  - (f) yellow phosphorus:
  - (g) any other active ingredient specified in a relevant safe work instrument.

Compare: SR 2001/120 Schedule 2

Michael Webster,  
Clerk of the Executive Council.

**Explanatory note**

*This note is not part of the regulations, but is intended to indicate their general effect.*

These regulations, which for the most part come into force on 1 December 2017, prescribe matters relating to the storage, handling, and use of hazardous substances in the workplace. They are made under the Health and Safety at Work Act 2015 (**the Act**). A hazardous substance is not necessarily any substance that is hazardous in any way to human beings: it is a category of known substances with known hazardous properties (including substances that become known over time). The category of hazardous substances is based on the category used in the regime established by the Hazardous Substances and New Organisms Act 1996 (**the HSNO Act**) and administered by the Environment Protection Authority (**the EPA**). In addition, these regulations contain provisions that regulate the use of gases under pressure: many of these gases are hazardous substances, but not all, because a gas under pressure presents a distinct hazard. For the most part, provisions of the regulations impose duties on a relevant person conducting a business or undertaking (a **PCBU**), provide that a contravention of a duty is an offence, and specify penalties for contravention. Several provisions set out exceptions or qualifications to the duty. Further, several provisions impose an alternative requirement of compliance with a relevant safe work instrument (a **SWI**) approved under section 227 of the Act.

*Regulation 1* states the Title of the regulations as the Health and Safety at Work (Hazardous Substances) Regulations 2017.

*Regulation 2* establishes the commencement scheme for the regulations:

- most of the regulations come into force on 1 December 2017. However, some provisions come into force at a later time, while a few come into force earlier.
- *regulation 15.52* and a number of provisions that support that regulation (approval of test stations under Part 15), come into force on 1 September 2017.
- *regulation 4.3* (competency requirements for certified handlers) and *regulations 13.26 and 13.27* (storage of class 6 and 8 substances at locations other than hazardous substance locations) come into force on 1 June 2018.
- *regulation 1.4* (hazardous waste) and *regulations 13.34 to 13.37* (storage of certain class 6 or 8 substances at hazardous substance locations) come into force on 1 June 2019.
- *regulation 13.38* (compliance certificate for hazardous substances location) comes into force on 1 December 2019.

*Regulations 3, 4, and 6 to 10* are concerned with interpretation:

- definitions provided by *regulation 3* include container, cylinder, explosive, firework, fumigant, gas container, gas under pressure, handle, hazard classification, hazardous substance location, ignition source, liquid, solid, stationary container system, stationary tank, tank, tank wagon, vapour, and likely to be present (in relation to a substance at workplace).
- the meaning of hazardous substance in *regulation 4* is linked to the scheme under the HSNO Act; and food, medicine, and psychoactive substances are excluded.
- explanations are provided for the classification of hazardous substances and for references to quantities, distances, and standards.

*Regulation 5* activates *Schedule 1*, which contains transitional provisions.

*Regulations 11 and 12* explain the meaning and operation of references to safe work instruments in specific provisions of the regulations. The SWIs referred to may modify a requirement in the referring provision or require compliance with the SWI itself: in either case, a failure to comply is an offence under the referring provision. SWIs may prescribe standards.

*Regulations 1 to 12* (except *regulation 5*) come into force on 1 September 2017.

## **Part 1**

### **Application**

*Part 1* contains provisions relating to the application of these regulations.

*Regulations 1.1 to 1.3* provide for the application of these regulations in relation to the Armed Forces:

- if the Chief of Defence Force issues a Defence Force Order regulating the management of hazardous substances, the Defence Force must comply with that order; and a failure to comply, in relation to a person other than a member of the Armed Forces, is an offence.
- for the purposes of section 213(4) of the Act, these provisions are included because operational activities of the Armed Forces often use, rely on, and adhere to different systems and standards to manage risk associated with operational work involving hazardous substances: for example, NATO or other international military standards for plant, equipment, tank wagons, or storage facilities. Defence Force Orders relating to hazardous substances controlled by the Armed Forces provide for alternative controls to apply, while still providing the necessary level of assurance that hazardous substances are being safely managed.

*Regulation 1.4* provides that the regulations apply to the use, handling, and storage of hazardous waste. However, *regulation 2* provides that this application does not take effect until 1 June 2019.

*Regulations 1.5 to 1.12* provide for the non-application or limited application of the regulations to certain matters:

- the regulations do not apply to hazardous substances being used as fuel for a vehicle, ship, or aircraft; offshore petroleum installations within the meaning of the Health and Safety at Work (Petroleum Exploration and Extraction) Regulations 2016; fuel gas in a distribution system, gas installation, or gas appliance (within the meaning of the Gas Act 1992) or in a pipeline (within the meaning of the Health and Safety in Employment (Pipelines) Regulations 1999).
- the regulations have limited application to the transportation of hazardous substances by land, sea, or air; to ethanol dilutions; and to laboratories; and provide for the issue of permits by WorkSafe to regulate the transshipment of class 1 hazardous substances through New Zealand.
- the regulations also have limited application to gases under pressure. Further, if a provision applies to a gas under pressure, it applies whether or not the gas is a hazardous substance.

## Part 2

### Labelling, signage, safety data sheets, and packaging

*Regulations 2.1 to 2.4* require a PCBU with management or control of a workplace to ensure that a container in the workplace is properly labelled. These provisions include exceptions and also different requirements for stationary tanks, process containers, and transportable containers.

*Regulations 2.5 to 2.10* apply to specified quantities of specified classes of hazardous substances. They provide for the location and content of information and warning signs that must be placed by a PCBU with management or control of a workplace.

Different signage is required for transit depots and milking premises and additional signage is required for fireworks and safety ammunition.

*Regulation 2.11* requires the PCBU to obtain a current safety data sheet for hazardous substances at the workplace and to ensure that key information from the sheet is available to workers.

*Regulations 2.12 to 2.14* require the PCBU to ensure that hazardous substances are in appropriate containers or, if decanted, appropriately packaged. There is a separate duty relating to decanted petrol, aviation gasoline, and racing gasoline.

### **Part 3**

#### **General duties relating to risk management**

*Regulations 3.1 to 3.3* impose general duties on PCBUs in relation to hazardous substances at the workplace, including a duty to prepare an inventory of hazardous substances used, handled, manufactured, or stored at the workplace, a duty to manage risks associated with the hazardous substances, and a duty to review control measures.

### **Part 4**

#### **Certified handlers and supervision and training of workers**

*Regulations 4.1 to 4.4* provide a scheme for the issue of compliance certificates for certified handlers of hazardous substances, including circumstances where a compliance certificate as a certified handler is required or is not required, the status of the compliance certificate as an authorisation for the purposes of section 206 of the Act, competency requirements, and decision criteria.

- *regulation 4.3* (competency requirements for certified handlers) comes into force on 1 June 2018.

*Regulations 4.5 and 4.6* impose on PCBUs duties relating to the provision of information, training, and instruction to workers who work with hazardous substances and a duty relating to supervision of all workers at the workplace. These duties are additional to those set out in regulation 9 of the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016.

### **Part 5**

#### **Emergency management**

*Regulation 5.1* provides that Part 5 does not apply to certain quantities of anhydrous ammonia that is used as a refrigerant in plant.

#### **Subpart 1—Fire extinguishers**

*Regulations 5.2 to 5.5* apply to a workplace where specified quantities of specified hazardous substances are present (*see Schedule 4*) and require PCBUs to ensure that



the workplace has sufficient fire extinguishers. The requirements cover the number, location, and capability of fire extinguishers.

### Subpart 2—Emergency response plans

*Clauses 5.6 to 5.13* apply to workplaces where specified quantities of specified hazardous substances are present (*see Schedule 5*) and require the PCBU to prepare an emergency response plan for the workplace. Circumstances in which these provisions do not apply are set out.

## Part 6

### Compliance certification

*Part 6* provides for 2 aspects of compliance certification: the authorisation of compliance certifiers (and the audit of those certifiers) and the administration of compliance certificates.

*Regulation 6.1* contains definitions for *Part 6*.

#### Subpart 1—Authorisation of compliance certifiers

*Regulations 6.2 to 6.4* require compliance certifiers to be certified, and provides for who may apply for authorisation (both individuals and others).

*Regulations 6.5 to 6.14* provide for the process of authorisation: the application, qualifications and fit and proper person criteria, the authorisation decision (including the term of authorisation), the registry of authorised compliance certifiers, and variation and renewal of authorisation.

*Regulations 6.15 to 6.20* provide the disciplinary scheme for authorised compliance certifiers, including investigations by WorkSafe, interim suspension of authorisation during investigation, investigation reports, and decisions about authorisation (reinstatement, variation, suspension, or cancellation).

*Regulation 6.21* allows WorkSafe to engage authorised compliance certifiers.

#### Subpart 2—Issue of compliance certificates

*Regulation 6.22* imposes restrictions on when an authorised compliance certifier may issue a compliance certificate. For example, the certifier must not issue a certificate if the certifier has been responsible for, or has had a financial interest in, the design, planning, or construction of the hazardous substance or other matter to be certified; or if the certifier has trained or supervised the person to be certified as a certified handler.

*Regulation 6.23* enables an authorised compliance certifier to issue a compliance certificate if satisfied that relevant requirements have been met.

*Regulation 6.24* also enables a certifier to issue a conditional compliance certificate for a hazardous substance location if satisfied that any failure to meet relevant re-

quirements is minor. A conditional compliance certificate lasts for 15 working days, after which it expires or is made non-conditional.

*Regulations 6.25 to 6.28* provide for administrative matters: the term of a compliance certificate (as specified in the certificate), variation of a certificate, the registry of compliance certificates, and the duty of a PCBU to give a health and safety representative information about compliance certificates that relate to the workplace.

*Regulations 6.29 to 6.33* provide the disciplinary scheme for holders of compliance certificates: including investigations by WorkSafe, interim suspension of a certificate during investigation, investigation reports, and decisions about authorisation (reinstatement or cancellation).

*Regulation 6.34* enables WorkSafe to exempt a person, under section 220 of the Act, from a requirement to hold a compliance certificate.

*Regulation 6.35* provides for rights to appeal against decisions made under this subpart and *subpart 1*.

### Subpart 3—Audit of compliance certifiers and performance standards

*Regulation 6.36* sets out the purpose of this subpart.

*Regulations 6.37 to 6.41* provide for the audit of authorised compliance certifiers by auditors engaged by WorkSafe, including the powers of auditors to require information from a certifier and to disclose that information to WorkSafe.

*Regulations 6.42 to 6.45* enables WorkSafe to issue and publish performance standards with which authorised compliance certifiers must comply.

## **Part 7 Controlled substance licences**

*Part 7* prescribes the scheme for applying for, granting, suspending, cancelling, and registering controlled substance licences for individuals.

*Regulations 7.1 and 7.2* set out the application requirements and the criteria for a fit and proper person to possess a hazardous substance. Expiry of the controlled substance licence is addressed in *regulation 7.3*. *Regulations 7.4 to 7.8* regulate suspension, investigation, and cancellation of a controlled substance licence. *Regulation 7.9* exempts certain individuals from the requirement to hold a controlled substance licence to carry out their official duties. *Regulation 7.10* prescribes the right to appeal to the District Court against certain decisions. *Regulation 7.11* addresses the matter of a replacement licence document if the licence document is lost, stolen, or destroyed.

*Regulations 7.12 and 7.13* require WorkSafe to maintain a register of holders of controlled substance licences.

The actual requirement to have a controlled substance licence is imposed in other Parts. *See, for example, regulations 9.5, 9.6, 9.8, 13.12, 13.13, and 14.6.*

## Part 8

### Controls applying to all class 1 to 5 substances

*Regulations 8.1 and 8.2* provide for the renewal of compliance certificates that are required under *Parts 9, 10, 11, and 12* for hazardous substance locations.

*Regulations 8.3 and 8.4* regulate the carrying of class 1 to 5 substances on passenger service vehicles.

*Regulations 8.5 to 8.7* provide for exemptions for tactical policing, explosives detector dogs, and ethanol dilutions.

## Part 9

### Class 1 substances

*Part 9* imposes requirements relating to class 1 substances, including fireworks.

*Regulations 9.1 and 9.2* cover preliminary matters, including definitions. Expressions defined include firework, indoor pyrotechnics and outdoor pyrotechnics, discharge area, exclusion zone, and article.

#### Subpart 1—Controls on class 1 substances

*Subpart 1 (regulations 9.3 to 9.21)* imposes general requirements for the control of class 1 substances. This includes controls relating to—

- circumstances in which substances must be under the control of a certified handler:
- circumstances in which a controlled substance licence is required:
- the display of class 1 substances for sale:
- the location of class 1 substances at a workplace:
- the protection of class 1 substances from certain hazards, including impact or pressure shock, heat, and electricity:
- the segregation and secure containment of class 1 substances:
- exceptions and variations, including modifications that can be made by safe work instruments.

#### Subpart 2—Hazardous substance locations

*Subpart 2 (regulations 9.22 to 9.27)* provides for the establishment and management of hazardous substance locations. Requirements include controls relating to—

- when class 1 substances must be kept in a hazardous substance location:
- the necessary features of a hazardous substance location to protect class 1 substances from certain hazards, including heat, combustible substances, electricity, and lightning strikes:
- when a compliance certificate is required for the hazardous substance location:

- the management of the unintended initiation of a class 1 substance in a hazardous substance location.

### Subpart 3—Intended detonation and deflagration of class 1 substances

*Subpart 3 (regulations 9.28 to 9.30)* regulates risks associated with the intended detonation or deflagration of class 1 substances. Requirements include—

- control of the substances by a certified handler:
- the establishment of a designated use zone around the intended detonation or deflagration:
- limitation of access to the site:
- segregation, packaging, and containment of the substances:
- managing certain hazards, including misfires and approaching thunderstorms:
- limiting the quantities of substances on site.

### Subpart 4—Controls on indoor and outdoor pyrotechnic displays

*Subpart 4 (regulations 9.31 to 9.43)* regulates pyrotechnic displays, both outdoor and indoor.

*Regulations 9.31 to 9.39* relate to outdoor pyrotechnic displays using only outdoor pyrotechnics. Controls include requirements relating to—

- control by a certified handler:
- the establishment of a discharge area and an exclusion zone, the necessary features of these areas, and the management of these areas:
- notification (of WorkSafe) and recording of displays:
- compliance certificates for the planning of displays:
- the management of discharge areas and exclusion zones, including management of class 1 substances and access to the areas and the substances, and the protection of class 1 substances from certain hazards (including heat, sparks, and approaching thunderstorms):
- additional controls for firings to heights over 60m.

*Regulations 9.40 and 9.41* impose modified requirements for outdoor pyrotechnic displays using indoor pyrotechnics.

*Regulations 9.42 and 9.43* regulate indoor pyrotechnic displays. These requirements are a modified version of the requirements for outdoor pyrotechnic displays. Further,—

- only indoor pyrotechnics may be used and, as with outdoor displays, a certified handler must be in control of the substances:
- only authorised display operators may be near the substances:
- precautions include a plan and equipment to control incidents.

## Subpart 5—Transfer and transportation of class 1 substances

*Subpart 5 (regulations 9.44 to 9.51)* regulates the transfer and transportation of class 1 substances.

*Regulations 9.44 to 9.47* relate to transfer. Transfer controls include requirements relating to—

- the establishment of a designated transfer zone, and the signage and other features of a designated transfer zone:
- control by a certified handler:
- management of the transfer of class 1 substances within a designated transfer zone, including limits on the quantity of class 1 substances, the speed of transfer, protection of the substances from approaching thunderstorms, control of persons, and documented procedures:
- emergency management.

*Regulations 9.48 to 9.51* relate to transportation. Transportation controls include requirements relating to—

- control by a certified handler:
- security of substances from unauthorised access:
- limits on the quantity of substances to be transported:
- management of transportation vehicles, including separation distances:
- management of interruptions of journeys:
- exemptions.

## Part 10

### Class 2, 3, and 4 substances

*Part 10* imposes requirements relating to class 2, 3, and 4 substances.

*Regulation 10.1* defines expressions used in the Part. *Regulation 10.2* provides that *Part 10* does not apply to anhydrous ammonia that is contained in plant in which anhydrous ammonia is used as a refrigerant. *Regulation 10.3* imposes general controls by specifying when class 2, 3, and 4 substances must be held at a hazardous substance location or at a transit depot. *Regulation 10.4* specifies the quantity of substances that must be secured. *Regulation 10.5* imposes a requirement to segregate a class 2, 3, or 4 substance from any substance or material with which it is incompatible.

## Subpart 1—Controls on class 2.1.1, 2.1.2, and 3.1 substances

*Subpart 1 (regulations 10.6 to 10.20)* imposes requirements for the control of class 2.1.1, 2.1.2, and 3.1 substances relating to—

- the establishment of a hazardous area and the application of other legislation to electrical systems located in a hazardous area:

- reducing the likelihood of unintended ignition of class 2.1.1, 2.1.2, and 3.1 substances and how to manage the likelihood of unintended ignition in different circumstances:
- the management of LPG, propane, butane, or isobutane that is located in a workplace or is an integral part of a refrigeration system.

### Subpart 2—Controls on class 3.2 and 4 substances

*Subpart 2 (regulations 10.21 to 10.25)* imposes requirements for the control of class 3.2 and 4 substances, relating to—

- limits on exposure of the substance to ignition sources:
- limits on the temperature of the substance:
- reducing the likelihood of unintended ignition of the substance.

### Subpart 3—Controls on hazardous substance locations and transit depots where class 2, 3, or 4 substances present

*Subpart 3 (regulations 10.26 to 10.37)* provides controls on hazardous substance locations and transit depots where class 2, 3, or 4 substances are present.

*Regulations 10.26 to 10.29* provide for—

- the establishment of hazardous substance locations for class 2, 3, and 4 substances:
- reducing the likelihood of unintended ignition of a class 3.2 or 4 substance at a hazardous substance location:
- the control of adverse effects of unintended ignition of a class 3.2 or 4 substance at a hazardous substance location.

*Regulations 10.30 to 10.33* address secondary containment for class 3 and 4 pooling substances by—

- requiring a secondary containment system for particular quantities of pooling substances:
- regulating the capacity of the system if the pooling substances are held in surface containers.

*Regulations 10.34 to 10.36* impose compliance certificate requirements for hazardous substance locations.

*Regulation 10.37* regulates transit depots where class 2, 3, or 4 substances are present.

## Part 11

### Controls relating to adverse effects of unintended ignition of class 2 and 3.1 substances

*Part 11* imposes requirements relating to the adverse effects of unintended ignition of class 2 and 3.1 substances.

*Regulation 11.1* defines expressions used in the Part. *Regulation 11.2* provides that *Part 11* does not apply to anhydrous ammonia that is contained in plant in which anhydrous ammonia is used as a refrigerant. *Regulation 11.3* imposes a duty on a PCBU with management or control of work using a hazardous substance to which *Part 11* applies to ensure that the adverse effects of an unintended ignition are controlled in accordance with the Part.

#### Subpart 1—Separation requirements for class 2.1.1, 2.1.2, and 3.1 substances not located at hazardous substance location

*Subpart 1 (regulations 11.4 to 11.17)* imposes separation requirements for class 2.1.1, 2.1.2, and 3.1 substances that are not located at a hazardous substance location. The requirements relate to—

- the separation of class 2.1.1 permanent gases, class 2.1.1 liquefiable gases, and class 3.1 substances from a protected place and a public place:
- the separation of class 2.1.2 flammable aerosols and cartridges of LPG, butane, propane, and isobutane from a protected place:
- the repairs and servicing of tank wagons:
- the holding of certain packages or transportable containers of class 3.1 substances in a type of building or external storage area known as type A, B, C, or D storage:
- the separation of type A, B, C, or D storage from a protected place:
- the storage of packages of class 3.1 substances in a store in a building:
- the separation of a transfer point used to fill a tank wagon with a class 3.1 substance from a protected place:
- the holding of class 3.1 substances that are being used or are being contained in 1 or more open packages or containers in a type 1 workroom, type 2 workroom, type 3 workroom, or a paint-mixing room:
- the separation of a type 1 workroom, type 2 workroom, type 3 workroom, or a paint-mixing room from a protected place.

#### Subpart 2—Separation requirements for class 2.1.1, 2.1.2, and 3.1 substances located at hazardous substance location

*Subpart 2 (regulations 11.18 to 11.37)* imposes separation requirements for class 2.1.1, 2.1.2, and 3.1 substances that are present at a workplace at which a hazardous substance location is required. The requirements relate to the same matters addressed

in *subpart 1*, with the exception of the repairs and servicing of tank wagons. *Subpart 2* contains additional requirements for the storage of substances that are available for retail sale.

### Subpart 3—Calculation of separation distances

*Subpart 3 (regulations 11.38 to 11.40)* provides for—

- the calculation of separation distances for intermediate capacities or intermediate quantities:
- the approval of safe work instruments in relation to separation distances or other matters in *subpart 1 or 2*:
- an application for an exemption under the Act from the required separation distances or other matters of *subparts 1 and 2*.

### Subpart 4—Additional controls for LPG, propane, butane, and isobutane

*Subpart 4 (regulations 11.41 to 11.43)* provides for the following additional controls for LPG, propane, butane, and isobutane:

- restrictions on delivery of the substances to a hazardous substance location:
- maximum quantities of the substances that may be stored or used indoors:
- alternative procedures for ongoing compliance checking and validation of controls by a PCBU or a worker who delivers the substances at a hazardous substance location.

## Part 12 Class 5 substances

*Part 12* imposes requirements relating to class 5 substances.

*Regulation 12.1* defines expressions used in the Part.

### Subpart 1—Controls on class 5.1.1 and 5.1.2 substances

*Subpart 1 (regulations 12.2 to 12.7)* imposes requirements for the control of class 5.1.1 and 5.1.2 substances, relating to—

- the circumstances in which substances must be held at a hazardous substance location or at a transit depot:
- the quantity of substances that must be secured:
- alternative means of meeting a requirement in *subpart 2* for a wall to have a particular fire-resistance rating:
- reducing the likelihood of unintended combustion or explosion of the substances:
- the use of personal protective equipment:
- the absorption, dilution, or recovery of spilled or leaked class 5.1.1 substances:



- the disposal of class 5.1.1 substances, absorbents, or personal protective equipment.

### Subpart 2—Controls on workplace where class 5.1.1 and 5.1.2 substances present

*Subpart 2 (regulations 12.8 to 12.20)* imposes controls on workplaces where class 5.1.1 and 5.1.2 substances are present.

*Regulations 12.8 to 12.12* provide for—

- the establishment and management of a hazardous substance location where the substances are present and additional requirements for places where the substances are manufactured or used;
- the requirements for personal protective equipment where contact with incompatible substances or ignition sources, or exposure to certain temperatures, is intended or anticipated;
- the establishment of a controlled zone around the hazardous substance location.

*Regulations 12.13 to 12.16* address secondary containment for class 5.1.1 pooling substances by—

- requiring a secondary containment system for particular quantities of pooling substances;
- regulating the capacity of the system if the pooling substances are held in surface containers.

*Regulations 12.17 to 12.19* impose compliance certificate requirements for hazardous substance locations containing certain quantities of class 5.1.1 or 5.1.2 substances.

*Regulation 12.20* regulates transit depots where class 5.1.1 or 5.1.2 substances are present.

### Subpart 3—Controls on class 5.2 substances

*Subpart 3 (regulations 12.21 to 12.46)* imposes controls on class 5.2 substances (*regulations 12.23 to 12.33*) and on workplaces where class 5.2 substances may be present (*regulations 12.34 to 12.46*).

*Regulation 12.21* provides an overview of *subpart 3* and *regulation 12.22* defines expressions used in the subpart. For example, the definitions of compatible and incompatible are different for class 5.2 substances than for class 5.1 substances referred to elsewhere in the Part. *Regulation 12.23* regulates the circumstances in which class 5.2 substances must be held at a hazardous substance location or at a transit depot. *Regulation 12.24* sets the quantity of substances that must be secured. *Regulation 12.25* provides alternative means to satisfy a requirement in *subpart 3* for a wall to have a particular fire-resistance rating.

*Regulations 12.26 to 12.31* provide further general controls on class 5.2 substances, including—

- the separation of the substances from incompatible substances or materials:
- the separation of the substances from an ignition source:
- the limits on the temperature of the substances:
- the requirement to ensure the substances are not subject to any impact or pressure shock that could result in an explosion or a fire:
- the use of personal protective equipment:
- the absorption, dilution, or recovery of spilled or leaked substances:
- the disposal of substances, absorbents, and personal protective equipment.

*Regulations 12.32 and 12.33—*

- regulate the keeping of class 5.2 substances in containers:
- prohibit the transport of class 5.2A substances on a public road or railway.

*Regulations 12.34 to 12.37 provide for—*

- the establishment and management of a hazardous substance location where class 5.2 substances are present and additional requirements in places where the substances are manufactured or used:
- the establishment of a controlled zone around the hazardous substance location.

*Regulations 12.38 to 12.41 address secondary containment for class 5.2 pooling substances by—*

- requiring a secondary containment system for particular quantities of pooling substances:
- regulating the capacity of the system if the pooling substances are held in surface containers.

*Regulations 12.42 to 12.45 impose compliance certificate requirements for hazardous substance locations containing certain quantities of class 5.2 substances.*

*Regulation 12.46 regulates transit depots where class 5.2 substances are present.*

## **Part 13**

### **Class 6 and 8 substances**

*Part 13 imposes requirements relating to class 6 and 8 substances.*

*Regulation 13.1 defines expressions used in the Part. Regulation 13.2 provides that Part 13 does not apply to anhydrous ammonia that is contained in plant in which anhydrous ammonia is used as a refrigerant. Regulation 13.3 requires a record to be kept of the application of certain class 6 or 8 substances. The matters to be included in the record are set out in regulation 13.4. Regulations 13.5 and 13.6 impose additional recording and notification requirements when sodium fluoroacetate is present in a workplace and for the importation of sodium fluoroacetate.*

*Regulations 13.7 and 13.8 set requirements for equipment used to handle class 6 or 8 substances and the use of personal protective equipment.*

*Regulations 13.9 to 13.13* impose controls relating to circumstances in which—

- substances must be under the control of a certified handler:
- a controlled substance licence is required.

*Regulations 13.14 to 13.16* impose transport restrictions on certain class 6 or 8 substances.

*Regulation 13.17* prohibits the use of a class 6 substance in a manner that results in a concentration of the substance in an environmental medium that exceeds the tolerable exposure limit set for the medium. *Regulation 13.18* enables a safe work instrument to prescribe an exposure standard for a class 6 substance. Class 6 substances that are also class 1 substances are excluded from both regulations.

*Regulations 13.19 to 13.25* address the application of vertebrate toxic agents, anti-fouling paints, and pesticides.

*Regulations 13.26 and 13.27* set requirements for the storage of class 6 or 8 substances that are not located at a hazardous substance location. These 2 provisions come into force on 1 June 2018.

*Regulation 13.28* regulates transit depots where class 6 or 8 substances are present. This provision comes into force on 1 December 2018.

*Regulation 13.29* imposes segregation requirements on class 6 or 8 substances to ensure that they do not come into contact with incompatible substances or materials.

*Regulations 13.30 to 13.33* address secondary containment for class 6 or 8 pooling substances by—

- requiring a secondary containment system for particular quantities of pooling substances:
- regulating the capacity of the system if the pooling substances are held in surface containers.

*Regulations 13.34 to 13.39* provide for—

- the establishment and management of a hazardous substance location where class 6 or 8 substances are present:
- the requirements for indoor storage cabinets or other stores of substances:
- the compliance certificate requirements for the hazardous substance locations.

*Regulations 13.34 to 13.37* (hazardous substance locations) come into force on 1 June 2019.

*Regulation 13.38* (compliance certificate for hazardous substance location) comes into force on 1 December 2019.

*Regulations 13.40 to 13.45* impose requirements for—

- separation between protected places, public places, and hazardous substance locations holding class 6.1 substances:
- separation between protected places and hazardous substance locations holding class 8.2 substances:

- applications for an exemption from other requirements in the Part:
- equipment, materials, and chemicals for cleaning up spills.

*Regulation 13.46* provides for additional and modified controls for class 6 or 8 substances in safe work instruments to be approved by the Minister.

## **Part 14 Fumigants**

*Part 14* imposes additional requirements in relation to fumigants. As defined in *regulation 3*, a fumigant is a class 6.1A, 6.1B, or 6.1C hazardous substance that is created for the purpose of fumigation or used for fumigation. Fumigation means the use of a fumigant in its gaseous state for the purpose of destroying rodents, pests, other plant or animal organisms, or fungi.

*Regulation 14.1* outlines that the controls in *Part 14* are in addition to the requirements for fumigants in other provisions of these regulations. *Regulation 14.2* defines expressions used in the Part.

### **Subpart 1—Certified handler and controlled substance licence requirements**

*Subpart 1 (regulations 14.3 to 14.6)* imposes controls relating to circumstances in which—

- fumigants must be under the control of a certified handler:
- a controlled substance licence is required.

### **Subpart 2—Notification and signage**

*Subpart 2 (regulations 14.7 to 14.10)* contains notification and signage requirements for fumigation.

### **Subpart 3—Operational requirements**

*Subpart 3 (regulations 14.11 to 14.17)* imposes requirements for—

- fumigation of and in shipping containers:
- fumigation in a fumigation cell:
- supervision of space fumigation:
- supervision of fumigation of ships, commodities on a ship, and aircraft:
- ventilation of a fumigation area:
- completion of fumigation.

### **Subpart 4—Record-keeping requirements**

*Regulation 14.18* requires a record to be kept of the application of a fumigant, in accordance with *regulation 13.4* and, if applicable, *regulation 14.19*.

## Subpart 5—Additional requirements for application of specific fumigants to soil

*Subpart 5 (regulations 14.20 to 14.31)* imposes additional requirements for the application of specific fumigants to soil. Some of the regulations may apply to additional fumigants in the future by way of a safe work instrument.

For Ripper range (30–55% iodomethane and 45–70% chloropicrin) (HSNO approval number HSR100349) and Tri-Form 60 (HSNO approval number HSR100563), the general requirements include—

- the size of the application block:
- the setting of a buffer zone around the perimeter of the application block for each fumigation:
- entry restrictions in an application block and a buffer zone:
- the timing and atmospheric and soil conditions, depending on the fumigant:
- the sealing of soil after fumigation.

For CytecGas 01 (HSNO approval number HSR007629), there are specific requirements for both the fumigation and a fumigation management plan.

## Subpart 6—Further requirements for uses of methyl bromide

*Subpart 6 (regulations 14.32 to 14.43)* imposes requirements for using methyl bromide, which are in addition to other requirements applicable to the use of methyl bromide in *Part 14*, *Part 13*, and other provisions of these regulations.

*Regulation 14.32* defines expressions used in this subpart.

*Regulations 14.33 to 14.40* impose additional requirements for the quarantine or pre-shipment uses of methyl bromide. Controls include—

- the application of methyl bromide only into an enclosed space:
- a requirement to secure the place where fumigation is carried out:
- record-keeping and monitoring requirements:
- the setting of a minimum buffer zone in which no member of the public is present:
- prohibiting the use of methyl bromide in a manner that results in a concentration of the substance in air at the boundary of the buffer zone that exceeds the tolerable exposure limit set for methyl bromide:
- requirements if sheets are used.

*Regulations 14.41 to 14.43* impose additional requirements for soil fumigation for potato wart using methyl bromide. Controls include—

- the application of methyl bromide by or under the direct supervision of an authorised person under the Biosecurity Act 1993:
- the use of sheets:

- a requirement to evacuate every residential property that is within 25 m of the site to be fumigated.

## **Part 15**

### **Gases under pressure**

*Part 15* imposes requirements relating to gases under pressure. It is divided into 9 subparts.

*Regulation 15.1* defines expressions used in the Part. This provision comes into force on 1 September 2017.

*Regulations 15.2 and 15.3* set out the application of *Part 15*, including exceptions to the application of the Part. *Regulation 15.3* also sets out specific rules relating to UN Model Regulations cylinders.

#### **Subpart 1—Reference temperatures and compatibility**

*Subpart 1 (regulations 15.4 and 15.5)* sets out general pressure and compatibility requirements for gas containers.

#### **Subpart 2—Refillable cylinders**

*Subpart 2 (regulations 15.6 to 15.20)* prescribes requirements for refillable cylinders or any gas container that is required by a safe work instrument to comply with the subpart. Requirements include those relating to—

- the use and supply of cylinders:
- the design, manufacture, and importation of cylinders and fittings:
- design verification certificates, compliance certificates, and pre-commissioning certificates.

#### **Subpart 3—Low-pressure fire extinguishers**

*Subpart 3 (regulations 15.21 to 15.24)* imposes additional requirements for low-pressure fire extinguishers relating to fire extinguisher registration numbers, design standard compliance, and manufacturing requirements.

#### **Subpart 4—Aerosol dispensers and other non-refillable gas containers**

*Subpart 4 (regulations 15.25 and 15.26)* provides for restrictions on the import, manufacture, and supply of aerosol dispensers and non-refillable gas containers.

#### **Subpart 5—Cylinder fittings**

*Subpart 5 (regulations 15.27 to 15.39)* sets out requirements relating to different types of cylinder fittings.

### Subpart 6—Labelling and marking

*Subpart 6 (regulations 15.40 to 15.51)* deals with marking requirements for gas containers and fittings.

### Subpart 7—Testing of cylinders and fittings

*Subpart 7 (regulations 15.52 to 15.60)* sets out an authorisation scheme, as well as requirements, for test stations, who are responsible for inspecting and testing cylinders and issuing test reports. The subpart also includes requirements relating to—

- the functions of WorkSafe in relation to those test stations:
- restrictions on charging cylinders:
- consequences for cylinders that fail a periodic test:
- the marking of refillable cylinders and fire extinguishers.

*Regulation 15.52* comes into force on 1 September 2017.

### Subpart 8—Charging gas containers and tank wagons, and cylinder repairs

*Subpart 8 (regulations 15.61 to 15.80)* specifies requirements relating to—

- the charging and recharging of specified gas containers and tank wagons:
- approved fillers and compliance certificates for approved fillers:
- the location and size of containers for the supply of LPG:
- the repair of cylinders.

### Subpart 9—Records, recalls, withdrawals, and modifying list of design standards

*Subpart 9 (regulations 15.81 to 15.86)* imposes requirements relating to—

- WorkSafe keeping and publishing, or making available, records of designs and design standards for cylinders and fittings:
- recalls of gas containers and fittings:
- withdrawals of design verification certificates for gas containers and of compliance certificates for fittings.

It also provides that a safe work instrument may modify the list of design standards for gas containers (that are set out in *Schedule 21*).

## Part 16

### Tank wagons and transportable containers

*Part 16* imposes requirements relating to tank wagons and transportable containers. It is divided into 8 subparts.

*Regulation 16.1* sets out interpretive provisions.

*Regulation 16.2* sets out the application of *Part 16*, including exceptions to the application of the Part for certain tank wagons.

### Subpart 1—General requirements for tank wagons

*Subpart 1 (regulations 16.3 to 16.5)* sets out general compatibility and marking requirements for tank wagons.

### Subpart 2—Design, construction, and installation requirements for large tank wagons with capacity of at least 2 000 L

*Subpart 2 (regulations 16.6 to 16.17)* imposes design, construction, installation, and operation requirements for tank wagons with a capacity of at least 2 000 L, including requirements relating to—

- stress, pressure, fatigue, corrosion resistance, and impact resistance:
- compartment size:
- emergency preparedness:
- the transfer of liquids or gases:
- the attachment of a tank to the chassis of a tank wagon:
- minimising risks of ignition for tank wagons that carry class 2.1.1, 3, and 4 substances.

### Subpart 3—Requirements for large road tank wagons with capacity of at least 2 000 L

*Subpart 3 (regulations 16.18 to 16.23)* imposes design, construction, installation, and operation requirements for road tank wagons with a capacity of at least 2 000 L, including requirements relating to—

- fuel systems and fuel tanks of tank wagons:
- stability and manoeuvrability:
- longitudinal surging:
- collision and run-under protection.

### Subpart 4—Requirements for smaller road tank trailers with capacity of less than 2 000 L that carry liquids

*Subpart 4 (regulations 16.24 to 16.28)* imposes design, construction, installation, and operation requirements for road tank trailers with a capacity of less than 2 000 L that carry liquids, including specific requirements relating to impact resistance and run-under protection.



### Subpart 5—Transportable containers

*Subpart 5 (regulations 16.29 and 16.30)* imposes requirements for transportable containers. It also sets out which controls a safe work instrument may provide for, modify, or specify in relation to transportable containers.

### Subpart 6—Compliance certification

*Subpart 6 (regulations 16.31 to 16.37)* sets out requirements respecting compliance certification for tank wagons and transportable containers, and includes requirements for tank wagon fabricators as well as record-keeping.

### Subpart 7—Operating requirements

*Subpart 7 (regulations 16.38 to 16.45)* provides for additional safety controls for specified tank wagons, such as controls relating to—

- the carriage of hazardous substances in tank wagons:
- the filling of tank wagons with liquid hazardous substances:
- the transfer of liquids or gases to or from a tank wagon:
- tank wagons that are left unattended:
- fire extinguishers and fire-fighting facilities and equipment for specified tank wagons:
- access to a tank wagon.

### Subpart 8—Additional and modified requirements

*Subpart 8 (regulation 16.46)* describes the controls that may be specified in a safe work instrument for tank wagons.

## Part 17

### Stationary container systems

*Part 17* imposes duties in relation to stationary container systems. Duties are generally imposed on a relevant PCBU, as defined. Several provisions include exceptions and provide for compliance with alternative requirements in a safe work instrument.

*Regulation 17.1* provides for the application of *Part 17*. Subject to stated exceptions, the Part applies to every stationary container system in a workplace that contains, or is intended to contain, a hazardous substance. Exceptions include certain small stationary tanks, process containers regulated by the Health and Safety in Employment (Pressure Equipment, Cranes, and Passenger Ropeways) Regulations 1999, and hazardous substances in solid form. When *Part 17* applies to a stationary container system, it applies from the point of entry to the point of exit to, for example, a vehicle, ship, or aircraft (whether its fuel system or a container for transport), a distribution system under the Gas Act 1992, or a pipeline under the Health and Safety in Employment (Pipelines) Regulations 1999.

*Regulation 17.2* provides definitions, including for below ground stationary tank, equipment, fitting, and relevant PCBU. A relevant PCBU is a PCBU who has the ability to control or influence a matter (or who would have that ability but for a contrary agreement or arrangement). There may be occasions when more than 1 PCBU must comply with a duty imposed on a relevant PCBU.

*Regulation 17.3* provides that compliance with *Part 17* is to be determined having regard not only to reasonable practicability but also to accepted engineering principles and practice.

### Subpart 1—General requirements for stationary container systems

*Regulations 17.4 and 17.5* require relevant PCBUs to ensure that stationary container systems are designed, constructed, installed, operated, maintained, inspected, tested, and repaired so that hazardous substances can be contained in the system without leakage. Duties are focused on all parts of the system, as well as the system generally, on all likely operating temperatures, pressures, stresses and loadings, and environmental conditions, and on changes to the hazardous substances contained.

*Regulations 17.6 to 17.12* impose duties relating to above ground stationary tanks used to contain hazardous liquids, including duties in relation to—

- the design, construction, installation, and operation of those tanks, including when used for pressure management:
- lightning protection, and the earthing and bonding, of the tanks:
- the filling of the tanks.

### Subpart 2—Above ground stationary tanks for gases

*Regulations 17.13 to 17.16* impose duties relating to the design, construction, installation, and operation of above ground stationary tanks used to contain gases, including when used for pressure management.

### Subpart 3—Separation of above ground stationary tanks

*Regulations 17.17 to 17.29* impose duties relating to the separation of above ground stationary tanks, by distance, location inside or outside a building, building construction, and container capacity and construction. Requirements include—

- distances between tanks containing a class 2.1.1 gas, or a class 3 substance, or a class 5, 6, or 8 substance that is non-flammable from tanks containing the same or different substances:
- secondary containment systems for tanks containing incompatible hazardous substances:
- distances between tank and the transfer point of the stationary container system to which they belong, distances between different transfer points, and distances between a stationary tank and a tank wagon being filled from the stationary tank:

- distance from a protected place or a public place.

#### Subpart 4—Below ground stationary tanks for hazardous liquids

*Regulations 17.30 to 17.35* impose duties in relation to below ground stationary tanks containing hazardous liquids. Requirements include—

- design, construction, and installation of the tanks (and operation, if the stationary container system is used for pressure management):
- filling a tank, including from a tank wagon.

#### Subpart 5—Below ground stationary tanks for gases

*Regulations 17.36 to 17.38* impose duties in relation to below ground stationary tanks containing hazardous liquids, including duties relating to design, construction, and installation of the tanks (and operation, if the stationary container system is used for pressure management).

#### Subpart 6—Disused below ground stationary tanks

*Regulation 17.39* imposes duties relating to the management of disused below ground stationary tanks.

#### Subpart 7—Fire-fighting equipment and facilities

*Regulations 17.40 to 17.42* impose duties in relation to the provision of fire-fighting equipment and facilities. The equipment and facilities must be tested. A PCBU may apply to be exempted from these requirements.

#### Subpart 8—Process containers and equipment

*Regulations 17.43 to 17.46* impose duties in relation to process containers and their associated equipment. Requirements include—

- making process containers and equipment from fire-resistant material:
- precautions against overflow when filling containers.

#### Subpart 9—Dispensers for retail sale of class 2.1.1, 3.1A, 3.1B, and 3.1C substances

*Regulations 17.47 to 17.51* impose duties relating to dispensers for the retail sale of specified substances. These provisions require—

- dispensers to be of a type approved by WorkSafe and provide for the approval of dispenser types on application:
- the keeping and management of a record of approved dispenser types by WorkSafe:
- PCBUs to shut down a dispenser in specified circumstances.

### Subpart 10—Vapourisers

*Regulations 17.52 to 17.56* impose duties relating to vapourisers. These provisions—

- require vapourisers to be of a type approved by WorkSafe and provide for the approval of vapouriser types on application:
- require the keeping and management of a record of approved vapouriser types by WorkSafe:
- impose duties on PCBU's in relation to the design and construction of vapourisers.

### Subpart 11—Installations for burning class 3.1 substance or substance approved by EPA

*Regulations 17.57 to 17.65* provide for stationary container systems that contain specified substances (class 3.1 and other substances approved by EPA) that are to be used as fuel in an internal combustion engine or a burner. Requirements relate to matters, including—

- the location of the stationary container system and various components of the system, including tanks (including service tanks) and transfer points and other fittings:
- the operation of the system:
- the avoidance and management of leakage and the discharge of exhaust fumes:
- the capacity of stationary tanks:
- equipping the system with a means of automatically cutting off the flow of the hazardous substance from a tank:
- the materials from which pipework is made and the installation of pipework:
- the characteristics of a heater that is a part of the system:
- the characteristics of any building or room in which a system or part of a system is located.

### Subpart 12—Burners

*Regulations 17.66 to 17.71* impose duties in relation to burners. These provisions—

- require burners to be of a type approved by WorkSafe and provide for the approval of burner types on application:
- require the keeping and management of a record of approved burner types by WorkSafe:
- impose duties on PCBU's in relation to the installation and operation of burners:
- require WorkSafe to keep a record of burners previously deemed to be not permitted for use under the Hazardous Substances (Dangerous Goods and Scheduled Toxic Substances) Transfer Notice 2004.

### Subpart 13—Pipework

*Regulations 17.72 to 17.74* impose duties in relation to pipework that is part of or attached to a stationary container system. These provisions—

- require pipework to be designed, constructed, installed, operated, inspected, tested, and maintained so that it is suitable for all reasonably foreseeable working pressures, temperatures, and structural stresses:
- impose requirements in relation to specific features of pipework, including transfer lines and transfer points:
- impose additional requirements in relation to transfer lines between a ship and a stationary tank.

### Subpart 14—Fittings

*Regulation 17.75* imposes a duty in relation to the location and installation of valves in relation to pipework that has 1 or more nozzles.

### Subpart 15—Marking and records

*Regulations 17.76 to 17.79* impose duties in relation to the placing and renewal of safety information markings on stationary tanks and on pipework connected to above ground stationary tanks.

*Regulations 17.80 and 17.81* require PCBUs to keep a plan of the workplace premises (showing the location of all buildings, all features of every stationary container system, hazardous substance storage locations, and fire-fighting equipment and facilities) and records that show how *Part 17* is complied with, and to keep the plan and records available for inspection.

### Subpart 16—Repairs, alterations, and maintenance

*Regulations 17.82 to 17.89* impose duties in relation to repair, alterations, maintenance, inspection, and testing of stationary container systems. These provisions—

- apply to above ground and below ground stationary tanks used to contain hazardous liquids:
- apply to process containers and all equipment of a stationary container system:
- describe circumstances in which a compliance certificate for an above ground stationary tank, a below ground stationary tank, or a process container become invalid, including the reconstruction or relocation of the tank or container.

### Subpart 17—Compliance certification

*Regulations 17.90 to 17.98* set out a scheme of requirements for compliance certificates for stationary container systems. These provisions—

- prohibit the filling of specified stationary container systems with a hazardous substance unless the system is certified under this subpart:

- specify the matters in relation to which compliance must be certified and the matters that must be stated in a certificate:
- specify the period of validity of a compliance certificate:
- provide separately for certification in relation to designs of stationary tanks and process containers and the fabricators who construct the tanks and containers according to design, including WorkSafe's role in maintaining a record of designs and fabricators and, in specified circumstances, removing a design or fabricator from the record after conducting an investigation.

### Subpart 18—Secondary containment

*Regulations 17.99 to 17.104* set out a scheme that requires secondary containment systems at workplaces where 1 or more stationary container systems, containing specified hazardous substances, are located. These provisions—

- require PCBUs to provide secondary containment systems and specify the capacity and other characteristics of these systems:
- provide for variations of certain capacity requirements by WorkSafe, on application.

### Subpart 19—Additional and modified requirements

*Regulation 17.105* allows for the approval of a safe work instrument in situations where the Minister is satisfied that compliance with these regulations will not appropriately control risk associated with stationary tanks.

- The SWI may modify requirements in these regulations or impose additional requirements:
- A PCBU must comply with a provision of the regulations as modified, and must comply with an additional requirement.

## **Part 18 Laboratories**

*Part 18* imposes requirements for certain laboratories that are exempt from the application of *Parts 2 to 17 and 19* of the regulations.

*Regulation 18.1* defines the following expressions used in the Part: approved hazardous substance, emergency response plan, laboratory manager and small container.

*Regulation 18.2* sets out the application of *Part 18*.

### *Laboratory design requirements*

*Regulation 18.3* imposes design requirements for all parts of a laboratory that could come into contact with a hazardous substance.

*Regulation 18.4* provides that if a hazardous substance is used or is available for use in a laboratory, the laboratory must be designed and operated so as to prevent the substance from escaping from the laboratory.

*Regulation 18.5* imposes warning sign requirements for all entrances to the laboratory as well as requirements for the securing of entrances to the laboratory.

#### *Recording of hazardous substances*

*Regulation 18.6* imposes record-keeping requirements for specified hazardous substances.

*Regulation 18.7* specifies additional recording and notification requirements for sodium fluoroacetate.

#### *Importation of sodium fluoroacetate*

*Regulation 18.8* imposes requirements for the importation of sodium fluoroacetate.

#### *Handling, packaging, and storage of hazardous substances*

*Regulation 18.9* imposes handling, packaging, and storage requirements for approved hazardous substances, and includes specific requirements for information that must be provided on small containers.

*Regulation 18.10* imposes handling, packaging, and storage requirements for unapproved hazardous substances, and includes specific requirements for information that must be provided on small containers.

*Regulation 18.11* requires that every small container in a laboratory meet the requirements set out in *regulation 2.12(2)*.

#### *Personnel requirements for laboratories*

*Regulation 18.12* sets out requirements respecting laboratory manager designations and responsibilities.

*Regulation 18.13* imposes skill and knowledge requirements for laboratory managers.

*Regulation 18.14* requires a PCBU with management or control of a laboratory to ensure that every person handling a hazardous substance in a laboratory is provided with the specified information before handling a substance, such as procedures to prevent the contamination of equipment or clothing.

#### *Emergency response plans*

*Regulation 18.15* requires that every laboratory have an emergency response plan that meets the requirements of *subpart 2 of Part 5*.

## **Part 19**

### **Tracking hazardous substances**

*Part 19* imposes requirements for tracking specified hazardous substances.

*Regulation 19.1* defines the terms competent person, tracked substance, and treatment.

*Regulations 19.2 and 19.3* set out which substances must comply with the Part.

*Regulation 19.4* sets out record-keeping requirements relating to tracked substances at each phase of their life cycle, including what must be included in a record.

*Regulation 19.5* establishes requirements to make records accessible to and understandable by specified persons.

*Regulation 19.6* imposes retention requirements for the records.

*Regulation 19.7* establishes requirements for transferring certain tracked substances to another workplace.

## **Part 20**

### **Consequential amendments to other health and safety at work regulations**

*Regulation 20.1* makes a minor consequential amendment to the Health and Safety at Work (General Risk and Workplace Management) Regulations 2016.

#### **Schedules**

*Schedule 1* contains transitional provisions:

- Many of these provisions identify a range of existing approvals and certifications and other instruments of compliance with existing requirements and provide that those certificates, approvals, and other instruments continue for the balance of their approval or certification period as equivalent compliance certificates under these regulations. Many of these certifications of compliance are test certificates issued under the HSNO Act.
- Other provisions make similar provision in relation to recognised inspection agencies and the compliance of specified plant, including gas containers and gas fittings, and specified designs.
- Other matters continued include waivers of specified requirements, the recall of specified containers and other things, identification numbers for tank wagons and transportable containers, and the approval of actions taken in relation to disused stationary tanks.
- Some provisions impose an alternative regulatory scheme for existing stationary container systems and their secondary containment systems, including compliance with a compliance plan (or with a SWI) and a separate requirement for compliance certification.

*Schedule 2* sets out prescribed compliance fees.



*Schedule 3* sets out the quantities of hazardous substances for which signage is required under Part 2.

*Schedule 4* sets out the quantities of hazardous substances for which fire extinguishers are required under *subpart 1 of Part 5*.

*Schedule 5* sets out the quantities of hazardous substances for which an emergency response plan is required under *subpart 2 of Part 5*.

*Schedule 6* sets out the maximum quantities of class 1 to 5 substances permitted on passenger service vehicles under *regulation 8.3*.

*Schedule 7* sets out hazardous substances, and quantities of hazardous substances, for which a controlled substance licence is required under *Part 9* or for which a controlled substance licence is not required.

*Schedule 8* sets out, for the purposes of *Part 9*, quantities and categories of class 1 substances for the purposes of segregation requirements, secure containment requirements, the establishment of hazardous substance locations, and compliance certificates, and dimensions of exclusion zones (for outdoor pyrotechnic displays).

*Schedule 9* addresses matters relevant to class 2, 3, and 4 substances for the purposes of *Parts 10, 11, 16, and 17*, including incompatible substances and materials, secure containment, electrically bonded and earthed equipment or containers, the activation of hazardous substance location and transit depot requirements, temperature limits, separation distances, and threshold quantities for secondary containment.

*Schedule 10* sets out, for the purposes of *regulation 3 and Parts 12 and 17*, quantities and hazard classifications of class 5.1.1 and 5.1.2 substances for the purposes of hazardous substance locations (with different requirements where substances are manufactured or used), transit depots, separation distances, threshold quantities for secondary containment, and secure containment requirements.

*Schedule 11* addresses matters relevant to class 5.2 substances for the purposes of *regulation 3 and Parts 12 and 17*, including quantities of substances that activate hazardous substance location or transit depot requirements, temperature limits, container sizes, separation distances, threshold quantities for secondary containment, and quantities that must be secured if left unattended.

*Schedule 12* deals with, for the purposes of *Parts 11 and 17*, the calculation of separation distances and other controls for class 2.1 and 3 substances.

*Schedule 13* lists the class 6.1 substances that would require a controlled substance licence under *regulations 13.12 and 13.13*.

*Schedule 14* lists the quantities of certain class 6 and 8 substances that must be secured if left unattended, for the purposes of *regulation 13.10*.

*Schedule 15* lists the substances and materials that are incompatible with class 6 and 8 substances, for the purposes of *regulation 10 and Part 13*.

*Schedule 16* sets out the threshold quantities for secondary containment of class 6, 8 and 9 substances, for the purposes of *Parts 13 and 17*.

*Schedule 17* provides, for the purposes of *Parts 13 and 17*, minimum separation distances for stores of packaged class 6.1 substances from protected places and public places.

*Schedule 18* addresses matters relevant to fumigants for the purposes of *Part 14*, including notification requirements and buffer zone distances.

*Schedule 19* sets out, for the purposes of *Part 15*, requirements for a compliance certifier before the certifier may issue a compliance certificate for imported UN Model Regulations cylinders.

*Schedule 20* deals with temperature requirements for certain containers containing gases under pressure, for the purposes of *Part 15*.

*Schedule 21* lists design standards for gas containers, for the purposes of *Part 15*.

*Schedule 22* establishes intervals for inspections and tests for specified cylinders, for the purposes of *Part 15*.

*Schedule 23* specifies, for the purposes of *Part 16*, the forces that must be resisted when a tank is attached to the chassis of a tank wagon.

*Schedule 24* sets out requirements for compliance certification of tank wagons, for the purposes of *Part 16*.

*Schedule 25* sets out separation distances for stationary container systems, for the purposes of *Part 17*.

*Schedule 26* lists, for the purposes of *Part 19*, hazardous substances that are tracked substances and hazardous substances that do not require tracking.

*Schedule 27* sets out the information to be included in records for tracked substances, for the purposes of *Part 19*.

### **Regulatory impact statement**

The Ministry of Business, Innovation, and Employment produced 2 regulatory impact statements on 30 September 2015 and 26 September 2016, to help inform the decisions taken by the Government relating to the contents of these regulations.

A copy of this regulatory impact statement can be found at—

- <http://www.mbie.govt.nz/info-services/employment-skills/workplace-health-and-safety-reform/document-and-image-library/ris-cabinet-paper-phase-one-regulations.pdf>
- <http://www.mbie.govt.nz/publications-research/publications/health-and-safety/ris-residual-policy-decisions-concerning-regulations-for-work-involving-hazardous-substances.pdf>
- <http://www.treasury.govt.nz/publications/informationreleases/ris>

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