

## A6.1 Residential Activities and Residential, Smith Street and York Place and Schools Zones

1. Tables A6.1.1 - 6.1.9 specify the hazardous substances quantity limits for residential activities in all zones, and all activities in the residential zones, the Smith Street and York Place Zone and Schools Zone, except the following are exempt from the hazardous substances quantity limits:
  - a. the storage and use of hazardous substances for domestic purposes, associated with a lawfully established residential activity, excluding home occupation. The hazardous substance(s) must form part of a consumer product intended for domestic use. The product must be stored in the container or packaging in which it was sold, and used in accordance with the manufacturer's instructions;
  - b. the storage and use of fuel and other substances that are contained in the fuel system, electrical system or control system of motor vehicles, boats, aircraft and small engines; and
  - c. the storage and use of transformer cooling oils in electricity transformers.
2. ~~Unless otherwise stated, if a hazardous substance falls into more than one HSNO sub-class and is therefore controlled by more than one maximum permitted quantity threshold, the base or primary class will determine the maximum permitted quantity threshold. The base or primary class of a substance is the first classification listed beside any substance within the New Zealand Gazette Notice No. 35 as well as on all HSNO required labelling and signage. {PHS cl.16}~~
3. All volumes listed for quantity limits will be aggregated i.e as a permitted activity a site may hold the maximum threshold identified of each Class 1 plus Class 2 plus Class 3 and/or Class 4.1.3A-C plus Class 4.2A plus 4.3A etc.
4. Where the volume or weight of a hazardous substance is affected by the temperature and pressure at which it is stored, the volume or weight will be considered (for the purposes of the hazardous substance quantity limits) to be that present in conditions of 20°C and 101.3kPa.
5. The permitted quantity thresholds apply per site.

**Table A6.1.1 Class 1 - Explosives**

Substance		Quantity limit
Subclass 1.1A-G, J, L: Mass explosion hazard		
1.	Gunpowder and black powder	15kg
2.	Display fireworks	0
3.	Industrial explosives (e.g. TNT) and all other 1.1	0
Subclass 1.2B-L: Projection hazard		
4.	All	No thresholds
Subclass 1.3C, F-L: Fire and minor blast hazard		
5.	Smokeless ammunition reloading powder	15kg
Subclass 1.3C, F-L: Fire and minor blast hazard		
6.	Retail fireworks	No thresholds - refer to Hazardous Substances (Fireworks) Regulations 2001
7.	All other 1.3	No thresholds
Subclass 1.4B-G, S: No significant hazard		

Substance		Quantity limit
8.	Safety ammunition and flares	25kg
9.	Retail fireworks	No thresholds - refer to Hazardous Substances (Fireworks) Regulations 2001
10.	Sodium Azide	0
11.	All other 1.4	No thresholds
Subclass 1.5D: Very insensitive, with mass explosion hazard		
12.	All	No thresholds
Subclass 1.6N: Extremely insensitive, no mass explosion hazard		
13.	All	No thresholds

**Table A6.1.2 Class 2 - Gases and aerosols**

Substance		Quantity limit
Subclass 2NH: Non Hazardous		
1.	All	10m <sup>3</sup>
Subclass 2.1.1A: High Hazard Flammable Gases		
2.	LPG (incl. propane-based refrigerant) in cylinders or multi-vessel tanks.	200kg Total Outdoor Storage Quantity
3.	LPG (incl. propane-based refrigerant) in below-ground or above-ground single vessel tanks	0
4.	LPG propane-based refrigerant in commercial receivers	0
5.	Acetylene	1m <sup>3</sup>
6.	Hydrogen, methane and all other permanent gases	0
Subclass 2.1.1B: Medium hazard flammable gases		
7.	Anhydrous ammonia refrigerant	0
8.	All other 2.1.1B	No thresholds
Subclass 2.1.2A: Flammable aerosols		
9.	All	20 Litres

**Table A6.1.3 Class 3 - Flammable liquids**

Substance		Quantity limit
Subclass 3.1A Liquid: Very high hazard (flash point less than 23°C, initial boiling point less than 35°C)		
1.	Petrol (stored above-ground in containers with capacity less than 450 Litres but no storage in metal drums)	a. 10 Litres inside dwelling b. 50 Litres outside dwelling
2.	Petrol (stored above-ground in containers with capacity more than 450 Litres)	0
3.	Liquid petroleum fuels in below-ground single vessel tanks	0
4.	All other	0
Subclass 3.1B Liquid: High hazard (flash point less than 23°C, initial boiling point more than 35°C)		
5.	Liquid petroleum fuels in below-ground single vessel tanks	0
6.	Petrol plus any subclass 3.1B substance - cumulative total limit (no storage in metal drums)	a. 10 Litres inside dwelling b. 50 Litres outside dwelling
7.	All other - e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity less than 450 Litres)	10 Litres
8.	All other - e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity more than 450 Litres)	0
Subclass 3.1C Liquid: Medium hazard (flash point more than 23°C, but less than 35°C)		
9.	Liquid petroleum fuels in below-ground single vessel tanks	0
10.	All - kerosene, aviation kerosene (stored above-ground in containers with capacity less than 450 Litres)	a. 20 Litres inside dwelling b. 50 Litres outside dwelling
11.	All - kerosene, aviation kerosene (stored above-ground in containers with capacity more than 450 Litres)	0
Subclass 3.1D Liquid: Low hazard (flash point more than 60°C, but less than 93°C)		
12.	Liquid petroleum fuels in below-ground single vessel tanks	0
13.	All - e.g. diesel, petroleum, fuel oils (stored above-ground in containers with capacity less than 450 Litres)	a. 20 Litres inside dwelling b. 209 Litres outside dwelling
14.	All - e.g. diesel, petroleum, fuel oils (stored above-ground in containers with capacity more than 450 Litres)	a. Certified single skin tanks: 450 Litres b. Certified double skin tanks: 600 Litres c. Certified super vault tanks constructed to South Western Research Institute (SWRI) standards: 10,000 Litres
Subclass 3.2A, 3.2B, 3.2C: Liquid desensitised explosive - High, medium and low hazard		
15	All substances	0

**Table A6.1.4 Class 4 - Flammable solids.**

Substance		Quantity limit
All HSNO hazardous substances <b>{PHS cl.16}</b> sub-classes and hazard classifications		
1.	All substances	0

**Table A6.1.5 Class 5 - Oxidising substances.**

Substance		Quantity limit
Subclass 5.1.1A-C: Liquids and solids		
1.	All substances	10 Litres if liquid, 10kg if solid
Subclass 5.1.2A: Gases		
2.	Oxygen (except as stored and used in accordance with HSNO and Hazardous Substances Regulations <b>{PHS cl.16}</b> requirements within medical facilities	Subclass 5.5m <sup>3</sup>
3.	Nitrous oxide (except as stored and used in accordance with HSNO and Hazardous Substance Regulations <b>{PHS cl.16}</b> requirements within medical facilities	0
4.	Chlorine	0
Subclass 5.2A-G: Organic Peroxide - Types A-G		
5.	All - e.g. MEKP Polyester resin catalyst	0.5 Litres

**Table A6.1.6 Class 6 - Toxic substances.**

Substance		Quantity limit
Subclass 6.1A-C: Acutely toxic		
1.	Anhydrous ammonia refrigerant	0
2.	Chlorine	0
3.	All other substances	0
Subclass 6.1D and E		
4.	Sodium chloride	5kg
5.	All other substances	1kg
Subclass 6.3A and B: Skin irritant		
6.	All	1kg
Subclass 6.4A: Eye irritant		
7.	Cement, hydrated lime and burnt lime	400kg
8.	Sodium chloride	5kg
9.	All others	1kg

Substance		Quantity limit
Subclass 6.5A and B: Respiratory and contact sensitizers		
10.	Cement, hydrated lime and burnt lime	400kg
11.	All others	1kg
Subclass 6.6A and B: Human mutagens		
12.	All	1kg
Subclass 6.7A and B: Carcinogens		
13.	All	1kg
Subclass 6.8A-C: Human reproductive or developmental toxicants		
14.	All	0
Subclass 6.9A and B: Substances affecting human target organs or systems		
15.	All	0

**Table A6.1.7 Class 7 - Radioactive materials.**

Substances	Quantity limit
All substances	Up to 100 times the quantities specified in the Type A transport package limit, as identified in the International Atomic Energy Agency (IAEA) Regulations for the Safe Transport of Radioactive Material. Examples include domestic smoke detectors, demonstration radioactive sources in school laboratories.

**Note A6.1.7A - Other requirements outside of the District Plan**

- These substances are controlled through the Radiation Protection Act 1965 rather than HSNO and Hazardous Substances Regulations. {PHS cl.16}

**Table A6.1.8 Class 8 - Corrosives.**

Substance		Quantity limit
Subclass 8.1A: Substances corrosive to metals		
1.	All	5 Litres
Subclass 8.2A-C: Substances corrosive to skin		
2.	Cement, hydrated lime and burnt lime	400kg
3.	All	5 Litres
Subclass 8.3A: Substances corrosive to the eye		
4.	Cement, hydrated lime and burnt lime	400kg
5.	All	5 Litres

**Table A6.1.9 Class 9 - Ecotoxics.**

Substance		Quantity limit
Subclass 9.1A-D: Aquatic ecotoxics and Subclass 9.2A-D: Soil ecotoxics		
1.	All substances in below ground tank storage	See base class thresholds.
2.	All substances in all other locations	0
Subclass 9.3A-C: Terrestrial vertebrate ecotoxics		
3.	All substances in all locations	See base class thresholds.
Subclass 9.4A-C: Terrestrial invertebrate ecotoxics		
4.	All substances in all locations	See base class thresholds.

## **A6.2 Commercial and Mixed Use, Industrial, Stadium, Moana Pool, Edgar Centre and Taieri Aerodrome Zones**

1. Tables A6.2.1 - A6.2.9 specify the hazardous substances quantity limits for the commercial and **{PO cl.16}** mixed use (excluding Smith Street and York Place Zone), industrial, Stadium, Moana Pool, Edgar Centre and Taieri Aerodrome zones.
2. Except:
  - a. where any site within these zones contains residential activity the quantity limits for the residential zone, as specified in Appendix A6.1, apply.
  - b. the following are exempt from the hazardous substances quantity limits:
    - i. in the industrial zones, the transit and two-hour storage maximum of tracked hazardous substances transit and 72-hour storage maximum of non-tracked hazardous substances;
    - ii. the storage and use of hazardous substances for domestic purposes, associated with a lawfully established residential activity, excluding home occupation. The hazardous substance(s) must form part of a consumer product intended for domestic use. The product must be stored in the container or packaging in which it was sold, and used in accordance with the manufacturer's instructions;
    - iii. the storage and use of fuel and other substances that are contained in the fuel system, electrical system or control system of motor vehicles, boats, aircraft and small engines; and
    - iv. the storage and use of transformer cooling oils in electricity transformers.
3. ~~Unless otherwise stated, if a hazardous substance falls into more than one HSNO sub-class and is therefore controlled by more than one maximum permitted quantity threshold, the base or primary class will determine the maximum permitted quantity threshold. The base or primary class of a substance is the first classification listed beside any substance within the New Zealand Gazette Notice No. 35 as well as on all HSNO required labelling and signage. {PHS cl.16}~~
4. All volumes listed for quantity limits will be aggregated i.e as a permitted activity a site may hold the maximum threshold identified of each Class 1 plus Class 2 plus Class 3 and/or Class 4.1.3A-C plus Class 4.2A plus 4.3A etc.
5. Where the volume or weight of a hazardous substance is affected by the temperature and pressure at which it is stored, the volume or weight will be considered (for the purposes of the hazardous substance quantity limits) to be that present in conditions of 20°C and 101.3kPa.
6. The permitted quantity thresholds apply per site, except for in the commercial and mixed use and industrial zones, where the permitted quantity thresholds apply per hazardous sub-facility. Each hazardous sub-facility must be separated from any other hazardous sub-facility on the same site and meet the following locational requirements:
  - a. if located external to a building, the gazetted<sup>1</sup> or regulated controls<sup>1</sup> for "protected place high-intensity land-use" **{PHS cl.16}** and "public place low-intensity land-use" **{PHS cl.16}** apply, and the location is such that the "controlled zone" or tabled separation distances of each facility do not overlap; or
  - b. if permitted to be located inside a building by the gazetted<sup>1</sup> or regulated controls<sup>1</sup>, or referenced standards pursuant to HSNO, then each hazardous sub-facility must be located in a separate fire cell.

<sup>1</sup> *New Zealand Gazette Notice 26 March 2004 – Issue No. 35 and Hazardous Substances (Classes 1-5 Controls) Regulations 2001 and HSNO (Classes 6, 8 and 9 Controls) Regulations 2001 Health and Safety at Work (Hazardous Substances) Regulations 2017 for work places and Hazardous Substances (Hazardous Property Controls) Notice 2017 for places that are not workplaces. {PHS cl.16}*

**Table A6.2.1 Class 1 - Explosives.**

Substance		Quantity limit
Subclass 1.1A-G, J, L: Mass explosion hazard		
1.	Gunpowder and black powder	15kg
2.	Display fireworks	0
3.	Industrial explosives (e.g. TNT) and all other Subclass 1.1	25kg
Subclass 1.2B-L: Projection hazard		
4.	All	No thresholds
Subclass 1.3C, F-L: Fire and minor blast hazard		
5.	Smokeless ammunition reloading powder	50kg
Subclass 1.3C, F-L: Fire and minor blast hazard		
6.	Retail fireworks	No thresholds - refer to Hazardous Substances (Fireworks) Regulations 2001
7.	All other Subclass 1.3	No thresholds
Subclass 1.4B-G, S: No significant hazard		
8.	Safety ammunition and flares	50kg
9.	Retail fireworks	No thresholds - refer to Hazardous Substances (Fireworks) Regulations 2001
10.	Sodium Azide	0
11.	All other Subclass 1.4	No thresholds
Subclass 1.5D: Very insensitive, with mass explosion hazard		
12.	All	No thresholds
Subclass 1.6N: Extremely insensitive, no mass explosion hazard		
13.	All	No thresholds

**Table A6.2.2 Class 2 - Gases and aerosols.**

Substance		Quantity limit
Subclass 2NH: Non Hazardous		
1.	All	200m <sup>3</sup>
Subclass 2.1.1A: High Hazard Flammable Gases		
2.	LPG (incl. propane-based refrigerant) in cylinders or multi-vessel tanks.	450kg total outdoor storage quantity
3.	LPG (incl. propane-based refrigerant) in below-ground or above-ground single vessel tanks	0
4.	LPG propane-based refrigerant in commercial receivers	50kg

Substance		Quantity limit
5.	Acetylene	2m <sup>3</sup>
6.	Hydrogen, methane and all other permanent gases	0
Subclass 2.1.1B: Medium hazard flammable gases		
7.	Anhydrous ammonia refrigerant	140kg
8.	All other Subclass 2.1.1B	No thresholds
Subclass 2.1.2A: Flammable aerosols		
9.	All	450 Litres

**Table A6.2.3 Class 3 - Flammable liquids**

Substance		Quantity limit
Subclass 3.1A Liquid: Very high hazard (flash point less than 23°C, initial boiling point less than 35°C)		
1.	Petrol (stored above-ground in containers with capacity less than 450 Litres)	a. 50 Litres (any storage except metal drums) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 420 Litres (in approved HSNO or Hazardous Substances Regulations <b>{PHS cl.16}</b> 'type' stores)
2.	Petrol (stored above-ground in containers with capacity more than 450 Litres)	a. Certified single skin tanks: 0 b. Certified double skin tanks: 600 Litres
3.	Liquid petroleum fuels in below-ground single vessel tanks	0
4.	All other (stored above-ground in containers with capacity less than 450 Litres)	50 Litres
5.	All other (stored above-ground in containers with capacity more than 450 Litres or stored below ground)	0
Subclass 3.1B Liquid: High hazard (flash point less than 23°C, initial boiling point more than 35°C)		
6.	Liquid petroleum fuels in below-ground single vessel tanks	0
7.	Petrol plus any subclass 3.1B substance - cumulative total limit (must not be stored in metal drums)	a. 10 Litres inside dwelling b. 50 Litres outside dwelling

Substance		Quantity limit
8.	All other - e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity less than 450 Litres)	a. 10 Litres (any storage) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 450 Litres (in approved HSNO or Hazardous Substances Regulations <b>{PHS cl.16}</b> 'type' stores) d. <del>Large scale</del> <del>Retail</del> <b>{PHS cl.16}</b> activities <u>activity</u> <b>{PO cl.16}</b> 1500m <sup>2</sup> or more in gross floor area <b>{PHS cl.16}</b> only: 1500 Litres in containers of up to 5 Litres each
9.	All other - e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity more than 450 Litres)	0
Subclass 3.1A: petrol plus 3.1B		
10.	Petrol plus any 3.1B substance - cumulative total limit	a. 50 Litres (any storage except metal drums) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 420 Litres (in approved HSNO or Hazardous Substances Regulations <b>{PHS cl.16}</b> 'type' stores)
Subclass 3.1C Liquid: Medium hazard (flash point more than 23°C, but less than 35°C)		
11.	Liquid petroleum fuels in below-ground single vessel tanks	0
12.	All - kerosene, aviation kerosene ;(stored above-ground in containers with capacity less than 450 Litres)	a. 10 Litres (any storage) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 450 Litres (in approved HSNO or Hazardous Substances Regulations <b>{PHS cl.16}</b> 'type' stores) d. <del>Large scale</del> <del>Retail</del> activities <u>activity</u> 1500m <sup>2</sup> or more in gross floor area <b>{PHS cl.16}</b> only: 1500 Litres in containers of up to 5 Litres each
13.	All - kerosene, aviation kerosene (stored above-ground in containers with capacity more than 450 Litres)	a. Certified single skin tanks: 450 Litres b. Certified double skin tanks: 2000 Litres
Subclass 3.1D Liquid: Low hazard (flash point more than 60°C, but less than 93°C)		
14.	Liquid petroleum fuels in below-ground single vessel tanks	0
15.	All - e.g. diesel, petroleum, fuel oils ;(stored above-ground in containers with capacity less than 450 Litres)	a. 20 Litres inside dwelling b. 209 Litres outside dwelling

Substance		Quantity limit
16.	All - e.g. diesel, petroleum, fuel oils ;(stored above-ground in containers with capacity more than 450 Litres)	a. Certified single skin tanks: 450 Litres b. Certified double skin tanks: 2000 Litres c. Certified super vault tanks constructed to South Western Research Institute (SWRI) standards: 10,000 Litres
Subclass 3.2A, 3.2B, 3.2C: Liquid desensitised explosive - High, medium and low hazard		
17.	All substances	0

<sup>1</sup> PHS cl.16: There is no 'Large Scale Retail Activity' in the Plan therefore provision amended to be consistent with the definition in the Dunedin City District Plan (2006)

**Table A6.2.4 Class 4 - Flammable solids.**

Substance		Quantity limit
Subclass 4.1.1A: Readily combustible solids and solids that may cause fire through friction (medium hazard)		
1.	All	50kg
Subclass 4.1.1B Readily combustible solids and solids that may cause fire through friction (low hazard)		
2.	All	500kg
Subclass 4.1.2A-B: Self reactive - Types A and B		
3.	All	50kg
Subclass 4.1.2C-G: Self reactive - Types C-G		
4.	All	500kg
Subclass 4.1.3A-C: Solid desensitized explosives		
5.	All	0
Subclass 4.2A-B: Spontaneously combustible - Pyrophoric substances (high hazard and self heating substances: medium hazard)		
6.	All	50kg
Subclass 4.2C: Spontaneously combustible (self heating substances: low hazard)		
7.	All	500kg
Subclass 4.3A-B: Solids that emit flammable gas when wet (high and medium hazard)		
8.	All	50kg
Subclass 4.3C: Solids that emit flammable gas when wet (low hazard)		
9.	All	500kg

**Table A6.2.5 Class 5 - Oxidising substances.**

Substance		Quantity limit
Subclass 5.1.1A-C: Liquids and solids		
1.	All substances	200 Litres if liquid, 200kg if solid
Subclass 5.1.2A: Gases		
2	Oxygen (except as stored and used in accordance with HSNO and Hazardous Substances Regulations <b>{PHS cl.16}</b> requirements within medical facilities	1000m <sup>3</sup>
3.	Nitrous oxide (except as stored and used in accordance with HSNO and Hazardous Substances Regulations <b>{PHS cl.16}</b> requirements within medical facilities	30 times 8-gram nitrous oxide cartridges for catering purposes only
4.	Chlorine	0
Subclass 5.2A-G: Organic Peroxide - Types A-G		
5.	All - e.g. MEKP Polyester resin catalyst	16 Litres

**Table A6.2.6 Class 6 - Toxic substances.**

Substance		Quantity limit
Subclass 6.1A-C: Acutely toxic		
1.	Anhydrous ammonia refrigerant	140kg
2.	Chlorine	0
3.	All other substances	20 Litres if liquid, 20kg if solid
Subclass 6.1D and E		
4.	Sodium chloride	200kg
5.	All other substances	200kg
Subclass 6.3A and B: Skin irritant		
6	All	2000kg
Subclass 6.4A: Eye irritant		
7.	Cement, hydrated lime and burnt lime	50 Tonne
8.	Sodium chloride	200kg
9.	All others	2000kg
Subclass 6.5A and B: Respiratory and contact sensitizers		
10.	Cement, hydrated lime and burnt lime	50 Tonne
11.	All others	2000kg
Subclass 6.6A and B: Human mutagens		
12.	All	2000kg

Substance		Quantity limit
Subclass 6.7A and B: Carcinogens		
13.	All	200kg
Subclass 6.8A-C: Human reproductive or developmental toxicants		
14.	All	0
Subclass 6.9A and B: Substances affecting human target organs or systems		
15.	All	0

**Table A6.2.7 Class 7 - Radioactive materials.**

Substances	Quantity limit
1. All substances	Up to 100 times the quantities specified in the Type A transport package limit, as identified in the International Atomic Energy Agency (IAEA) Regulations for the Safe Transport of Radioactive Material. Examples include domestic smoke detectors, demonstration radioactive sources in school laboratories.

**Note A6.2.7A - General advice**

- These substances are controlled through the Radiation Protection Act 1965 rather than HSNO and Hazardous Substances Regulations. **{PHS cl.16}**

**Table A6.2.8 Class 8 - Corrosives.**

Substance		Quantity limit
Subclass 8.1A: Substances corrosive to metals		
1.	All	1000 Litres
Subclass 8.2A-C: Substances corrosive to skin		
2.	Cement, hydrated lime and burnt lime	50 Tonne
3.	All	1000 Litres
Subclass 8.3A: Substances corrosive to the eye		
4.	Cement, hydrated lime and burnt lime	50 Tonne
5.	All	1000 Litres

**Table A6.2.9 Class 9 - Ecotoxics.**

Substance		Quantity limit
Subclass 9.1A-D: Aquatic ecotoxics and 9.2A-D: Soil ecotoxics		
1.	All substances in below ground tank storage	See base class thresholds.
2.	All substances in all other locations	0
Subclass 9.3A-C: Terrestrial vertebrate ecotoxics		
3.	All substances in all locations	See base class thresholds.
Subclass 9.4A-C: Terrestrial invertebrate ecotoxics		
4.	All substances in all locations	See base class thresholds.

## **A6.3 Dunedin Hospital, Campus, Otago Museum and Invermay and Hercus Zones**

1. Tables A6.3.1 - A6.3.9 specify the hazardous substances quantity limits for the Dunedin Hospital, Campus, Otago Museum and Invermay and Hercus zones.
2. Except:
  - a. where any site within these zones contains residential activity the quantity limits for the residential zone, as specified in Appendix A6.1, apply.
  - b. the following are exempt from the hazardous substances quantity limits:
    - i. in the industrial zones, the transit and two-hour storage maximum of tracked hazardous substances transit and 72-hour storage maximum of non-tracked hazardous substances;
    - ii. the storage and use of hazardous substances for domestic purposes, associated with a lawfully established residential activity, excluding home occupation. The hazardous substance(s) must form part of a consumer product intended for domestic use. The product must be stored in the container or packaging in which it was sold, and used in accordance with the manufacturer's instructions;
    - iii. the storage and use of fuel and other substances that are contained in the fuel system, electrical system or control system of motor vehicles, boats, aircraft and small engines; and
    - iv. the storage and use of transformer cooling oils in electricity transformers.
3. ~~Unless otherwise stated, if a hazardous substance falls into more than one HSNO sub-class and is therefore controlled by more than one maximum permitted quantity threshold, the base or primary class will determine the maximum permitted quantity threshold. The base or primary class of a substance is the first classification listed beside any substance within the New Zealand Gazette Notice No. 35 as well as on all HSNO required labelling and signage. {PHS cl.16}~~
4. All volumes listed for quantity limits will be aggregated i.e. as a permitted activity a site may hold the maximum threshold identified of each Class 1 plus Class 2 plus Class 3 and/or Class 4.1.3A-C plus Class 4.2A plus 4.3A etc.
5. Where the volume or weight of a hazardous substance is affected by the temperature and pressure at which it is stored, the volume or weight will be considered (for the purposes of the hazardous substance quantity limits) to be that present in conditions of 20°C and 101.3kPa.
6. The permitted quantity thresholds apply per site, except for in the Campus Zone, where the permitted quantity thresholds apply per hazardous sub-facility. Each hazardous sub-facility must be separated from any other hazardous sub-facility on the same site and meet the following locational requirements:
  - a. if located external to a building, the gazetted<sup>1</sup> or regulated controls<sup>1</sup> for "protected place high-intensity land-use" **{PHS cl.16}** and "public place low-intensity land-use" **{PHS cl.16}** apply, and the location is such that the "controlled zone" or tabled separation distances of each facility do not overlap; or
  - b. if permitted to be located inside a building by the gazetted<sup>1</sup> or regulated controls<sup>1</sup>, or referenced standards pursuant to HSNO, then each hazardous sub-facility must be located in a separate fire cell.

<sup>1</sup> ~~New Zealand Gazette Notice 26 March 2004 – Issue No. 35 and Hazardous Substances (Classes 1-5 Controls) Regulations 2001 and HSNO (Classes 6, 8 and 9 Controls) Regulations 2001~~ Health and Safety at Work (Hazardous Substances) Regulations 2017 for work places and Hazardous Substances (Hazardous Property Controls) Notice 2017 for places that are not workplaces. {PHS cl.16}

**Table A6.3.1 Class 1 - Explosives**

Substance		Quantity limit
Subclass 1.1A-G, J, L: Mass explosion hazard		
1.	Gunpowder and black powder	0
2.	Display fireworks	0
3.	Industrial explosives (e.g. TNT) and all other Subclass 1.1	0
Subclass 1.2B-L: Projection hazard		
4.	All	No thresholds
Subclass 1.3C, F-L: Fire and minor blast hazard		
5.	Smokeless ammunition reloading powder	0
Subclass 1.3C, F-L: Fire and minor blast hazard		
6.	Retail fireworks	No thresholds - refer to Hazardous Substances (Fireworks) Regulations 2001
7.	All other Subclass 1.3	No thresholds
Subclass 1.4B-G, S: No significant hazard		
8.	Safety ammunition and flares	5kg
9.	Retail fireworks	No thresholds - refer to Hazardous Substances (Fireworks) Regulations 2001
10.	Sodium Azide	0
11.	All other Subclass 1.4	No thresholds
Subclass 1.5D: Very insensitive, with mass explosion hazard		
12.	All	No thresholds
Subclass 1.6N: Extremely insensitive, no mass explosion hazard		
13.	All	No thresholds

**Table A6.3.2 Class 2 - Gases and aerosols.**

Substance		Quantity limit
Subclass 2NH: Non Hazardous		
1.	All	a. 200m <sup>3</sup> b. 500 Litres of non-flammable, non-toxic cryogenic liquids stored in accordance with AS1894:1997
Subclass 2.1.1A: High Hazard Flammable Gases		
2.	LPG (incl. propane-based refrigerant) in cylinders or multi-vessel tanks	450kg total outdoor storage quantity

Substance		Quantity limit
3.	LPG (incl. propane-based refrigerant) in below-ground or above-ground single vessel tanks	0
4.	LPG propane-based refrigerant in commercial receivers	50kg
5.	Acetylene	30m <sup>3</sup>
6.	Hydrogen, methane and all other permanent gases	30m <sup>3</sup>
Subclass 2.1.1B: Medium hazard flammable gases		
7.	Anhydrous ammonia refrigerant	0
8.	All other 2.1.1B	No thresholds
Subclass 2.1.2A: Flammable aerosols		
9.	All	450 Litres

**Table A6.3.3 Class 3 - Flammable liquids**

Substance		Quantity limit
Subclass 3.1A Liquid: Very high hazard (flash point less than 23°C, initial boiling point less than 35°C)		
1.	Petrol (stored above-ground in containers with capacity less than 450 Litres)	a. 2000 Litres
2.	Petrol (stored above-ground in containers with capacity more than 450 Litres)	a. Certified single skin tanks: 0 b. Certified double skin tanks: 600 Litres
3.	Liquid petroleum fuels in below-ground single vessel tanks	0
4.	All other (stored above-ground in containers with capacity less than 450 Litres)	50 Litres
5.	All other (stored above-ground in containers with capacity more than 450 Litres or stored below ground)	0
Subclass 3.1B Liquid: High hazard (flash point less than 23°C, initial boiling point more than 35°C)		
6.	Liquid petroleum fuels in below-ground single vessel tanks	0
7.	All other - e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity less than 450 Litres)	a. 10 Litres (any storage) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 450 Litres (in approved HSNO or Hazardous Substances Regulations {PHS cl.16} 'type' stores) d. <del>Large scale r</del> Retail {PHS cl.16} activities activity {PO cl.16} 1500m <sup>2</sup> or more in gross floor area {PHS cl.16} only: 1500 Litres in containers of up to 5 Litres each

Substance		Quantity limit
8.	All other - e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity more than 450 Litres)	0
Subclass 3.1A: Petrol plus Subclass 3.1B		
9.	Petrol plus any Subclass 3.1B substance - cumulative total limit	a. 2000 Litres
Subclass 3.1C Liquid: Medium hazard (flash point more than 23°C, but less than 35°C)		
10.	Liquid petroleum fuels in below-ground single vessel tanks	0
11.	All - kerosene, aviation kerosene (stored above-ground in containers with capacity less than 450 Litres)	a. 10 Litres (any storage) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 450 Litres (in approved HSNO or Hazardous Substances Regulations <b>{PHS cl.16}</b> 'type' stores) d. <del>Large scale</del> <del>Retail activities</del> activity 1500m <sup>2</sup> or more in gross floor area <b>{PHS cl.16}</b> only: 1500 Litres in containers of up to 5 Litres each
12.	All - kerosene, aviation kerosene (stored above-ground in containers with capacity more than 450 Litres)	a. Certified single skin tanks: 450 Litres b. Certified double skin tanks: 2000 Litres
Subclass 3.1D Liquid: Low hazard (flash point more than 60°C, but less than 93°C)		
13.	Liquid petroleum fuels in below-ground single vessel tanks	0
14.	All - e.g. diesel, petroleum, fuel oils (stored above-ground in containers with capacity less than 450 Litres)	450 Litres
15.	All - e.g. diesel, petroleum, fuel oils (stored above-ground in containers with capacity more than 450 Litres)	a. Certified single skin tanks: 450 Litres b. Certified double skin tanks: 2000 Litres c. Certified super vault tanks constructed to south western research institute (SWRI) standards: 10,000 Litres
Subclass 3.2A, Subclass 3.2B, Subclass 3.2C: Liquid desensitised explosive - High, medium and low hazard		
16.	All substances	0

**Table A6.3.4 Class 4 - Flammable solids.**

Substance		Quantity limit
Subclass 4.1.1A: Readily combustible solids and solids that may cause fire through friction (medium hazard)		
1.	All	50kg
Subclass 4.1.1B Readily combustible solids and solids that may cause fire through friction (low hazard)		
2.	All	500kg
Subclass 4.1.2A-B: Self reactive - Types A and B		
3.	All	50kg
Subclass 4.1.2C-G: Self reactive - Types C-G		
4.	All	500kg
Subclass 4.1.3A-C: Solid desensitized explosives		
5.	All	5kg
Subclass 4.2A-B: Spontaneously combustible - Pyrophoric substances (high hazard and self heating substances: medium hazard)		
6.	All	50kg
Subclass 4.2C: Spontaneously combustible (self heating substances: low hazard)		
7.	All	500kg
Subclass 4.3A-B: Solids that emit flammable gas when wet (high and medium hazard)		
8.	All	50kg
Subclass 4.3C: Solids that emit flammable gas when wet (low hazard)		
9.	All	500kg

**Table A6.3.5 Class 5 - Oxidising substances.**

Substance		Quantity limit
Subclass 5.1.1A-C: Liquids and solids		
1.	All substances	200 Litres if liquid, 200kg if solid
Subclass 5.1.2A: Gases		
2.	Oxygen (except as stored and used in accordance with HSNO and Hazardous Substances Regulations { <b>PHS cl.16</b> } requirements within medical facilities	500m <sup>3</sup>
3.	Nitrous oxide (except as stored and used in accordance with HSNO and Hazardous Substances Regulations { <b>PHS cl.16</b> } requirements within medical facilities	0
4.	Chlorine	0
Subclass 5.2A-G: Organic Peroxide - Types A-G		

Substance	Quantity limit
5. All - e.g. MEKP Polyester resin catalyst	0.5 Litres

**Table A6.3.6 Class 6 - Toxic substances.**

Substance	Quantity limit
Subclass 6.1A-C: Acutely toxic	
1. Anhydrous ammonia refrigerant	0
2. Chlorine	0
3. All other substances	20 Litres if liquid, 20kg if solid
Subclass 6.1D and E	
4. Sodium chloride	1000kg
5. All other substances	1000kg
Subclass 6.3A and B: Skin irritant	
6. All	1000kg
Subclass 6.4A: Eye irritant	
7. Cement, hydrated lime and burnt lime	1000kg
8. Sodium chloride	1000kg
9. All others	1000kg
Subclass 6.5A and B: Respiratory and contact sensitizers	
10. Cement, hydrated lime and burnt lime	1000kg
11. All others	1000kg
Subclass 6.6A and B: Human mutagens	
12. All	1000kg
Subclass 6.7A and B: Carcinogens	
13. All	1000kg
Subclass 6.8A-C: Human reproductive or developmental toxicants	
14. All	0
Subclass 6.9A and B: Substances affecting human target organs or systems	
15. All	0

**Table A6.3.7 Class 7 - Radioactive materials.**

Substances	Quantity limit
1. All substances	Up to 100 times the quantities specified in the Type A transport package limit, as identified in the International Atomic Energy Agency (IAEA) Regulations for the Safe Transport of Radioactive Material. Examples include domestic smoke detectors, demonstration radioactive sources in school laboratories.

**Note A6.3.7A - General advice**

- These substances are controlled through the Radiation Protection Act 1965 rather than HSNO and Hazardous Substances Regulations. {PHS cl.16}

**Table A6.3.8 Class 8 - Corrosives.**

Substance	Quantity limit
Subclass 8.1A: Substances corrosive to metals	
1. All	1000 Litres
Subclass 8.2A-C: Substances corrosive to skin	
2. Cement, hydrated lime and burnt lime	1000kg
3. All	1000 Litres
Subclass 8.3A: Substances corrosive to the eye	
4. Cement, hydrated lime and burnt lime	1000kg
5. All	1000 Litres

**Table A6.3.9 Class 9 - Ecotoxics.**

Substance	Quantity limit
Subclass 9.1A-D: Aquatic ecotoxics and Subclass 9.2A-D: Soil ecotoxics	
1. All substances in below ground tank storage	See base class thresholds.
2. All substances in all other locations	0
Subclass 9.3A-C: Terrestrial vertebrate ecotoxics	
3. All substances in all locations	See base class thresholds.
Subclass 9.4A-C: Terrestrial invertebrate ecotoxics	
4. All substances in all locations	See base class thresholds.

## **A6.4 Recreation, Rural and Rural Residential and Dunedin Botanic Garden Zones**

1. Tables A6.4.1 - A6.4.9 specify the hazardous substances quantity limits for the recreation, rural, rural residential and Dunedin Botanic Garden zones.
2. Except:
  - a. where any site within the recreation and Dunedin Botanic Garden zones contains residential activity the quantity limits for the residential zone, as specified in Appendix A6.1, apply.
  - b. where any site within the rural and rural residential zones contain residential activity, the quantity limits for the residential zone apply to the residential dwelling and curtilage only.
  - c. the following are exempt from the hazardous substances quantity limits:
    - i. in the rural and rural residential zones:
      1. the storage and use of agrichemicals in accordance with NZS8409:2004;
      2. the storage and use of class 3 fuels in accordance with the Environmental Protection Agency's Approved Practice Guide for Above-Ground Fuel Storage on Farms, September 2010.
      3. the storage and use of fertiliser in accordance with the following:
        1. Fertiliser (Corrosive) Group Standard HSR002569;
        2. Fertiliser (Oxidising) Group Standard HSR002570;
        3. Fertiliser (Subsidiary Hazard) Group Standard HSR002571;
        4. Fertiliser (Toxic) Group Standard HSR002572; and
        5. Fert Research's Code of Practice for Nutrient Management 2007.
    - ii. the storage and use of hazardous substances for domestic purposes, associated with a lawfully established residential activity, excluding home occupation. The hazardous substance(s) must form part of a consumer product intended for domestic use. The product must be stored in the container or packaging in which it was sold, and used in accordance with the manufacturer's instructions;
    - iii. the storage and use of fuel and other substances that are contained in the fuel system, electrical system or control system of motor vehicles, boats, aircraft and small engines; and
    - iv. the storage and use of transformer cooling oils in electricity transformers.
3. ~~Unless otherwise stated, if a hazardous substance falls into more than one HSNO sub-class and is therefore controlled by more than one maximum permitted quantity threshold, the base or primary class will determine the maximum permitted quantity threshold. The base or primary class of a substance is the first classification listed beside any substance within the New Zealand Gazette Notice No. 35 as well as on all HSNO required labelling and signage. {PHS cl.16}~~
4. All volumes listed for quantity limits will be aggregated i.e. as a permitted activity a site may hold the maximum threshold identified of each Class 1 plus Class 2 plus Class 3 and/or Class 4.1.3A-C plus Class 4.2A plus 4.3A etc.
5. Where the volume or weight of a hazardous substance is affected by the temperature and pressure at which it is stored, the volume or weight will be considered (for the purposes of the hazardous substance quantity limits) to be that present in conditions of 20°C and 101.3kPa.
6. The permitted quantity thresholds apply per site, except for forestry and timber treatment in the rural and rural residential zones, where the permitted quantity thresholds apply per hazardous sub-facility. Each hazardous sub-facility must be separated from any other hazardous sub-facility on the same site and meet the following

locational requirements:

- a. if located external to a building, the gazetted<sup>1</sup> or regulated controls<sup>1</sup> for "protected place high intensity land-use" **{PHS cl.16}** and "public place low intensity land-use" **{PHS cl.16}** apply, and the location is such that the "controlled zone" or tabled separation distances of each facility do not overlap; or
- b. if permitted to be located inside a building by the gazetted<sup>1</sup> or regulated controls<sup>1</sup>, or referenced standards pursuant to HSNO, then each hazardous sub-facility must be located in a separate fire cell.

<sup>1</sup> *New Zealand Gazette Notice 26 March 2004 – Issue No. 35 and Hazardous Substances (Classes 1-5 Controls) Regulations 2001 and HSNO (Classes 6, 8 and 9 Controls) Regulations 2001 Health and Safety at Work (Hazardous Substances) Regulations 2017 for work places and Hazardous Substances (Hazardous Property Controls) Notice 2017 for places that are not workplaces. {PHS cl.16}*

**Table A6.4.1 Class 1 - Explosives.**

Substance		Quantity limit
Subclass 1.1A-G, J, L: Mass explosion hazard		
1.	Gunpowder and black powder (excluding forestry and timber treatment)	15kg (except forestry and timber treatment)
2.	Gunpowder and black powder (forestry and timber treatment only)	0
3.	Display fireworks	0
4.	Industrial explosives (e.g. TNT) and all other Subclass 1.1	25kg
Subclass 1.2B-L: Projection hazard		
5.	All	No thresholds
Subclass 1.3C, F-L: Fire and minor blast hazard		
6.	Smokeless ammunition reloading powder	15kg
Subclass 1.3C, F-L: Fire and minor blast hazard		
7.	Retail fireworks	No thresholds - refer to Hazardous Substances (Fireworks) Regulations 2001
8.	All other Subclass 1.3	No thresholds
Subclass 1.4B-G, S: No significant hazard		
9.	Safety ammunition and flares (excluding forestry and timber treatment)	25kg
10.	Safety ammunition and flares (forestry and timber treatment only)	15kg
11.	Retail fireworks	No thresholds - refer to Hazardous Substances (Fireworks) Regulations 2001
12.	Sodium Azide	0
13.	All other Subclass 1.4	No thresholds
Subclass 1.5D: Very insensitive, with mass explosion hazard		

Substance		Quantity limit
14.	All	No thresholds
Subclass 1.6N: Extremely insensitive, no mass explosion hazard		
15.	All	No thresholds

**Table A6.4.2 Class 2 - Gases and aerosols.**

Substance		Quantity limit
Subclass 2NH: Non Hazardous		
1.	All	200m <sup>3</sup>
Subclass 2.1.1A: High Hazard Flammable Gases		
2.	LPG (incl. propane-based refrigerant) in cylinders or multi-vessel tanks.	450kg Total Outdoor Storage Quantity
3.	LPG (incl. propane-based refrigerant) in below-ground or above-ground single vessel tanks	0
4.	LPG propane-based refrigerant in commercial receivers	50kg
5.	Acetylene	2m <sup>3</sup>
6.	Hydrogen, methane and all other permanent gases (excluding forestry and timber treatment)	100m <sup>3</sup>
7.	Hydrogen, methane and all other permanent gases (forestry and timber treatment only)	30m <sup>3</sup>
Subclass 2.1.1B: Medium hazard flammable gases		
8.	Anhydrous ammonia refrigerant	0
9.	All other 2.1.1B	No thresholds
Subclass 2.1.2A: Flammable aerosols		
10.	All	450 Litres

**Table A6.4.3 Class 3 - Flammable liquids**

Substance		Quantity limit
Subclass 3.1A Liquid: Very high hazard (flash point less than 23°C, initial boiling point less than 35°C)		
1.	Petrol (stored above-ground in containers with capacity less than 450 Litres for forestry and <u>rural industry</u> (timber treatment <u>activity activities</u> only) <b>{PHS cl.16}</b> )	a. 50 Litres (any storage except metal drums) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 420 (in approved HSNO or <u>Hazardous Substances Regulations</u> <b>{PHS cl.16}</b> 'type' stores)
2.	Petrol (stored above-ground in containers with capacity less than 450 Litres for all other activities)	2000 Litres

Substance		Quantity limit
3.	Petrol (stored above-ground in containers with capacity more than 450 Litres for forestry and <u>rural industry</u> (timber treatment <u>activity</u> <del>activities</del> only) <b>{PHS cl.16}</b> )	a. Certified single skin tanks: 0 b. Certified double skin tanks: 600 Litres
4.	Petrol (stored above-ground in containers with capacity more than 450 Litres for all other activities)	a. Certified single skin tanks: 0 b. Certified double skin tanks: 2000 Litres
5.	Liquid petroleum fuels in below-ground single vessel tanks	0
6.	All other (stored above-ground in containers with capacity less than 450 Litres)	50 Litres
7.	All other (stored above-ground in containers with capacity more than 450 Litres or stored below ground)	0
Subclass 3.1B Liquid: High hazard (flash point less than 23°C, initial boiling point more than 35°C)		
8.	Liquid petroleum fuels in below-ground single vessel tanks	0
9.	All other - e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity less than 450 Litres)	a. 10 Litres (any storage) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 450 Litres (in approved HSNO or Hazardous Substances Regulations <b>{PHS cl.16}</b> 'type' stores) d. <del>Large scale</del> <u>Retail activities activity</u> <b>{PO cl.16}</b> <u>1500m<sup>2</sup> or more in gross floor area</u> <b>{PHS cl.16}</b> only: 1500 Litres in containers of up to 5 Litres each
10.	All other - e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity more than 450 Litres)	0
Subclass 3.1A: petrol plus 3.1B		
11.	Petrol plus any 3.1B substance - cumulative total limit (forestry and timber treatment only)	a. 50 Litres (any storage except metal drums) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 420 Litres (in approved HSNO or Hazardous Substances Regulations <b>{PHS cl.16}</b> 'type' stores)
12.	Petrol plus any 3.1B substance - cumulative total limit (all other activities)	2000L
Subclass 3.1C Liquid: Medium hazard (flash point more than 23°C, but less than 35°C)		
13.	Liquid petroleum fuels in below-ground single vessel tanks	0

Substance		Quantity limit
14.	All - kerosene, aviation kerosene (stored above-ground in containers with capacity less than 450 Litres)	a. 10 Litres (any storage) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 450 Litres (in approved HSNO or Hazardous Substances Regulations <b>{PHS cl.16}</b> 'type' stores) d. <del>Large scale</del> <u>Retail activities activity 1500m<sup>2</sup> or more in gross floor area</u> <b>{PHS cl.16}</b> only: 1500 Litres in containers of up to 5 Litres each
15.	All - kerosene, aviation kerosene (stored above-ground in containers with capacity more than 450 Litres)	a. Certified single skin tanks: 450 Litres b. Certified double skin tanks: 2000 Litres
Subclass 3.1D Liquid: Low hazard (flash point more than 60°C, but less than 93°C)		
16.	Liquid petroleum fuels in below-ground single vessel tanks	0
17.	All - e.g. diesel, petroleum, fuel oils (stored above-ground in containers with capacity less than 450 Litres)	a. 450 Litres
18.	All - e.g. diesel, petroleum, fuel oils (stored above-ground in containers with capacity more than 450 Litres)	a. Certified single skin tanks: 450 Litres b. Certified double skin tanks: 2000 Litres c. Certified super vault tanks constructed to South Western Research Institute (SWRI) standards: 10,000 Litres
Subclass 3.2A, 3.2B, 3.2C: Liquid desensitised explosive - High, medium and low hazard		
19.	All substances	0

<sup>1</sup> **PHS cl.16:** Timber treatment is included within the definition for rural industry.

#### **Table A6.4.4 Class 4 - Flammable solids.**

Substance		Quantity limit
Subclass 4.1.1A: Readily combustible solids and solids that may cause fire through friction (medium hazard)		
1.	All	50kg
Subclass 4.1.1B Readily combustible solids and solids that may cause fire through friction (low hazard)		
2.	All	500kg
Subclass 4.1.2A-B: Self reactive - Types A and B		
3.	All	50kg
Subclass 4.1.2C-G: Self reactive - Types C-G		
4.	All	500kg
Subclass 4.1.3A-C: Solid desensitized explosives		

Substance		Quantity limit
5.	All	0
Subclass 4.2A-B: Spontaneously combustible - Pyrophoric substances (high hazard and self heating substances: medium hazard)		
6.	All	50kg
Subclass 4.2C: Spontaneously combustible (self heating substances: low hazard)		
7.	All	500kg
Subclass 4.3A-B: Solids that emit flammable gas when wet (high and medium hazard)		
8.	All	50kg
Subclass 4.3C: Solids that emit flammable gas when wet (low hazard)		
9.	All	500kg

**Table A6.4.5 Class 5 - Oxidising substances.**

Substance		Quantity limit
Subclass 5.1.1A-C: Liquids and solids		
1.	All substances (excluding forestry and timber treatment)	No threshold
2.	All substances (forestry and timber treatment only)	200 Litres if liquid, 200kg if solid
Subclass 5.1.2A: Gases		
3.	Oxygen (except as stored and used in accordance with HSNO and Hazardous Substances Regulations { <b>PHS cl.16</b> } requirements within medical facilities)	200m <sup>3</sup>
4.	Nitrous oxide (except as stored and used in accordance with HSNO and Hazardous Substances Regulations { <b>PHS cl.16</b> } requirements within medical facilities)	0
5.	Chlorine	0
Subclass 5.2A-G: Organic Peroxide - Types A-G		
6.	All - e.g. MEKP Polyester resin catalyst	0.5 Litres

**Table A6.4.6 Class 6 - Toxic substances.**

Substance		Quantity limit
Subclass 6.1A-C: Acutely toxic		
1.	Anhydrous ammonia refrigerant	0
2.	Chlorine	0
3.	All other substances	20 Litres if liquid, 20kg if solid
Subclass 6.1D and E		
4.	Sodium chloride	1000kg

Substance		Quantity limit
5.	All other substances (excluding forestry and timber treatment)	200kg
6.	All other substances (forestry and timber treatment only)	1000kg
Subclass 6.3A and B: Skin irritant		
7.	All (excluding forestry and timber treatment)	2000kg
8.	All (forestry and timber treatment only)	1000kg
Subclass 6.4A: Eye irritant		
9.	Cement, hydrated lime and burnt lime	30 tonne
10.	Sodium chloride	1000kg
11.	All others	1000kg
Subclass 6.5A and B: Respiratory and contact sensitizers		
12.	Cement, hydrated lime and burnt lime	30 tonne
13.	All others (excluding forestry and timber treatment)	2000kg
14.	All others (forestry and timber treatment only)	1000kg
Subclass 6.6A and B: Human mutagens		
15.	All (excluding forestry and timber treatment)	2000kg
16.	All (forestry and timber treatment only)	1000kg
Subclass 6.7A and B: Carcinogens		
17.	All	200kg
18.	All (forestry and timber treatment only)	1000kg
Subclass 6.8A-C: Human reproductive or developmental toxicants		
19.	All	0
Subclass 6.9A and B: Substances affecting human target organs or systems		
20.	All	0

**Table A6.4.7 Class 7 - Radioactive materials.**

Substances		Quantity limit
1.	All substances	Up to 100 times the quantities specified in the Type A transport package limit, as identified in the International Atomic Energy Agency (IAEA) Regulations for the Safe Transport of Radioactive Material. Examples include domestic smoke detectors, demonstration radioactive sources in school laboratories.

**Note A6.4.7A - General advice**

- These substances are controlled through the Radiation Protection Act 1965 rather than HSNO and Hazardous Substances Regulations. **{PHS cl.16}**

**Table A6.4.8 Class 8 - Corrosives.**

Substance		Quantity limit
Subclass 8.1A: Substances corrosive to metals		
1.	All (excluding forestry and timber treatment)	1000 Litres
2.	All (forestry and timber treatment only)	5000 Litres
Subclass 8.2A-C: Substances corrosive to skin		
3.	Cement, hydrated lime and burnt lime	50 Tonne
4.	All (excluding forestry and timber treatment)	1000 Litres
5.	All (forestry and timber treatment only)	5000 Litres
Subclass 8.3A: Substances corrosive to the eye		
6.	Cement, hydrated lime and burnt lime	50 Tonne
7.	All (excluding forestry and timber treatment)	1000 Litres
8.	All (forestry and timber treatment only)	5000 Litres

**Table A6.4.9 Class 9 - Ecotoxics.**

Substance		Quantity limit
Subclass 9.1A-D: Aquatic ecotoxics and 9.2A-D: Soil ecotoxics		
1.	All substances in below ground tank storage	See base class thresholds.
2.	All substances in all other locations	0
Subclass 9.3A-C: Terrestrial vertebrate ecotoxics		
3.	All substances in all locations	See base class thresholds.
Subclass 9.4A-C: Terrestrial invertebrate ecotoxics		
4.	All substances in all locations	See base class thresholds.

## A6.5 Port Zone {Confirmed for deletion - PHS 85.1}

1. Tables A6.5.1 – A6.5.9 specify the hazardous substances quantity limits for the Port Zone. **{PHS 85.1}**
2. Except: **{PHS 85.1}**
  - a. the following are exempt from the hazardous substances quantity limits: **{PHS 85.1}**
    - i. the transit and two hour storage maximum of tracked hazardous substances transit and 72-hour storage maximum of non-tracked hazardous substances; **{PHS 85.1}**
    - ii. the storage of hazardous substances (excluding fixed installations) with either a Hazardous Substance Location Certificate or Transit Depot Certificate issued pursuant to the Hazardous Substances (Classes 1 to 5) Regulations 2001 and for Classes 6, 8, 9 in compliance with the HSNO Act 1996; **{PHS 85.1}**
    - iii. the storage and use of fuel and other substances that are contained in the fuel system, electrical system or control system of motor vehicles, boats, aircraft and small engines; and **{PHS 85.1}**
    - iv. the storage and use of transformer cooling oils in electricity transformers. **{PHS 85.1}**
3. Unless otherwise stated, if a hazardous substance falls into more than one HSNO sub-class and is therefore controlled by more than one maximum permitted quantity threshold, the base or primary class will determine the maximum permitted quantity threshold. The base or primary class of a substance is the first classification listed beside any substance within the New Zealand Gazette Notice No. 35 as well as on all HSNO required labelling and signage: **{PHS 85.1}**
4. All volumes listed for quantity limits will be aggregated i.e as a permitted activity a site may hold the maximum threshold identified of each Class 1 plus Class 2 plus Class 3 and/or Class 4.1.3A-C plus Class 4.2A plus 4.3A etc: **{PHS 85.1}**
5. Where the volume or weight of a hazardous substance is affected by the temperature and pressure at which it is stored, the volume or weight will be considered (for the purposes of the hazardous substance quantity limits) to be that present in conditions of 20°C and 101.3kPa: **{PHS 85.1}**
6. The permitted quantity thresholds apply per hazardous sub-facility. Each hazardous sub-facility must be separated from any other hazardous sub-facility on the same site and meet the following locational requirements: **{PHS 85.1}**
  - a. if located external to a building, the gazetted<sup>1</sup> or regulated controls<sup>1</sup> for "high intensity land use" and "low intensity land use" apply, and the location is such that the "controlled zone" or tabled separation distances of each facility do not overlap; or **{PHS 85.1}**
  - b. if permitted to be located inside a building by the gazetted<sup>1</sup> or regulated controls<sup>1</sup>, or referenced standards pursuant to HSNO, then each hazardous sub-facility must be located in a separate fire cell. **{PHS 85.1}**

<sup>1</sup> New Zealand Gazette Notice 26 March 2004 – Issue No. 35 and Hazardous Substances (Classes 1-5 Controls) Regulations 2001 and HSNO (Classes 6, 8 and 9 Controls) Regulations 2001 **{PHS 85.1}**

**Table A6.5.1 Class 1 – Explosives. {PHS 85.1}**

Substance <b>{PHS 85.1}</b>		Quantity limit <b>{PHS 85.1}</b>
Subclass 1.1A-G, J, L: Mass explosion hazard <b>{PHS 85.1}</b>		
4.	Gunpowder and black powder <b>{PHS 85.1}</b>	0

<b>Substance {PHS 85.1}</b>		<b>Quantity limit {PHS 85.1}</b>
2-	Display fireworks {PHS 85.1}	0
3-	Industrial explosives (e.g. TNT) and all other Subclass 1.1 {PHS 85.1}	No threshold
Subclass 1.2B-L: Projection hazard {PHS 85.1}		
4-	All {PHS 85.1}	No threshold
Subclass 1.3C, F-L: Fire and minor blast hazard {PHS 85.1}		
5-	Smokeless ammunition-reloading powder {PHS 85.1}	No threshold
Subclass 1.3C, F-L: Fire and minor blast hazard {PHS 85.1}		
6-	Retail fireworks {PHS 85.1}	No thresholds – refer to Hazardous Substances (Fireworks) Regulations 2001
7-	All other Subclass 1.3 {PHS 85.1}	No thresholds
Subclass 1.4B-G, S: No significant hazard {PHS 85.1}		
8-	Safety ammunition and flares {PHS 85.1}	50kg
9-	Retail fireworks {PHS 85.1}	No thresholds – refer to Hazardous Substances (Fireworks) Regulations 2001
10-	Sodium Azide {PHS 85.1}	0
11-	All other Subclass 1.4 {PHS 85.1}	No thresholds
Subclass 1.5D: Very insensitive, with mass explosion hazard {PHS 85.1}		
12-	All {PHS 85.1}	No thresholds
Subclass 1.6N: Extremely insensitive, no mass explosion hazard {PHS 85.1}		
13-	All {PHS 85.1}	No thresholds

**Table A6.5.2 Class 2 – Gases and aerosols. {PHS 85.1}**

<b>Substance {PHS 85.1}</b>		<b>Quantity limit {PHS 85.1}</b>
Subclass 2NH: Non Hazardous {PHS 85.1}		
1-	All {PHS 85.1}	200m <sup>3</sup>
Subclass 2.1.1A: High Hazard Flammable Gases {PHS 85.1}		
2-	LPG (incl. propane-based refrigerant) in cylinders or multi-vessel tanks {PHS 85.1}	600kg total outdoor storage quantity
3-	LPG (incl. propane-based refrigerant) in below-ground or above-ground single vessel tanks {PHS 85.1}	0
4-	LPG propane-based refrigerant in commercial receivers {PHS 85.1}	50kg

Substance {PHS 85.1}		Quantity limit {PHS 85.1}
5-	Acetylene {PHS 85.1}	30m <sup>3</sup>
6-	Hydrogen, methane and all other permanent gases {PHS 85.1}	30m <sup>3</sup>
Subclass 2.1.1B: Medium-hazard flammable gases {PHS 85.1}		
7-	Anhydrous ammonia-refrigerant {PHS 85.1}	140kg
8-	All other Subclass 2.1.1B {PHS 85.1}	No thresholds
Subclass 2.1.2A: Flammable aerosols {PHS 85.1}		
9-	All {PHS 85.1}	450 Litres

**Table A6.5.3 Class 3 – Flammable liquids {PHS 85.1}**

Substance {PHS 85.1}		Quantity limit {PHS 85.1}
Subclass 3.1A Liquid: Very high hazard (flash point less than 23°C, initial boiling point less than 35°C) {PHS 85.1}		
1-	Petrol (stored above-ground in containers with capacity less than 450 Litres but no storage in metal drums) {PHS 85.1}	a. 50 Litres (any storage except metal drums) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 420 Litres (in approved HSNO 'type' stores)
2-	Petrol (stored above-ground in containers with capacity more than 450 Litres but no storage in metal drums) {PHS 85.1}	a. Certified single-skin tanks: 0 b. Certified double-skin tanks: 600 Litres
3-	Liquid petroleum fuels in below-ground single-vessel tanks {PHS 85.1}	0
4-	All other (stored above-ground in containers with capacity less than 450 Litres) {PHS 85.1}	50 Litres
5-	All other (stored above-ground in containers with capacity more than 450 Litres or stored below-ground) {PHS 85.1}	0
Subclass 3.1B Liquid: High hazard (flash point less than 23°C, initial boiling point more than 35°C) {PHS 85.1}		
6-	Liquid petroleum fuels in below-ground single-vessel tanks {PHS 85.1}	0
7-	All other – e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity less than 450 Litres) {PHS 85.1}	a. 10 Litres (any storage) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 450 Litres (in approved HSNO 'type' stores) d. Port is permitted to hold 1500 Litres in containers of up to 20L where a test location certificate is held.

Substance {PHS 85.1}		Quantity limit {PHS 85.1}
8.	All other – e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity more than 450 Litres) {PHS 85.1}	0
Subclass 3.1A: Petrol plus Subclass 3.1B {PHS 85.1}		
9.	Petrol plus any Subclass 3.1B substance – cumulative total limit {PHS 85.1}	2000 Litres
Subclass 3.1C Liquid: Medium hazard (flash point more than 23°C, but less than 35°C) {PHS 85.1}		
10.	Liquid petroleum fuels in below-ground single vessel tanks {PHS 85.1}	0
11.	All – kerosene, aviation kerosene (stored above-ground in containers with capacity less than 450 Litres) {PHS 85.1}	a. 10 Litres (any storage) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 450 Litres (in approved HSNO 'type' stores) d. Large scale retail activities only: 1500 Litres in containers of up to 5 Litres each
12.	All – kerosene, aviation kerosene (stored above-ground in containers with capacity more than 450 Litres) {PHS 85.1}	a. Certified single skin tanks: 450 Litres b. Certified double skin tanks: 2000 Litres
Subclass 3.1D Liquid: Low hazard (flash point more than 60°C, but less than 93°C) {PHS 85.1}		
13.	Liquid petroleum fuels in below-ground single vessel tanks {PHS 85.1}	0
14.	All – e.g. diesel, petroleum, fuel oils (stored above-ground in containers with capacity less than 450 Litres) {PHS 85.1}	450 Litres
15.	All – e.g. diesel, petroleum, fuel oils (stored above-ground in containers with capacity more than 450 Litres) {PHS 85.1}	a. Certified single skin tanks: 450 Litres b. Certified double skin tanks: 2000 Litres c. Certified super vault tanks constructed to south-western research institute (SWRI) standards: 30,000 Litres
Subclass 3.2A, Subclass 3.2B, Subclass 3.2C: Liquid desensitised explosive – High, medium and low hazard {PHS 85.1}		
16.	All substances {PHS 85.1}	0

**Table A6.5.4 Class 4 – Flammable solids. {PHS 85.1}**

Substance {PHS 85.1}		Quantity limit {PHS 85.1}
Subclass 4.1.1A: Readily combustible solids and solids that may cause fire through friction (medium hazard) {PHS 85.1}		
1.	All {PHS 85.1}	50kg

<b>Substance {PHS 85.1}</b>		<b>Quantity limit {PHS 85.1}</b>
<b>Subclass 4.1.1B Readily combustible solids and solids that may cause fire through friction (low hazard) {PHS 85.1}</b>		
2. All {PHS 85.1}		500kg
<b>Subclass 4.1.2A-B: Self reactive – Types A and B {PHS 85.1}</b>		
3. All {PHS 85.1}		50kg
<b>Subclass 4.1.2C-G: Self reactive – Types C-G {PHS 85.1}</b>		
4. All {PHS 85.1}		500kg
<b>Subclass 4.1.3A-C: Solid desensitized explosives {PHS 85.1}</b>		
5. All {PHS 85.1}		0
<b>Subclass 4.2A-B: Spontaneously combustible – Pyrophoric substances (high hazard and self heating substances: medium hazard) {PHS 85.1}</b>		
6. All {PHS 85.1}		50kg
<b>Subclass 4.2C: Spontaneously combustible (self heating substances: low hazard) {PHS 85.1}</b>		
7. All {PHS 85.1}		500kg
<b>Subclass 4.3A-B: Solids that emit flammable gas when wet (high and medium hazard) {PHS 85.1}</b>		
8. All {PHS 85.1}		50kg
<b>Subclass 4.3C: Solids that emit flammable gas when wet (low hazard) {PHS 85.1}</b>		
9. All {PHS 85.1}		500kg

**Table A6.5.5 Class 5 – Oxidising substances. {PHS 85.1}**

<b>Substance {PHS 85.1}</b>		<b>Quantity limit {PHS 85.1}</b>
<b>Subclass 5.1.1A-C: Liquids and solids {PHS 85.1}</b>		
1. All substances {PHS 85.1}		200 Litres if liquid, 200kg if solid
<b>Subclass 5.1.2A: Gases {PHS 85.1}</b>		
2. Oxygen (except as stored and used in accordance with HSN0 requirements within medical facilities {PHS 85.1})		200m <sup>3</sup>
3. Nitrous oxide (except as stored and used in accordance with HSN0 requirements within medical facilities {PHS 85.1})		0
4. Chlorine {PHS 85.1}		0
<b>Subclass 5.2A-C: Organic Peroxide – Types A-C {PHS 85.1}</b>		
5. All – e.g. MEKP Polyester resin catalyst {PHS 85.1}		0.5 Litres

**Table A6.5.6 Class 6 - Toxic substances. {PHS 85.1}**

Substance {PHS 85.1}		Quantity limit {PHS 85.1}
Subclass 6.1A-C: Acutely toxic {PHS 85.1}		
1-	Anhydrous ammonia-refrigerant {PHS 85.1}	140kg
2-	Chlorine {PHS 85.1}	0
3-	All other substances {PHS 85.1}	20-Litres if liquid, 20kg if solid
Subclass 6.1D and E {PHS 85.1}		
4-	Sodium chloride {PHS 85.1}	1000kg
5-	All other substances {PHS 85.1}	1000kg
Subclass 6.3A and B: Skin irritant {PHS 85.1}		
6-	All {PHS 85.1}	1000kg
Subclass 6.4A: Eye irritant {PHS 85.1}		
7-	Cement, hydrated lime and burnt lime {PHS 85.1}	100 Tonne
8-	Sodium chloride {PHS 85.1}	1000kg
9-	All others {PHS 85.1}	1000kg
Subclass 6.5A and B: Respiratory and contact sensitizers {PHS 85.1}		
10-	Cement, hydrated lime and burnt lime {PHS 85.1}	100 Tonne
11-	All others {PHS 85.1}	1000kg
Subclass 6.6A and B: Human mutagens {PHS 85.1}		
12-	All {PHS 85.1}	1000kg
Subclass 6.7A and B: Carcinogens {PHS 85.1}		
13-	All {PHS 85.1}	1000kg
Subclass 6.8A-C: Human reproductive or developmental toxicants {PHS 85.1}		
14-	All {PHS 85.1}	0
Subclass 6.9A and B: Substances affecting human target organs or systems {PHS 85.1}		
15-	All {PHS 85.1}	0

**Table A6.5.7 Class 7 - Radioactive materials. {PHS 85.1}**

Substances {PHS 85.1}	Quantity limit {PHS 85.1}
69. All substances {PHS 85.1}	Up to 100 times the quantities specified in the Type A transport package limit, as identified in the International Atomic Energy Agency (IAEA) Regulations for the Safe Transport of Radioactive Material. Examples include domestic smoke detectors, demonstration radioactive sources in school laboratories.

**Note A6.5A - General advice {PHS 85.1}**

1. These substances are controlled through the Radiation Protection Act 1965 rather than HSNO. {PHS 85.1}

**Table A6.5.8 Class 8 - Corrosives. {PHS 85.1}**

Substance {PHS 85.1}	Quantity limit {PHS 85.1}
Subclass 8.1A: Substances corrosive to metals {PHS 85.1}	
1. All {PHS 85.1}	1000 Litres
Subclass 8.2A-C: Substances corrosive to skin {PHS 85.1}	
2. Cement, hydrated lime and burnt lime {PHS 85.1}	100 Tonne
3. All {PHS 85.1}	1000 Litres
Subclass 8.3A: Substances corrosive to the eye {PHS 85.1}	
4. Cement, hydrated lime and burnt lime {PHS 85.1}	100 Tonne
5. All {PHS 85.1}	1000 Litres

**Table A6.5.9 Class 9 - Ecotoxics. {PHS 85.1}**

Substance {PHS 85.1}	Quantity limit {PHS 85.1}
Subclass 9.1A-D: Aquatic ecotoxics and Subclass 9.2A-D: Soil ecotoxics {PHS 85.1}	
1. All substances in below ground tank storage {PHS 85.1}	See base class thresholds.
2. All substances in all other locations {PHS 85.1}	0
Subclass 9.3A-C: Terrestrial vertebrate ecotoxics {PHS 85.1}	
3. All substances in all locations {PHS 85.1}	See base class thresholds.
Subclass 9.4A-C: Terrestrial invertebrate ecotoxics {PHS 85.1}	
4. All substances in all locations {PHS 85.1}	See base class thresholds.

## A6.6 Dunedin International Airport Zone

1. Tables A6.6.1 - A6.6.9 specify the hazardous substances quantity limits for the Dunedin International Airport Zone.
2. Except:
  - a. where any site within the zone contains residential activity the quantity limits for the residential zone, as specified in Appendix A6.1, apply.
  - b. the following are exempt from the hazardous substances quantity limits:
    - i. the storage and use of hazardous substances for domestic purposes, associated with a lawfully established residential activity, excluding home occupation. The hazardous substance(s) must form part of a consumer product intended for domestic use. The product must be stored in the container or packaging in which it was sold, and used in accordance with the manufacturer's instructions;
    - ii. the storage and use of fuel and other substances that are contained in the fuel system, electrical system or control system of motor vehicles, boats, aircraft and small engines; and
    - iii. the storage and use of transformer cooling oils in electricity transformers.
3. ~~Unless otherwise stated, if a hazardous substance falls into more than one HSNO sub-class and is therefore controlled by more than one maximum permitted quantity threshold, the base or primary class will determine the maximum permitted quantity threshold. The base or primary class of a substance is the first classification listed beside any substance within the New Zealand Gazette Notice No. 35 as well as on all HSNO required labelling and signage. {PHS cl.16}~~
4. All volumes listed for quantity limits will be aggregated i.e as a permitted activity a site may hold the maximum threshold identified of each Class 1 plus Class 2 plus Class 3 and/or Class 4.1.3A-C plus Class 4.2A plus 4.3A etc.
5. Where the volume or weight of a hazardous substance is affected by the temperature and pressure at which it is stored, the volume or weight will be considered (for the purposes of the hazardous substance quantity limits) to be that present in conditions of 20°C and 101.3kPa.
6. The permitted quantity thresholds apply per hazardous sub-facility. Each hazardous sub-facility must be separated from any other hazardous sub-facility on the same site and meet the following locational requirements:
  - a. if located external to a building, the gazetted<sup>1</sup> or regulated controls<sup>1</sup> for "~~protected place high-intensity land use~~" **{PHS cl.16}** and "~~public place low-intensity land use~~" **{PHS cl.16}** apply, and the location is such that the "controlled zone" or tabled separation distances of each facility do not overlap; or
  - b. if permitted to be located inside a building by the gazetted<sup>1</sup> or regulated controls<sup>1</sup>, or referenced standards pursuant to HSNO, then each hazardous sub-facility must be located in a separate fire cell.

<sup>1</sup> ~~New Zealand Gazette Notice 26 March 2004 – Issue No. 35 and Hazardous Substances (Classes 1-5 Controls) Regulations 2001 and HSNO (Classes 6, 8 and 9 Controls) Regulations 2001 Health and Safety at Work (Hazardous Substances) Regulations 2017 for work places and Hazardous Substances (Hazardous Property Controls) Notice 2017 for places that are not workplaces. {PHS cl.16}~~

**Table A6.6.1 Class 1 - Explosives.**

Substance		Quantity limit
Subclass 1.1A-G, J, L: Mass explosion hazard		
1.	Gunpowder and black powder	0
2.	Display fireworks	0
3.	Industrial explosives (e.g. TNT) and all other Subclass 1.1	0
Subclass 1.2B-L: Projection hazard		
4.	All	No thresholds
Subclass 1.3C, F-L: Fire and minor blast hazard		
5.	Smokeless ammunition reloading powder	15kg
Subclass 1.3C, F-L: Fire and minor blast hazard		
6.	Retail fireworks	No thresholds - refer to Hazardous Substances (Fireworks) Regulations 2001
7.	All other Subclass 1.3	No thresholds
Subclass 1.4B-G, S: No significant hazard		
8.	Safety ammunition and flares	No threshold
9.	Retail fireworks	No thresholds - refer to Hazardous Substances (Fireworks) Regulations 2001
10.	Sodium Azide	0
11.	All other Subclass 1.4	No thresholds
Subclass 1.5D: Very insensitive, with mass explosion hazard		
12.	All	No thresholds
Subclass 1.6N: Extremely insensitive, no mass explosion hazard		
13.	All	No thresholds

**Table A6.6.1 Class 2 - Gases and aerosols.**

Substance		Quantity limit
Subclass 2NH: Non Hazardous		
1.	All	200m <sup>3</sup>
Subclass 2.1.1A: High Hazard Flammable Gases		
2.	LPG (incl. propane-based refrigerant) in cylinders or multi-vessel tanks	450kg total outdoor storage quantity
3.	LPG (incl. propane-based refrigerant) in below-ground or above-ground single vessel tanks	0
4.	LPG propane-based refrigerant in commercial receivers	50kg

Substance	Quantity limit
5. Acetylene	30m <sup>3</sup>
6. Hydrogen, methane and all other permanent gases	30m <sup>3</sup>
Subclass 2.1.1B: Medium hazard flammable gases	
7. Anhydrous ammonia refrigerant	140kg
8. All other Subclass 2.1.1B	No thresholds
Subclass 2.1.2A: Flammable aerosols	
9. All	450 Litres

**Table A6.6.3 Class 3 - Flammable liquids**

Substance	Quantity limit
Subclass 3.1A Liquid: Very high hazard (flash point less than 23°C, initial boiling point less than 35°C)	
1. Petrol (stored above-ground in containers with capacity less than 450 Litres but no storage in metal drums)	a. 50 Litres (any storage except metal drums) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 420 Litres (in approved HSNO or Hazardous Substances Regulations <b>{PHS cl.16}</b> 'type' stores)
2. Petrol (stored above-ground in containers with capacity more than 450 Litres)	a. Certified single skin tanks: 0 b. Certified double skin tanks: 600 Litres
3. Liquid petroleum fuels in below-ground single vessel tanks	0
4. All other (stored above-ground in containers with capacity less than 450 Litres)	50 Litres
5. All other (stored above-ground in containers with capacity more than 450 Litres or stored below ground)	0
Subclass 3.1B Liquid: High hazard (flash point less than 23°C, initial boiling point more than 35°C)	
6. Liquid petroleum fuels in below-ground single vessel tanks	0
7. All other - e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity less than 450 Litres)	a. 10 Litres (any storage) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 450L (in approved HSNO or Hazardous Substances Regulations <b>{PHS cl.16}</b> 'type' stores) d. Large-scale <del>r</del> Retail activities activity <b>{PO cl.16}</b> 1500m <sup>2</sup> or more in gross floor area <b>{PHS cl.16}</b> only: 1500 Litres in containers of up to 5 Litres each

Substance		Quantity limit
8.	All other - e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity more than 450 Litres)	a. Certified single skin tanks: 0 b. Certified double skin tanks: 600 Litres
Subclass 3.1A: Petrol plus Subclass 3.1B		
9.	Petrol plus any Subclass 3.1B substance - cumulative total limit	a. 50 Litres (any storage except metal drums) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 420 Litres (in approved HSNO <u>or Hazardous Substances Regulations</u> <b>{PHS cl.16}</b> 'type' stores)
Subclass 3.1C Liquid: Medium hazard (flash point more than 23°C, but less than 35°C)		
10.	Liquid petroleum fuels in below-ground single vessel tanks	0
11.	All - kerosene, aviation kerosene (stored above-ground in containers with capacity less than 450 Litres)	a. 10 Litres (any storage) b. 250 Litres (in dangerous goods cabinet approved to AS 1940) c. 450 Litres (in approved HSNO <u>or Hazardous Substances Regulations</u> <b>{PHS cl.16}</b> 'type' stores) d. <del>Large scale</del> <u>Retail activities activity 1500m<sup>2</sup> or more in gross floor area</u> <b>{PHS cl.16}</b> only: 1500 Litres in containers of up to 5 Litres each
12.	All - kerosene, aviation kerosene (stored above-ground in containers with capacity more than 450 Litres)	a. Certified single skin tanks: 450 Litres b. Certified double skin tanks: 2000 Litres
Subclass 3.1D Liquid: Low hazard (flash point more than 60°C, but less than 93°C)		
13.	Liquid petroleum fuels in below-ground single vessel tanks	0
14.	All - e.g. diesel, petroleum, fuel oils (stored above-ground in containers with capacity less than 450 Litres)	450 Litres
15.	All - e.g. diesel, petroleum, fuel oils (stored above-ground in containers with capacity more than 450 Litres)	a. Certified single skin tanks: 450 Litres b. Certified double skin tanks: 10,000 Litres c. Certified super vault tanks constructed to South Western Research Institute (SWRI) standards: 30,000 Litres
Subclass 3.2A, Subclass 3.2B, Subclass 3.2C: Liquid desensitised explosive - High, medium and low hazard		
16.	All substances	0

**Table A6.6.4 Class 4 - Flammable solids.**

Substance		Quantity limit
Subclass 4.1.1A: Readily combustible solids and solids that may cause fire through friction (medium hazard)		
1.	All	50kg
Subclass 4.1.1B Readily combustible solids and solids that may cause fire through friction (low hazard)		
2.	All	500kg
Subclass 4.1.2A-B: Self reactive - Types A and B		
3.	All	50kg
Subclass 4.1.2C-G: Self reactive - Types C-G		
4.	All	500kg
Subclass 4.1.3A-C: Solid desensitized explosives		
5.	All	0
Subclass 4.2A-B: Spontaneously combustible - Pyrophoric substances (high hazard and self heating substances: medium hazard)		
6.	All	50kg
Subclass 4.2C: Spontaneously combustible (self heating substances: low hazard)		
7.	All	500kg
Subclass 4.3A-B: Solids that emit flammable gas when wet (high and medium hazard)		
8.	All	50kg
Subclass 4.3C: Solids that emit flammable gas when wet (low hazard)		
9.	All	500kg

**Table A6.6.5 Class 5 - Oxidising substances.**

Substance		Quantity limit
Subclass 5.1.1A-C: Liquids and solids		
1.	All substances	200 Litres if liquid, 200kg if solid
Subclass 5.1.2A: Gases		
2.	Oxygen (except as stored and used in accordance with HSNO and Hazardous Substances Regulations { <b>PHS cl.16</b> } requirements within medical facilities	200m <sup>3</sup>
3.	Nitrous oxide (except as stored and used in accordance with HSNO and Hazardous Substances Regulations { <b>PHS cl.16</b> } requirements within medical facilities	0
4.	Chlorine	0
Subclass 5.2A-G: Organic Peroxide - Types A-G		

Substance	Quantity limit
5. All - e.g. MEKP Polyester resin catalyst	0.5 Litres

**Table A6.6.6 Class 6 - Toxic substances.**

Substance	Quantity limit
Subclass 6.1A-C: Acutely toxic	
1. Anhydrous ammonia refrigerant	140kg
2. Chlorine	0
3. All other substances	20 Litres if liquid, 20kg if solid
Subclass 6.1D and E	
4. Sodium chloride	1000kg
5. All other substances	1000kg
Subclass 6.3A and B: Skin irritant	
6. All	1000kg
Subclass 6.4A: Eye irritant	
7. Cement, hydrated lime and burnt lime	1000kg
8. Sodium chloride	1000kg
9. All others	1000kg
Subclass 6.5A and B: Respiratory and contact sensitizers	
10. Cement, hydrated lime and burnt lime	1000kg
11. All others	1000kg
Subclass 6.6A and B: Human mutagens	
12. All	1000kg
Subclass 6.7A and B: Carcinogens	
13. All	1000kg
Subclass 6.8A-C: Human reproductive or developmental toxicants	
14. All	0
Subclass 6.9A and B: Substances affecting human target organs or systems	
15. All	0

**Table A6.6.7 Class 7 - Radioactive materials.**

Substances	Quantity limit
1. All substances	Up to 100 times the quantities specified in the Type A transport package limit, as identified in the International Atomic Energy Agency (IAEA) Regulations for the Safe Transport of Radioactive Material. Examples include domestic smoke detectors, demonstration radioactive sources in school laboratories.

**Note A6.6.7A - General advice**

- These substances are controlled through the Radiation Protection Act 1965 rather than HSNO and Hazardous Substances Regulations. **{PHS cl.16}**

**Table A6.6.8 Class 8 - Corrosives.**

Substance	Quantity limit
Subclass 8.1A: Substances corrosive to metals	
1. All	1000 Litres
Subclass 8.2A-C: Substances corrosive to skin	
2. Cement, hydrated lime and burnt lime	1000kg
3. All	1000 Litres
Subclass 8.3A: Substances corrosive to the eye	
4. Cement, hydrated lime and burnt lime	1000kg
5. All	1000 Litres

**Table A6.6.9 Class 9 - Ecotoxics.**

Substance	Quantity limits
Subclass 9.1A-D: Aquatic ecotoxics and Subclass 9.2A-D: Soil ecotoxics	
1. All substances in below ground tank storage	See base class thresholds.
2. All substances in all other locations	0
Subclass 9.3A-C: Terrestrial vertebrate ecotoxics	
3. All substances in all locations	See base class thresholds.
Subclass 9.4A-C: Terrestrial invertebrate ecotoxics	
4. All substances in all locations	See base class thresholds.

## A6.7 Ashburn Clinic, Mercy Hospital and Wakari Hospital Zones

1. Tables A6.7.1 - A6.7.9 specify the hazardous substances quantity limits for the Ashburn Clinic, Mercy Hospital and Wakari Hospital zones.
2. Except:
  - a. where any site within these zones contains residential activity the quantity limits for the residential zone, as specified in Appendix A6.1, apply.
  - b. the following are exempt from the hazardous substances quantity limits:
    - i. the storage and use of hazardous substances for domestic purposes, associated with a lawfully established residential activity, excluding home occupation. The hazardous substance(s) must form part of a consumer product intended for domestic use. The product must be stored in the container or packaging in which it was sold, and used in accordance with the manufacturer's instructions;
    - ii. the storage and use of fuel and other substances that are contained in the fuel system, electrical system or control system of motor vehicles, boats, aircraft and small engines; and
    - iii. the storage and use of transformer cooling oils in electricity transformers.
3. ~~Unless otherwise stated, if a hazardous substance falls into more than one HSNO sub-class and is therefore controlled by more than one maximum permitted quantity threshold, the base or primary class will determine the maximum permitted quantity threshold. The base or primary class of a substance is the first classification listed beside any substance within the New Zealand Gazette Notice No. 35 as well as on all HSNO required labelling and signage. {PHS cl.16}~~
4. All volumes listed for quantity limits will be aggregated i.e. as a permitted activity a site may hold the maximum threshold identified of each Class 1 plus Class 2 plus Class 3 and/or Class 4.1.3A-C plus Class 4.2A plus 4.3A etc.
5. Where the volume or weight of a hazardous substance is affected by the temperature and pressure at which it is stored, the volume or weight will be considered (for the purposes of the hazardous substance quantity limits) to be that present in conditions of 20°C and 101.3kPa.
6. The permitted quantity thresholds apply per site.

**Table A6.7.1 Class 1 - Explosives.**

Substance		Quantity limit
Subclass 1.1A-G, J, L: Mass explosion hazard		
1.	Gunpowder and black powder	0
2.	Display fireworks	0
3.	Industrial explosives (e.g. TNT) and all other Subclass 1.1	0
Subclass 1.2B-L: Projection hazard		
4.	All	No thresholds
Subclass 1.3C, F-L: Fire and minor blast hazard		
5.	Smokeless ammunition reloading powder	15kg
Subclass 1.3C, F-L: Fire and minor blast hazard		

Substance		Quantity limit
6.	Retail fireworks	No thresholds - refer to Hazardous Substances (Fireworks) Regulations 2001
7.	All other Subclass 1.3	No thresholds
Subclass 1.4B-G, S: No significant hazard		
8.	Safety ammunition and flares	25kg
9.	Retail fireworks	No thresholds - refer to Hazardous Substances (Fireworks) Regulations 2001
10.	Sodium Azide	0
11.	All other Subclass 1.4	No thresholds
Subclass 1.5D: Very insensitive, with mass explosion hazard		
12.	All	No thresholds
Subclass 1.6N: Extremely insensitive, no mass explosion hazard		
13.	All	No thresholds

**Table A6.7.2 Class 2 - Gases and aerosols.**

Substance		Quantity limit
Subclass 2NH: Non Hazardous		
1.	All	10m <sup>3</sup>
Subclass 2.1.1A: High Hazard Flammable Gases		
2.	LPG (incl. propane-based refrigerant) in cylinders or multi-vessel tanks.	200kg total outdoor storage quantity
3.	LPG (incl. propane-based refrigerant) in below-ground or above-ground single vessel tanks	
4.	LPG propane-based refrigerant in commercial receivers	0
5.	Acetylene	1.45m <sup>3</sup>
6.	Hydrogen, methane and all other permanent gases	0
Subclass 2.1.1B: Medium hazard flammable gases		
7.	Anhydrous ammonia refrigerant	0
8.	All other Subclass 2.1.1B	No thresholds
Subclass 2.1.2A: Flammable aerosols		
9.	All	20 Litres

**Table A6.7.3 Class 3 - Flammable liquids**

Substance		Quantity limit
Subclass 3.1A Liquid: Very high hazard (flash point less than 23°C, initial boiling point less than 35°C)		
1.	Petrol (stored above-ground in containers with capacity less than 450 Litres)	a. 10 Litres inside dwelling b. 50 Litres outside dwelling
2.	Petrol (stored above-ground in containers with capacity more than 450 Litres)	0
3.	Liquid petroleum fuels in below-ground single vessel tanks	0
4.	All other	0
Subclass 3.1B Liquid: High hazard (flash point less than 23°C, initial boiling point more than 35°C)		
5.	Liquid petroleum fuels in below-ground single vessel tanks	0
6.	All other - e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity less than 450 Litres)	100 Litres in accordance with HSNO requirements <u>or Hazardous Substances Regulations</u> <b>{PHS cl.16}</b>
7.	All other - e.g. acetone, paint spray thinners, pure alcohol (stored above-ground in containers with capacity more than 450 Litres)	0
Subclass 3.1A: Petrol plus Subclass 3.1B		
8.	Petrol plus any Subclass 3.1B substance - cumulative total limit	a. 10 Litres inside dwelling b. 50 Litres outside dwelling
Subclass 3.1C Liquid: Medium hazard (flash point more than 23°C, but less than 35°C)		
9.	Liquid petroleum fuels in below-ground single vessel tanks	0
10.	All - kerosene, aviation kerosene (stored above-ground in containers with capacity less than 450 Litres)	a. 20 Litres inside dwelling b. 50 Litres outside dwelling
11.	All - kerosene, aviation kerosene (stored above-ground in containers with capacity more than 450 Litres)	0
Subclass 3.1D Liquid: Low hazard (flash point more than 60°C, but less than 93°C)		
12.	Liquid petroleum fuels in below-ground single vessel tanks	0
13.	All - e.g. diesel, petroleum, fuel oils (stored above-ground in containers with capacity less than 450 Litres)	a. 20 Litres inside dwelling b. 209 Litres outside dwelling
14.	All - e.g. diesel, petroleum, fuel oils (stored above-ground in containers with capacity more than 450 Litres)	Certified double skin tanks: 5200 Litres
Subclass 3.2A, Subclass 3.2B, Subclass 3.2C: Liquid desensitised explosive - High, medium and low hazard		
15.	All substances	0

**Table A6.7.4 Class 4 - Flammable solids.**

Substance		Quantity limit
Subclass 4.1.1A: Readily combustible solids and solids that may cause fire through friction (medium hazard)		
1.	All	0
Subclass 4.1.1B Readily combustible solids and solids that may cause fire through friction (low hazard)		
2.	All	0
Subclass 4.1.2A-B: Self reactive - Types A and B		
3.	All	0
Subclass 4.1.2C-G: Self reactive - Types C-G		
4.	All	0
Subclass 4.1.3A-C: Solid desensitized explosives		
5.	All	0
Subclass 4.2A-B: Spontaneously combustible - Pyrophoric substances (high hazard and self heating substances: medium hazard)		
6.	All	0
Subclass 4.2C: Spontaneously combustible (self heating substances: low hazard)		
7.	All	0
Subclass 4.3A-B: Solids that emit flammable gas when wet (high and medium hazard)		
8.	All	0
Subclass 4.3C: Solids that emit flammable gas when wet (low hazard)		
9.	All	0

**Table A6.7.5 Class 5 - Oxidising substances.**

Substance		Quantity limit
Subclass 5.1.1A-C: Liquids and solids		
1.	All substances	10 Litres if liquid, 10kg if solid
Subclass 5.1.2A: Gases		
2.	Oxygen (except as stored and used in accordance with HSNO and Hazardous Substances Regulations <b>{PHS cl.16}</b> requirements within medical facilities	No limit if stored and used in accordance with HSNO and Hazardous Substances Regulations <b>{PHS cl.16}</b> requirements within medical facilities
3.	Nitrous oxide (except as stored and used in accordance with HSNO and Hazardous Substances Regulations <b>{PHS cl.16}</b> requirements within medical facilities	No limit if stored and used in accordance with HSNO and Hazardous Substances Regulations <b>{PHS cl.16}</b> requirements within medical facilities
4.	Chlorine	0

Substance		Quantity limit
Subclass 5.2A-G: Organic Peroxide - Types A-G		
5.	All - e.g. MEKP Polyester resin catalyst	0.5 Litres in addition to Steris 20 Concentrate: 70kg

**Table A6.7.6 Class 6 - Toxic substances.**

Substance		Quantity limit
Subclass 6.1A-C: Acutely toxic		
1.	Anhydrous ammonia refrigerant	0
2.	Chlorine	0
3.	All other substances	0
Subclass 6.1D and E		
4.	Sodium chloride	5kg
5.	All other substances	1kg
Subclass 6.3A and B: Skin irritant		
6.	All	1kg
Subclass 6.4A: Eye irritant		
7.	Cement, hydrated lime and burnt lime	400kg
8.	Sodium chloride	5kg
9.	All others	1kg
Subclass 6.5A and B: Respiratory and contact sensitizers		
10.	Cement, hydrated lime and burnt lime	400kg
11.	All others	1kg
Subclass 6.6A and B: Human mutagens		
12.	All	1kg
Subclass 6.7A and B: Carcinogens		
13.	All	1kg
Subclass 6.8A-C: Human reproductive or developmental toxicants		
14.	All	0
Subclass 6.9A and B: Substances affecting human target organs or systems		
15.	All	0

**Table A6.7.7 Class 7 - Radioactive materials.**

Substances	Quantity limit
1. All substances	Up to 100 times the quantities specified in the Type A transport package limit, as identified in the International Atomic Energy Agency (IAEA) Regulations for the Safe Transport of Radioactive Material. Examples include domestic smoke detectors, demonstration radioactive sources in school laboratories.

**Note A6.7.7A A9.7A - General advice {PHS cl.16}**

- These substances are controlled through the Radiation Protection Act 1965 rather than HSNO and Hazardous Substances Regulations. {PHS cl.16}

**Table A6.7.8 Class 8 - Corrosives.**

Substance	Quantity limit
Subclass 8.1A: Substances corrosive to metals	
1. All	5 Litres
Subclass 8.2A-C: Substances corrosive to skin	
2. Cement, hydrated lime and burnt lime	400kg
3. All	5 Litres
Subclass 8.3A: Substances corrosive to the eye	
4. Cement, hydrated lime and burnt lime	400kg
5. All	5 Litres

**Table A6.7.9 Class 9 - Ecotoxics.**

Substance	Quantity limit
Subclass 9.1A-D: Aquatic ecotoxics and Subclass 9.2A-D: Soil ecotoxics	
1. All substances in below ground tank storage	See base class thresholds.
2. All substances in all other locations	0
Subclass 9.3A-C: Terrestrial vertebrate ecotoxics	
3. All substances in all locations	See base class thresholds.
Subclass 9.4A-C: Terrestrial invertebrate ecotoxics	
4. All substances in all locations	See base class thresholds.

