Mirvac Real Estate Pty Ltd

Hazardous Chemicals Assessment

699 Bourke Street, Melbourne, Victoria 3000

7 June 2024
Project Ref: 754-SYDEN228268 - 699 Bourke St Hazchem Report 2024

HAZARDOUS CHEMICALS ASSESSMENT

Prepared for
Mirvac Real Estate Pty Ltd

Prepared by
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Quality information

Revision history

Revision	Description	Date	Originator	Reviewer	Approver
R00	Final	7/06/2024	Ben Mcann	Dean Gleeson	Dean Gleeson

Distribution

Report Status	No. of copies	Format	Distributed to	Date
R00 Final	1	PDF	Mirvac	7/06/2024

7 June 2024

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EXECUTIVE SUMMARY

Tetra Tech Coffey Pty Ltd (Tetra Tech) was commissioned by Mirvac Real Estate Pty Ltd (the client) to conduct a Hazardous Chemicals Assessment (assessment) of the office building located at 699 Bourke Street, Docklands, Melbourne (the site). Ben McCann conducted the assessment on 22nd April 2024. The term 'Hazardous Chemicals' in this report has been used to refer to both dangerous goods and hazardous substances, as defined under the *Dangerous Goods (Storage and Handling) Regulations, 2012* and the *Occupational Health and Safety Regulations, 2017.*

Assessment Findings

Summary of Hazardous Chemicals Identified on Site

The following table presents a summary of the approximate total volumes of hazardous chemicals stored on site by dangerous goods class. It also details whether placarding and/or manifests are required for any dangerous goods stored in bulk at the site.

Dangerous Goods Class	Approximate Quantity Stored on Site (L or Kg)	Placarding Required	Manifest Required
Class 2.1	168kg	-	-
Class 2.2	1,398kg	-	-
Class 3	5L	-	-
Class 5.1 and 5.2	60kg	-	-
Class 6.1	-	-	-
Class 8	140L 6 x batteries	-	-
Class 9	-	-	-
C1 Combustible Liquid	7,800L	-	-
Non-Dangerous Goods and Products with Unknown Classes	105L 4kg	-	-

Observations

The following observations were made at the time of the assessment:

- Quantities of hazardous chemicals stored on site did not exceed the threshold levels for placarding and manifest requirements.
- Inspected hazardous chemicals observed on site were securely stored in sealed containers and provided with adequate secondary containment.
- Inspected hazardous chemical containers appeared to be appropriately labelled.
- Hazardous chemical storage areas were secured from unauthorised access e.g. within locked rooms.

- Spill kits were available adjacent to hazardous chemical storage areas e.g. Diesel Tank Room, Level 12 Plant Room, Generator Room.
- Incompatible hazardous chemicals appeared to be appropriately segregated e.g. Class 5.1 and Class 8 chemicals stored in separate secondary containment in Cooling Tower Area.
- An emergency eye wash station was not available within close proximity to Class 8 corrosive substances stored in the Level 12 Cooling Tower Area.
- Appropriate fire safety measures appeared to be available within hazardous chemical storage areas e.g. dry chemical fire extinguishers in diesel storage areas.
- The LPG cylinders in the Level 12 Plant Room were stored in a secure cabinet.
- Safety Data Sheets (SDSs) were available for the majority of hazardous chemicals stored on site, however SDSs were not available for a number of the hazardous chemicals used and stored on site e.g. diesel, refrigerants and water treatment chemicals (refer to Hazardous Chemicals Register).
- The majority of the SDSs reviewed on site were current (within 5 years of issue date), however the SDS for Hydro 256 in the Cooling Tower Area was not current (expired in February 2023).

Recommendations

The following recommended actions (and the associated indicative recommended timeframes) are provided based on the findings and observations presented above:

High Priority (action within 1 month)

No high priority actions are required.

Medium Priority (action within 3 months)

No medium priority actions are required.

Low Priority (action within 6 months)

- Install an emergency eye wash station adjacent to (within 2-10m) the Class 8 corrosive substances stored in the Level 12 Cooling Tower Area.
- Ensure that printed SDS copies are available and readily accessible for all hazardous chemicals in each relevant storage area, as well as within a central storage hub.
- Replace the expired SDS for Hydro 256 in the Cooling Tower Area with a current copy.
- Require as a condition of service contract, that all contractors engaged at the site provide a register of the chemicals they intend to use/store on site as well as a current SDS.
- Ensure all staff and contractors working within chemical storage areas at the site are provided with appropriate information, instruction and training to ensure they are able to work safely in these areas. It is recommended that this be managed within the site induction.
- Implement a periodic hazardous chemicals assessment at the site to ensure the requirements are being maintained and the register remains current. It is recommended that such a review is performed at least annually, or when significant changes are made to the hazardous chemicals used/stored on site.
- A copy of this report and register should be made available to any staff and contractors working within the relevant areas at the site.

1. INTRODUCTION

Tetra Tech Coffey Pty Ltd (Tetra Tech) was commissioned by Mirvac Real Estate Pty Ltd (the client) to conduct a Hazardous Chemicals Assessment (assessment) of the office building located at 699 Bourke Street, Docklands, Melbourne (the site). Ben McCann conducted the assessment on 22nd April 2024. The term 'Hazardous Chemicals' in this report has been used to refer to both dangerous goods and hazardous substances, as defined under the *Dangerous Goods (Storage and Handling) Regulations, 2012* and the *Occupational Health and Safety Regulations, 2017.*

1.1 Site Description

The site consisted of a 12 level (approximately 19,500m^2) office building, constructed in 2015. The building was occupied at the time of the assessment. Key chemical storage areas included the Diesel Tank Room, Generator Rooms, Chiller Room, Cooling Tower Area, and Level 12 Plant Room.

1.2 Assessment Objectives

The objectives of this assessment were as follows:

- Conduct a visual inspection of all common areas (tenanted areas were not included) at the site.
- Liaise with relevant site personnel and collect data on the location, type, quantities, use and function of the hazardous chemicals stores on site.
- Assess the risks associated with the storage of hazardous chemicals on site.
- Evaluate the effectiveness of risk control measures implemented at the site to manage hazardous chemical storage.
- Provide recommended actions to rectify any identified non-conformances and minimise the identified risks.
- Prepare an up-to-date hazardous chemicals register for the site.

2. METHODOLOGY

The assessment consisted of an on-site visual inspection to identify and assess, so far as reasonably practicable, the presence, location and condition of hazardous chemicals at, on, and associated with the site. Areas were visually inspected for containers and storage vessels that may contain any potentially hazardous chemicals. Visual assessment of the type of all hazardous chemicals identified was conducted with product details recorded including estimated volumes, and whether the contents were labelled or indicated through signage. All chemical storage areas were accessed, where reasonably practicable, and where no access was available, locations were recorded within Section 2.1 of this report. The assessment was carried out methodically, systematically and diligently to make sure all relevant areas of the premises were inspected.

Hazardous properties of each hazardous chemical stored on site were collated from the Safety Data Sheets (SDS). Where the SDS was unavailable, generic hazardous properties for the class of dangerous goods were used. For each hazardous property identified, an assessment was made to determine whether this hazardous property resulted in a risk to occupants of the chemical storage area or any adjacent areas.

Data collected during the assessment was compared to the legislative documents and standards listed in Section 7.

2.1 Inaccessible Areas

The following areas were not accessible at the time of the assessment. The presence/absence of hazardous chemicals in these areas cannot be confirmed until further investigation can confirm or refute the presence.

- Occupied areas/tenancies.
- Areas not specified as chemical storage areas.

3. DUTIES OF THE SITE OCCUPIER / EMPLOYER

An occupier / employer of a premises where hazardous chemicals are stored and handled has a duty to identify the hazards associated with the hazardous chemicals and control the risks arising from their storage and handling. The following duties must also be carried out by the site occupier / employer:

- Provide appropriate consultation, training, induction and supervision to all workers who are required to work within hazardous chemical storage areas.
- Prepare a register of all hazardous chemicals stored or used at the site.
- Obtain current SDSs for all hazardous chemicals stored or used on site.
- Prepare a manifest of any hazardous chemicals stored in bulk quantities above the relevant threshold limits.
- Display appropriate placards for hazardous chemicals stored in bulk quantities above the relevant threshold limits.
- Ensure hazardous chemical storage areas are appropriately ventilated.
- Ensure hazardous chemical containers and pipework are protected from damage.
- Ensure all hazardous chemical containers and pipework are appropriately labelled.
- Ensure that incompatible hazardous chemicals are appropriately segregated.
- Ensure appropriate spill containment provisions are provided for all hazardous chemicals.
- Ensure suitable fire safety measures are available and appropriately maintained.
- Provide health monitoring to workers who may be exposed to hazardous chemicals in levels exceeding the relevant exposure standards.

Note: The above duties are specified in Part 4 of the *Dangerous Goods (Storage and Handling) Regulations, 2012* and Part 4.1 of the *Occupational Health and Safety Regulations, 2017*. The occupier / employer of this site is considered to be the Property Manager.

4. BACKGROUND INFORMATION

4.1 Definitions

Definitions of key terms used in this assessment report and within the hazardous chemicals register are provided below:

- Dangerous Goods – Substances capable of causing immediate harm to people and property because of their hazardous properties. They may be corrosive, flammable, combustible, explosive, oxidising or water-reactive or have other hazardous properties
- Hazardous Substances – Substances that have the potential to harm human health.
- Manifest – A summary of the key information about specific dangerous goods stored at a site, intended to be provided to emergency services in the event of an emergency. Only required for dangerous goods stored in large quantities over the threshold limits detailed in the *Dangerous Goods (Storage & Handling) Regulations, 2012*.
- Placard – Signage intended to provide a clear visual warning to emergency services that dangerous goods are stored at the site. They include outer warning placards, to be installed at the vehicle entrances to the site, and location placards, to be installed on or adjacent to each container or storage area. Only required for dangerous goods stored in large quantities over the threshold limits detailed in the *Dangerous Goods (Storage & Handling) Regulations, 2012*.

4.2 Dangerous Goods Classes

Classes of relevant dangerous goods are listed below:

- Class 2 – Gases.
    - Division 2.1 – Flammable gases.
    - Division 2.2 – Non-flammable, non-toxic gases.
    - Division 2.3 – Toxic gases.
- Class 3 – Flammable liquids.
- Class 4 – Flammable solids.
    - Division 4.1 – Flammable solids, self-reactive substances, and solid desensitized explosives.
    - Division 4.2 – Substances liable to spontaneous combustion.
    - Substances which in contact with water emit flammable gases.
- Class 5 – Oxidizing substances and organic peroxides.
    - Division 5.1 – Oxidizing substances.
    - Division 5.2 – Organic peroxides.
- Class 6 – Toxic and infectious substances.
    - Division 6.1 – Toxic substances.
    - Division 6.2 – Infectious substances.
- Class 8 – Corrosive substances.
- Class 9 – Miscellaneous dangerous substances and articles.
- C1 – Combustible liquids (liquids with a flashpoint greater than 60°C but less than 93°C and a fire point less than its boiling point).

Note: It is possible for substances to display more than one characteristic, therefore these substances may fall under more than one dangerous goods class. In such circumstances the substance will have a primary class and a subsidiary class. Subsidiary classes are displayed in brackets in the dangerous goods class column of the Hazardous Chemicals Register.

4.3 Packing Group

To further assist with the identification of dangerous goods and their particular hazards, Classes 3, 4, 5, 6 and 8 are assigned with a packing group. This represents the level of danger to persons exposed to the dangerous goods. Packing groups include the following:

- I – Great danger.
- II – Medium danger.
- III – Minor danger.

5. ASSESSMENT FINDINGS

The assessment findings are detailed in the following sections. Refer to **Appendix A** for a photographic supplement and **Appendix B** for the full Hazardous Chemicals Register.

5.1 Summary of Hazardous Chemicals Identified on Site

The following table presents a summary of the approximate total volumes of hazardous chemicals stored on site by dangerous goods class. It also details whether placarding and/or manifests are required for any dangerous goods stored in bulk at the site.

Dangerous Goods Class	Approximate Quantity Stored on Site (L or Kg)	Placarding Required	Manifest Required
Class 2.1	168kg	-	-
Class 2.2	1,398kg	-	-
Class 3	5L	-	-
Class 5.1 and 5.2	60kg	-	-
Class 6.1	-	-	-
Class 8	140L 6 x batteries	-	-
Class 9	-	-	-
C1 Combustible Liquid	7,800L	-	-
Non-Dangerous Goods and Products with Unknown Classes	105L 4kg	-	-

5.2 Observations

The following observations were made at the time of the assessment:

- Quantities of hazardous chemicals stored on site did not exceed the threshold levels for placarding and manifest requirements.
- Inspected hazardous chemicals observed on site were securely stored in sealed containers and provided with adequate secondary containment.
- Inspected hazardous chemical containers appeared to be appropriately labelled.
- Hazardous chemical storage areas were secured from unauthorised access e.g. within locked rooms.
- Spill kits were available adjacent to hazardous chemical storage areas e.g. Diesel Tank Room, Level 12 Plant Room, Generator Room.
- Incompatible hazardous chemicals appeared to be appropriately segregated e.g. Class 5.1 and Class 8 chemicals stored in separate secondary containment in Cooling Tower Area.
- An emergency eye wash station was not available within close proximity to Class 8 corrosive substances stored in the Level 12 Cooling Tower Area.
- Appropriate fire safety measures appeared to be available within hazardous chemical storage areas e.g. dry chemical fire extinguishers in diesel storage areas.
- The LPG cylinders in the Level 12 Plant Room were stored in a secure cabinet.
- Safety Data Sheets (SDSs) were available for the majority of hazardous chemicals stored on site, however SDSs were not available for a number of the hazardous chemicals used and stored on site e.g. diesel, refrigerants and water treatment chemicals (refer to Hazardous Chemicals Register).

- The majority of the SDSs reviewed on site were current (within 5 years of issue date), however the SDS for Hydro 256 in the Cooling Tower Area was not current (expired in February 2023).

6. RECOMMENDED ACTIONS

The following recommended actions (and the associated indicative recommended timeframes) are provided based on the findings and observations presented above:

6.1 High Priority (action within 1 month)

No high priority actions are required.

6.2 Medium Priority (action within 3 months)

No medium priority actions are required.

6.3 Low Priority (action within 6 months)

- Install an emergency eye wash station adjacent to (within 2-10m) the Class 8 corrosive substances stored in the Level 12 Cooling Tower Area.
- Ensure that printed SDS copies are available and readily accessible for all hazardous chemicals in each relevant storage area, as well as within a central storage hub.
- Replace the expired SDS for Hydro 256 in the Cooling Tower Area with a current copy.
- Require as a condition of service contract, that all contractors engaged at the site provide a register of the chemicals they intend to use/store on site as well as a current SDS.
- Ensure all staff and contractors working within chemical storage areas at the site are provided with appropriate information, instruction and training to ensure they are able to work safely in these areas. It is recommended that this be managed within the site induction.
- Implement a periodic hazardous chemicals assessment at the site to ensure the requirements are being maintained and the register remains current. It is recommended that such a review is performed at least annually, or when significant changes are made to the hazardous chemicals used/stored on site.
- A copy of this report and register should be made available to any staff and contractors working within the relevant areas at the site.

7. REFERENCES

- Occupational Health & Safety Act, 2004.
- Dangerous Goods Act, 1985.
- Occupational Health & Safety Regulations, 2017.
- Dangerous Goods (Storage & Handling) Regulations, 2012.
- Code of Practice for the Storage and Handling of Dangerous Goods, 2013.
- Compliance Code: Hazardous Substances, 2019.
- Australian Standard 1940:2017 ‘The Storage and Handling of Flammable and Combustible Liquids’.
- Australian Standard 1596:2014 ‘The Storage and Handling of LP Gas’.
- Australian Standard 3833:2007 ‘The Storage and Handling of Mixed Classes of Dangerous Goods in Packages and Intermediate Bulk Containers’.

8. LIMITATIONS

This report and the associated services performed by Tetra Tech are in accordance with the scope of services set out in the contract between Tetra Tech and the Client. The scope of services was defined by the requests of the Client, by the time and budgetary constraints imposed by the Client, and by the availability of access to the site.

Tetra Tech derived the data in this report primarily from visual inspections, examination of available records, and interviews with individuals with relevant information about the site. In preparing this report, Tetra Tech has relied upon, and presumed accurate, certain information (or absence thereof) provided by government authorities, the Client and others identified herein. Except as otherwise stated in the report, Tetra Tech has not attempted to verify the accuracy or completeness of any such information.

No warranty, undertaking, or guarantee, whether expressed or implied, is made with respect to the data reported or to the findings, observations, and recommendations expressed in this report. Furthermore, such data, findings, observations, and recommendations are based solely upon existence at the time of the assessment. The passage of time, manifestation of latent conditions or impacts of future events (e.g. changes in legislation, scientific knowledge, land uses, etc.) may require further investigation at the site with subsequent data analysis and re-evaluation of the findings, observations, and recommendations expressed in this report.

This report has been prepared on behalf of and for the exclusive use of the Client, and is subject to and issued in connection with the provisions of the agreement between Tetra Tech and the Client. Tetra Tech accepts no liability or responsibility whatsoever and expressly disclaims any responsibility for or in respect of any use of or reliance upon this report by any third party or parties. It is the responsibility of the Client to accept if the Client so chooses any recommendations contained within and implement them in an appropriate, suitable and timely manner.

APPENDIX A: PHOTOGRAPHS

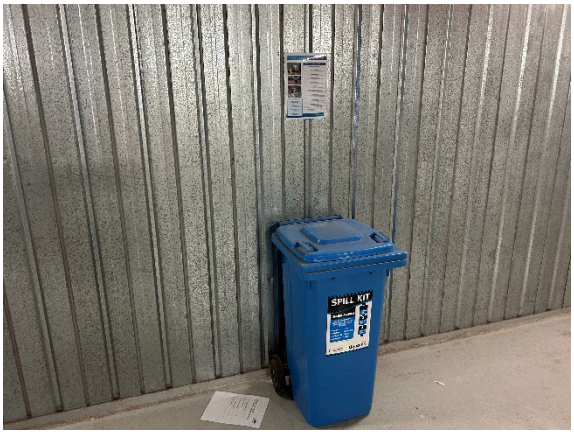

Photo 01. Spill kit in Level 12 Plant Room.

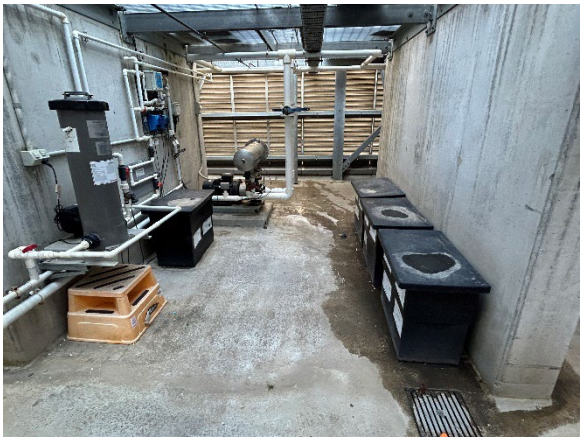

Photo 02. Chemical storage in Level 12 Cooling Tower Area.

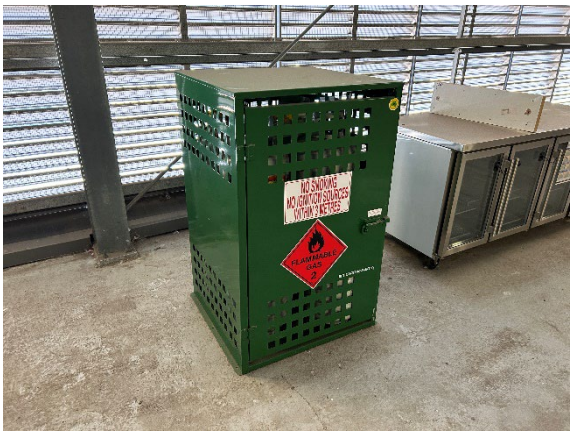

Photo 03. LPG storage in Level 12 Plant Room.

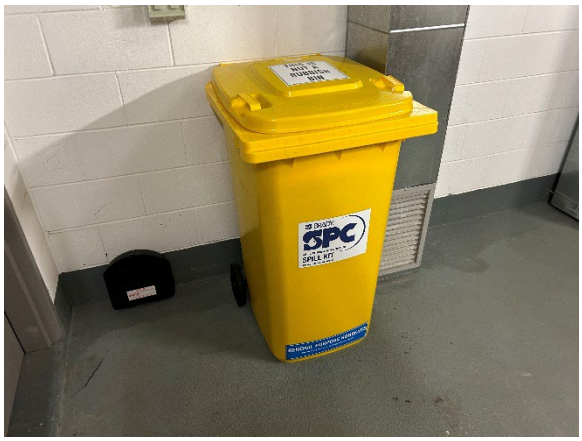

Photo 04. Spill kit in Diesel Tank Room.

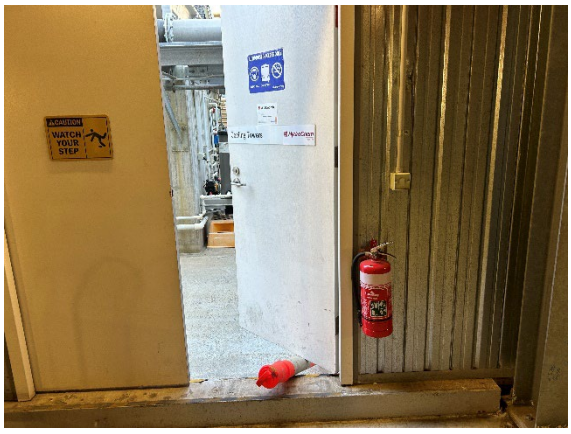

Photo 05. Fire extinguisher adjacent entrance to Cooling Tower Area.

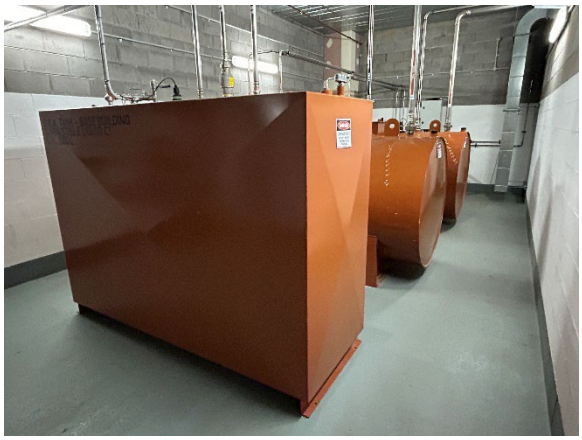

Photo 06. Diesel tanks.

APPENDIX B: HAZARDOUS CHEMICALS REGISTER

HAZARDOUS CHEMICALS REGISTER

Instructions

Complete, keep and maintain this *Hazardous Chemicals Register* for all existing and new chemicals used by staff. This register should be readily accessible by all staff and contractors who use or who may be affected or exposed to any of the hazardous chemicals listed herein.

All hazardous chemicals must have a current safety data sheet (SDS) and an accompanying risk assessment that is no more than five years old. The SDS must state whether the product is hazardous and, in case of dangerous goods, provide the proper shipping name, class label, subsidiary risk, and packing group details. Copies of the SDSs must be attached to this register.

Site		669 Bourke Street, Docklands, Victoria		
Date of Register		7th June 2024 (based on 22nd April 2024 inspection)		
Assessor	**Name**	Ben McCann	**PositionTitle**	Senior Associate – Property Risk
	Company	Tetra Tech Coffey	**Client Contact Name**	Emma Brown

Product Name	Purpose	Location	Quantity		Hazardous Substance	Dangerous Goods		SDS Expiry	Actions/Comments
			Number of Containers	Max Quantity (L or Kg)		Class	Packing Group		
Level 3, Diesel Tank Room									
Diesel	Fuel	Level 3, Diesel Tank Room	2 x 2,500L 1 x 2,000L	7,000L	Yes	C1	N/A	**Not Available**	Provide current SDS in a readily accessible location
Level 3, Generator Room									
Hardcore 12V Batteries	Battery	Level 3, Generator Room	4 x units	4 x units	Yes	8	N/A	**Not Available**	Provide current SDS in a readily accessible location
Diesel	Fuel	Level 3, Generator Room	2 x 200L	400L	Yes	C1	N/A	**Not Available**	Provide current SDS in a readily accessible location

Product Name	Purpose	Location	Quantity		Hazardous Substance	Dangerous Goods		SDS Expiry	Actions/Comments
			Number of Containers	Max Quantity (L or Kg)		Class	Packing Group		
Caterpillar CAT DEO 15W-40 Diesel Engine Oil	Engine oil	Level 3, Generator Room	2 x 20L	40L	-	-	-	**Not Available**	Provide current SDS in a readily accessible location
Co-Gen Generator Room									
12V Batteries	Battery	Level 3, Co-Gen Generator Room	2 x units	2 x units	Yes	8	N/A	**Not Available**	Provide current SDS in a readily accessible location
Diesel	Fuel	Level 3, Co-Gen Generator Room	1 x 400L	400L	Yes	C1	N/A	**Not Available**	Provide current SDS in a readily accessible location
Level 3, Chiller Plant Room									
R-134a	Refrigerant	Level 3, Chiller Plant Room, chillers	2 x 295Kg 1 x 808Kg	1,398kg	Yes	2.2	N/A	**Not available**	Provide current SDS in a readily accessible location
Hydro 428	Water treatment	Level 3, Chiller Plant Room	2 x 15L	45L	Yes	-	-	**Not available**	Provide current SDS in a readily accessible location
		Level 3, Chiller Plant Room, dosing pot	1 x 15L						
Level 12, Cooling Tower Area									
Hydro 360	Water treatment	Level 12, Cooling Tower Area, AGL Tower	1 x 15L	30L	Yes	8	III	Mar 2026	-
		Level 12, Cooling Tower Area, base building area	1 x 15L						
Hydro 256	Water treatment	Level 12, Cooling Tower Area, AGL Tower	1 x 15L	60L	Yes	8	III	**Feb 2023**	Replace outdated SDS with current version
		Level 12, Cooling Tower Area, base building area	3 x 15L						
Hydro 260	Water treatment	Level 12, Cooling Tower Area, AGL Tower	1 x 15L	30L	Yes	8	III	Apr 2026	-

Product Name	Purpose	Location	Quantity		Hazardous Substance	Dangerous Goods		SDS Expiry	Actions/Comments
			Number of Containers	Max Quantity (L or Kg)		Class	Packing Group		
		Level 12, Cooling Tower Area, base building area	1 x 15L						
Hydro 260X	Water treatment	Level 12, Cooling Tower Area, base building area	1 x 15L	15L	Yes	8	III	Oct 2027	-
Hydro 375	Water treatment	Level 12, Cooling Tower Area, base building area	3 x 15Kg	60kg	Yes	5.1 (8)	II	Jun 2026	-
		Level 12, Cooling Tower Area, base building area, erosion pot	1 x 15Kg						
Hydro 348	Water treatment	Level 12, Cooling Tower Area, base building area	1 x 5L	5L	-	-	-	July 2025	-
Hydro 408	Water treatment	Level 12, Cooling Tower Area, base building area	1 x 15L	15L	-	-	-	**Not available**	Provide current SDS in a readily accessible location
Hydro 428	Water treatment	Level 12, Cooling Tower Area, base building area	1 x 15L	15L	Yes	-	-	**Not available**	Provide current SDS in a readily accessible location
Hydro 326	Water treatment	Level 12, Cooling Tower Area, base building area	1 x 4kg	4kg	-	-	-	**Not available**	Provide current SDS in a readily accessible location
Hydro 5801	Water treatment	Level 12, Cooling Tower Area, base building area	1 x 5L	5L	Yes	8	III	Oct 2026	-
Hydro 440	Water treatment	Level 12, Cooling Tower Area, base building area	1 x 4kg	4kg	Yes	-	-	**Not available**	Provide current SDS in a readily accessible location
Level 12, Plant Room									
LPG	Fuel	Level 12, Plant Room	8 x 21kg	168kg	Yes	2.1	N/A	**Not available**	Provide current SDS in a readily accessible location

Product Name	Purpose	Location	Quantity		Hazardous Substance	Dangerous Goods		SDS Expiry	Actions/Comments
			Number of Containers	Max Quantity (L or Kg)		Class	Packing Group		
Hydro 428	Water treatment	Level 12, Plant Room, dosing pots	3 x 15L	45L	Yes	-	-	**Not available**	Provide current SDS in a readily accessible location