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# **SEPP 33 Risk Screening Assessment**

SYD08 - Data Storage facility

Prepared for: LCI Consultants Pty Ltd

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#### Revisions

Revision	Description	Date	Prepared by	Approved by
R1	Preliminary Issue	11/03/2022	Salwa Al-Khalaf	Michael Wakefield
R2	Draft SSDA issue	15/03/2022	Salwa Al-Khalaf	Imran Shaik
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R4	Updated to include site-wide hazardous materials storage quantities	11/05/2022	Salwa Al-Khalaf	Matthew Buttarelli

#### **Review Panel**

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## **Table of Contents**

Executi	ve Sur	nmary	ხ
1	Introd	uction	7
2	Objec	tive	8
3	SEPF	33 Risk Screening	8
	3.1	Identified Hazardous Material	8
	3.2	Risk Screening	8
	3.3	SEPP 33 Findings	9
Figure	1 SY	Dures  Dos General Site Layoutact from SEPP 33 Guidelines	
List (	of Ta	bles	
Table 1	Abbre	viations	5
Table 2	Defini	tion List	5
Table 3	List of	Hazardous Materials	8



## Limitations

ACOR has assessed this application based on the information provided by LCI Consultants Pty Ltd in relation to the storage quantities, locations, and design layout. It remains the responsibility of LCI Consultants Pty Ltd to ensure that the installation meets the requirements and implement the controls as required by the relevant legislation.

Note: This report and findings are not a substitute for full compliance with Australian standards and Codes of Practice. The operator shall ensure that they maintain their duty of care and consult the relevant legislation and guidelines.

Should the storage conditions or volumes change, the contents and findings in this report shall be reviewed, and the risks associated with any change assessed and controlled.



### **Abbreviations**

#### Table 1 Abbreviations

Abbreviation	Description	
ACOR	ACOR Consultants (WA)	
AS	Australian standard	
AS/NZS	Australian/ New Zealand standard	
n/a	Not applicable	
SDS	Safety data sheets	
SEPP 33	Reference to the State Environmental Planning Policy (Resilience and Hazards) 2021, Chapter 3 – Hazardous and offensive development	

Note: Under the Work Health and Safety Act and Regulation in NSW, dangerous goods are termed as hazardous chemicals. Australian Standards still use the term 'dangerous goods' when referring to the definitions and classes as set out in the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code). In this report, the terminology of dangerous goods will mainly be used to be consistent with Australian Standards.

## **Definitions**

#### Table 2 Definition List

Terms	Definition	
Combustible liquid	Any liquid, other than a flammable liquid, that has a flash point, and has a fire point that is less than its boiling point. For the purpose of this Standard, combustible liquids are divided into two classes as follows:	
	Class C1 - A combustible liquid that has a closed cup flash point of greater than 60°C and no greater than 93°C. (dangerous goods for storage)	
	Class C2 - A combustible liquid that - has a flash point of greater 93°C; or has been excluded from being a flammable liquid by any of the criteria for sustaining combustion. (non-dangerous goods)	
Ignition source	A source of energy sufficient to ignite a flammable atmosphere. Examples of ignition sources include naked flames, exposed incandescent material, electrical welding arcs, mechanical sparks, electrical discharge due to static electricity.	
On-site protected place	A building where people are employed within the property boundary, including offices, warehouses, manufacturing or processing areas, amenities, and other dangerous goods stores where quantities exceed minor storage.	

## Criteria

This review and assessment were carried out based on the following criteria:

- Work Health and Safety (WHS) Act 2011; and
- WHS Regulation 2011/2017
- Code Of Practice Managing Risks of Hazardous Chemicals in the Workplace August 2019
- Code of Practice (NSW) Storage and handling of dangerous goods (2005) (Information only)
- Australian standard AS1692:2006 Steel tanks for flammable and combustible liquids
- Australian standard AS/NZS 4681:2000 The storage and handling of Class 9 Miscellaneousdangerous goods and articles



## **Executive Summary**

LCI Consultants Pty Ltd (LCI Consultants) has engaged ACOR Consultants (ACOR) to undertake a potentially hazardous development screening review of the proposed dangerous goods storage systems at the proposed Station Road Data Centre SYD08 Expansion on the site known as 57 Station Road, Seven Hills, located within the Blacktown City Council local government area (LGA).

The proposed development comprises the erection of a new two-storey data centre at the rear of the site, associated plant and equipment, car parking areas, landscaping, and civil works.

The on-site uninterrupted power supply (UPS) system comprises:

- Back-up diesel fuel power generators; and
- lithium battery storge room.

This assessment is part of a State Significant Development Application and demonstrates that the proposed development is not a potentially hazardous development under the *State Environmental Planning Policy* (Resilience and Hazards) 2021, Chapter 3 – Hazardous and offensive development.



## 1 Introduction

LCI Consultants Pty Ltd has engaged ACOR Consultants (WA) to undertake a hazardous development screening review of the Station Road Data Centre SYD08 Expansion on the site known as 57 Station Road, Seven Hills.

We note Stage 1 of the development involves construction of a single-storey data storage facility on a portion of the site fronting Station Road. This Stage 1 development has been approved by Blacktown City Council under DA Consent DA-21-01058.

The Stage 1 single storey data storage facility will include storage of 40,000 litres of diesel fuel as part of the generator system. The fuel will be stored within containerised belly tanks located adjacent to the single storey data centre.

The proposed SYD08 data storage facility expansion will comprise:

- Construction of a two-storey 19.2MW data centre at the rear of the site, including ancillary office space, car parking, landscaping, and storage facilities;
- Provision of diesel fuel power generators; and
- Nine (9) battery storage rooms.

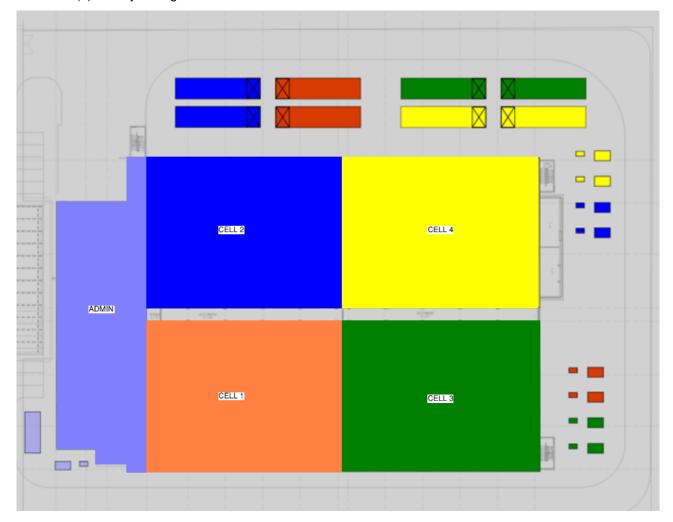


Figure 1 SYD08 General Site Layout



## 2 Objective

The objective of this report is to undertake a potentially hazardous development risk screening assessment of the proposed dangerous goods storage facilities located within the new data storage centre (SYD08) development, against the SEPP33 criteria.

## 3 SEPP33 Risk Screening

This assessment is based on the risk screening methods detailed in *State Environmental Planning Policy* (Resilience and Hazards) 2021 – Chapter 3 – Hazardous and offensive development.

#### 3.1 Identified Hazardous Material

The total quantities and the types of hazardous materials in the development are listed in Table 3.

Table 3 List of Hazardous Materials

Location	Proper shipping name	Total Quantity	DG Class / Division	Sub-risk	Packing group
SYD08 Data Centre Expansion					
Generator enclosures	Combustible liquid, Diesel	289,000 L	C1	n/a	III
Located within battery storage room	Lithium-Ion Batteries	56,500 kg	9	n/a	II
SYD09 Data Centre – Development Approval by Blacktown City Council (DA-21-01058)					
Generator enclosures	Combustible liquid, Diesel	38,000 L	C1	n/a	III
Located within battery storage room	Lithium-Ion Batteries	3646.5 kg	9	n/a	II
Total Site Hazardous Materials (SYD08 + SYD09)					
Generator enclosures	Combustible liquid, Diesel	327,000 L	C1	n/a	III
Located within battery storage room Lithium-Ion Batteries		60,146.5 kg	9	n/a	II

## 3.2 Risk Screening

The following Figure 2 (extracted as Table 1 from the SEPP33 Application Guidelines), indicates that combustible liquids category C1 (diesel) and class 9 dangerous goods are excluded from the risk screening requirements.



Table 1: Screening Method to be Used

Class	Method to Use/Minimum Quantity
1.1	Use graph at Figure 5 if greater than 100 kg
1.2-1.3	Table 3
2.1 — pressurised (excluding LPG)	Figure 6 graph if greater than 100 kg
2.1 — liquefied (pressure) (excluding LPG)	Figure 7 graph if greater than 500 kg
LPG (above ground)	table 3
LPG (underground)	table 3
2.3	table 3
3PGI	Figure 8 graph if greater than 2 tonne
3PGII	Figure 9 graph if greater than 5 tonne
3PGIII	Figure 9 graph if greater than 5 tonne
4	table 3
5	table 3
6	table 3
7	table 3
8	table 3

Figure 2 Extract from SEPP 33 Guidelines

In order to determine whether the proposed development is a potentially hazardous development, the risk screening method described in the SEPP 33 Hazardous and Offensive Development Application Guidelines was applied to the proposed development.

The risk screening is based on the potential for, and consequences of an explosion, fire, or release of toxic substances. It takes the following factors into account:

- The properties of the substances being handled or stored;
- The conditions of storage or use;
- The quantity involved;
- The location in respect to the site boundary; and
- The surrounding land use.

## 3.3 SEPP 33 Findings

There are no dangerous goods on the site that are included in the threshold values as described in SEPP 33 (refer to Figure 2). The proposed development is not a potentially hazardous industry, as described by SEPP 33 and does not require a Preliminary Hazard Analysis to be conducted.