



State Environmental Planning Policy (Resilience and Hazards)
– Preliminary Risk Screening

15-21 Britton St, Smithfield

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15-21 Britton St, Smithfield

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Quality Management

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5	28 October 2024	Updated based on comments from DPHI – reduced quantity of LPG below placard quantities under the WHS regulation.		

Executive Summary

Background

This report has been prepared by Riskcon Engineering Pty Ltd to address the Secretary's Environmental Assessment Requirements (SEARS) for State Significant development application (SSDA) SSD-67368956, a proposed multi-story warehouse located at 15 – 21 Britton Street (Lot 1 DP597083) and 28 – 54 Percival Road (Lot 34 DP617521), Smithfield. The proposed development involves the construction and operation of a multi-level warehouse estate, comprising:

- Site preparation and establishment works, including:
 - Demo Demolition of existing buildings and structures;
 - Clearing of nominated vegetation within the proposed development area;
 - Bulk earthworks to create proposed site levels;
 - Decommissioning of existing vehicle crossings; and
 - In-ground building services and utility work.
- Construction and operation of three (3) multi-level warehouse buildings across the two (2) allotments, comprising the following:
 - Two (2) two-storey warehouse buildings located on Lot 34 DP 617521 (Warehouse A and B), comprising of 12 individual warehouse units and ancillary office;
 - A three-storey building located on Lot 1 DP 597082 (Warehouse C), comprising of 9 individual warehouse units, ancillary office, and a café;
 - Shared outdoor amenity areas provided for employees on level 1;
 - Connected hardstand on ground floor and level 1 that will allow for vehicle circulation across the whole site;
 - A total of 482 carparking spaces within three separate carparking areas;
 - A total Gross Floor Area (GFA) of 96,568m², including 88,976m² of warehouse, 7,036m² of office, 71m² of café, 220m² of end of trip facilities and 265m² of shared amenities;
 - Four (4) new vehicle crossings on Percival Road and four (4) new vehicle crossings on Britton Street to provide separate entry and exit for heavy and light vehicles; and
 - Extensive ground and on-building landscaping works.

This report has been prepared as a preliminary risk screening of the development upon the surrounding land uses to determine whether it is acceptable within the context of the surrounding land zoning.

Conclusions

A review of the quantities of DGs that may be stored at the proposed facility and the associated vehicle movements was conducted for the purpose of a preliminary risk screening in accordance with "Applying SEPP 33". The assessment was conducted both for individual tenancies and for a cumulative effect across the warehouse.

The results of this analysis indicates the threshold quantities for the DGs that may be stored and transported are not exceeded (at both the individual tenancy and cumulative levels); hence, Chapter 3 of SEPP (Resilience and Hazards) does not apply to the project. Furthermore, a review of the potential to cause offense was conducted which indicated the site operations would be unlikely to result in noise or odour to occur at levels which would cause offense.

As the facility is not classified as potentially hazardous or offensive, it is not necessary to prepare a Preliminary Hazard Analysis for the facility as Chapter 3 of SEPP (Resilience and Hazards) does not apply.

Recommendations

Notwithstanding the above, the following recommendations have been made:

- Any Dangerous Goods (DG) shall be stored in accordance with the Work Health and Safety Regulation 2017 and any documentation required by the Regulation shall be prepared prior to occupying the space with DGs.

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Abbreviations

Abbreviation	Description
ADG	Australian Dangerous Goods Code
DA	Development Application
DGs	Dangerous Goods
DPE	Department of Planning and Environment
GFA	Gross Floor Area
LGA	Local Government Area
RH	Resilience & Hazards
RL	Relative Level
SEARS	Secretary's Environmental Assessment Requirements
SEPP	State Environmental Planning Policy
SSDA	State Significant Development

1.0 Introduction

1.1 Background

This report has been prepared by Riskcon Engineering Pty Ltd to address the Secretary's Environmental Assessment Requirements (SEARS) for State Significant development application (SSDA) SSD-67368956, a proposed multi-story warehouse located at 15 – 21 Britton Street (Lot 1 DP597083) and 28 – 54 Percival Road (Lot 34 DP617521), Smithfield. The proposed development involves the construction and operation of a multi-level warehouse estate, comprising:

- Site preparation and establishment works, including:
 - Demo Demolition of existing buildings and structures;
 - Clearing of nominated vegetation within the proposed development area;
 - Bulk earthworks to create proposed site levels;
 - Decommissioning of existing vehicle crossings; and
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 - Connected hardstand on ground floor and level 1 that will allow for vehicle circulation across the whole site;
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 - Four (4) new vehicle crossings on Percival Road and four (4) new vehicle crossings on Britton Street to provide separate entry and exit for heavy and light vehicles; and
 - Extensive ground and on-building landscaping works.

This report has been prepared as a preliminary risk screening of the development upon the surrounding land uses to determine whether it is acceptable within the context of the surrounding land zoning.

1.2 Scope of Services

The scope of work is to prepare a SEPP-RH assessment for the warehouse tenancies located at 15 – 21 Britton Street (Lot 1 DP597083) and 28 – 54 Percival Road (Lot 34 DP617521). The assessment does not include any other sites nor the preparation of any additional planning studies should they be required.

2.0 Methodology

2.1 General Methodology

The methodology used in this assessment is as follows:

- Review the types and proposed quantities of DGs to be potentially stored at the site.
- Compare the quantities of DGs to the threshold quantities listed in “Applying SEPP 33 – Hazardous and Offensive Development” (Ref. [1]) to identify whether the storage location or quantity triggers SEPP 33.
- Review the likely vehicular movements involving DGs and compare against the applicable thresholds detailed in Applying SEPP 33 (Ref. [1]).
- Report on the findings of the SEPP-RH assessment.

2.2 Data taken from “Applying SEPP 33”

Figure 2-1, extracted from “Applying SEPP 33” provides details on the application of Figures or Tables from the same document to determine the applied screening Threshold (Ref. [1]).

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 2-1: Screening Method to be Used

Table 3 from “Applying SEPP 33” has been extracted and is shown in **Figure 2-2**.

Class	Screening Threshold	Description
1.2	5 tonne	or are located within 100 m of a residential area
1.3	10 tonne	or are located within 100 m of a residential area
2.1	(LPG only — not including automotive retail outlets ¹)	
	10 tonne or 16 m ³	if stored above ground
	40 tonne or 64 m ³	if stored underground or mounded
2.3	5 tonne	anhydrous ammonia, kept in the same manner as for liquefied flammable gases and not kept for sale
	1 tonne	chlorine and sulfur dioxide stored as liquefied gas in containers <100 kg
	2.5 tonne	chlorine and sulphur dioxide stored as liquefied gas in containers >100 kg
	100 kg	liquefied gas kept in or on premises
	100 kg	other poisonous gases
4.1	5 tonne	
4.2	1 tonne	
4.3	1 tonne	
5.1	25 tonne	ammonium nitrate — high density fertiliser grade, kept on land zoned rural where rural industry is carried out, if the depot is at least 50 metres from the site boundary
	5 tonne	ammonium nitrate — elsewhere
	2.5 tonne	dry pool chlorine — if at a dedicated pool supply shop, in containers <30 kg
	1 tonne	dry pool chlorine — if at a dedicated pool supply shop, in containers >30 kg
	5 tonne	any other class 5.1
5.2	10 tonne	
6.1	0.5 tonne	packing group I
	2.5 tonne	packing groups II and III
6.2	0.5 tonne	includes clinical waste
7	all	should demonstrate compliance with Australian codes
8	5 tonne	packing group I
	25 tonne	packing group II
	50 tonne	packing group III

Figure 2-2: General Screening Threshold Quantities

Transportation screen thresholds have been provided in **Figure 2-3**.

Class	Vehicle Movements		Minimum quantity*	
	Cumulative	Peak	per load (tonne)	
	Annual	or Weekly	Bulk	Packages
1	see note	see note	see note	
2.1	>500	>30	2	5
2.3	>100	>6	1	2
3PGI	>500	>30	1	1
3PGII	>750	>45	3	10
3PGIII	>1000	>60	10	no limit
4.1	>200	>12	1	2
4.2	>100	>3	2	5
4.3	>200	>12	5	10
5	>500	>30	2	5
6.1	all	all	1	3
6.2	see note	see note	see note	
7	see note	see note	see note	
8	>500	>30	2	5
9	>1000	>60	no limit	

Figure 2-3: Transportation Screening Thresholds

3.0 Project Description

3.1 Site Description

The land to which this SSDA relates is located across two (2) lots at 28 – 54 Percival Rd (Lot 1 DP597082) and 15-21 Britton Street (Lot 34 DP617521), Smithfield which is approximately 30 km west of the Sydney Central Business District (CBD). The location of the site in proximity to the CBD is shown in **Figure 3-1**.

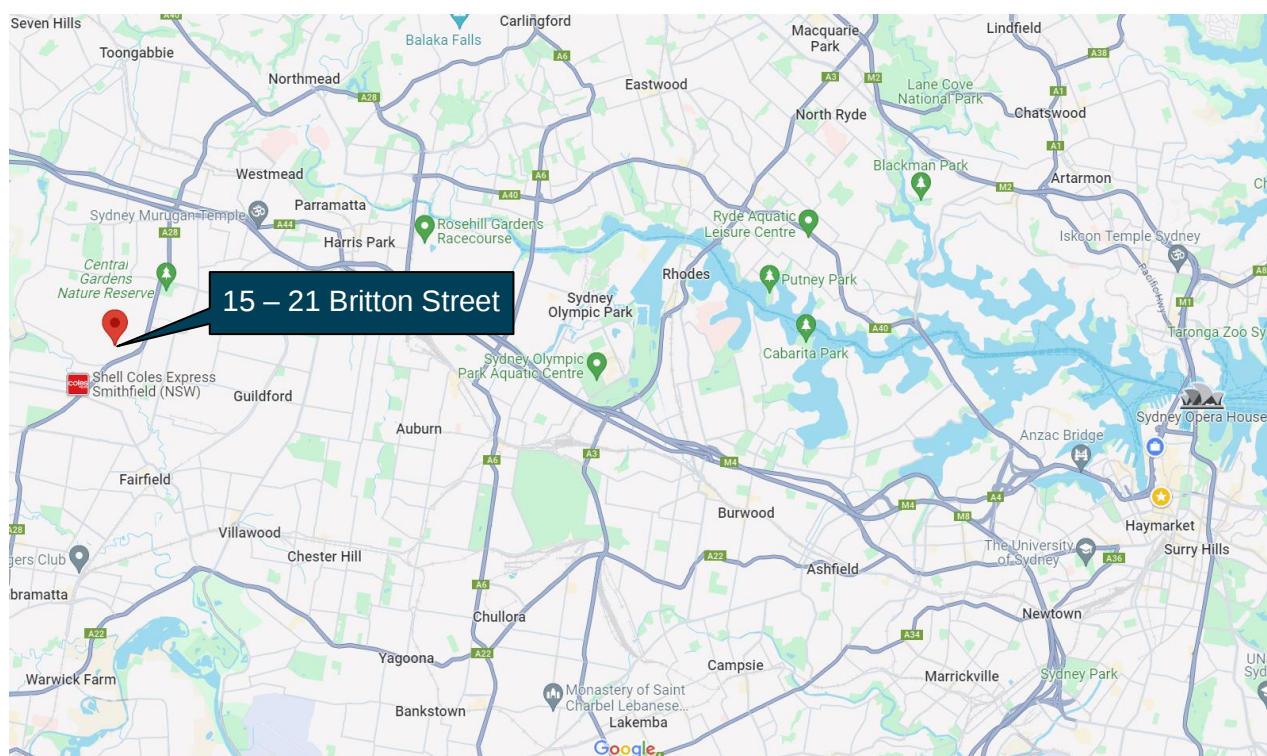


Figure 3-1: Site Location (source Google Maps)

3.2 General Description

The proposed development consists of three (3) warehouse buildings, with frontage to both Britton Street and Percival Road. Warehouse A and B will be located on Lot 34 DP 617521 (Percival Road frontage at an RL of 33.75. Each building will be two-storey, with a maximum height of 28.6 m (including roof plant).

Warehouse C will be located on Lot 1 DP 597082 (Britton Street frontage) at an RL of 23.75. Warehouse C accommodates an additional storey at lower ground level, due to the 10 m difference in proposed Site levels. Whilst this building height is 38.6 m (including roof plant), the height of all three (3) buildings is consistent at RL 62.35. The three (3) warehouses will be connected at ground level and level 1 via a hardstand that allows for vehicle circulation across the whole site.

Each building will involve individual warehouse units, with ancillary office at mezzanine level. On the first floor, each building will have access to a shared outdoor amenity area. A café will be located at lower ground level within Warehouse C to accommodate the needs of employees.

The Gross Floor Area (GFA) for each building is outlined in **Table 3-1**. **Figure 3-2**, **Figure 3-3** and **Figure 3-4** show the warehouse layouts of the site.

Table 3-1: Gross Floor Areas

Building No.	Warehouse GFA	Office GFA	Other facilities	Total GFA
Building A	29,630 m ²	2,297 m ²	Shared amenities: 132 m ²	32,059 m ²
Building B	30,122 m ²	2,300 m ²	Shared amenities: 133 m ²	32,665 m ²
			End of trip facilities: 110 m ²	
Building C	29,224 m ²	2,439 m ²	Café: 71 m ²	31,844 m ²
			End of trip facilities: 110 m ²	
Total	88,796 m ²	7,036 m ²	556 m ²	96,568 m ²

The proposal involves new vehicle crossings, which will provide separate ingress and egress for heavy vehicles. Ingress is provided at Britton Street, whilst egress is provided at both Britton Street and Percival Road. Ramps are provided to allow vehicle circulation to the upper levels. Each warehouse is connected via a hardstand that will allow for vehicle circulation, loading and unloading for each warehouse tenancy.

Separate vehicle crossings are provided for cars, enabling access to the at-grade parking at Percival Road, as well as the southern end of Britton Street. A third vehicle crossing is provided at the northern end of Britton Street, which provides access to a carparking area at ground floor, mezzanine level. A total of 482 carparks are provided across the three (3) carparking areas.

The proposal will require the removal of several trees across the whole Site and will incorporate landscaping and tree planting at the side boundaries, as well as along Britton Street and Percival Road.

3.3 Quantities of Dangerous Goods Stored and Handled

The tenants for the units at this point are unknown; however, to improve the flexibility of the building leasing options, it is proposed to provide a speculative level of DG storage to facilitate the operations of tenants. The future tenants may require DG storage for products typically used in warehousing operations such as forklift cylinders, paint etc.

Table 3-2 has been developed to summarise the proposed allowances for each tenancy.

Table 3-2: DG Allowances per Tenancy

Description	Class	PG	Quantity	Vessel	Total Storage
Forklift cylinders	2.1	n/a	5	15 kg*	75 kg / 180 L
Aerosols	2.1	n/a	-	-	50 kg
Flammable liquids	3	II & III	1	160 L cabinet	160 L
Batteries (lead-acid)	8	III	-	-	100 kg

*Based on a 36 L water capacity for 15 kg forklift LPG cylinders

Table 3-3 has been developed on the basis of twenty-one (21) total warehousing tenancies containing the quantities outlined in **Table 3-2**. It should be noted that the number of individual tenancies may change resulting in a different distribution of DGs across the site.

Table 3-3: Maximum Classes and Quantities of Dangerous Goods Stored

Description	Class	PG	Quantity
Forklift cylinders	2.1	n/a	1,575 kg / 3,780 L
Aerosols	2.1	n/a	1,050 kg
Flammable liquids	3	II & III	3,360 L
Batteries (lead-acid)	8	III	2,100 kg

*Based on a 36 L water capacity for 15 kg forklift LPG cylinders

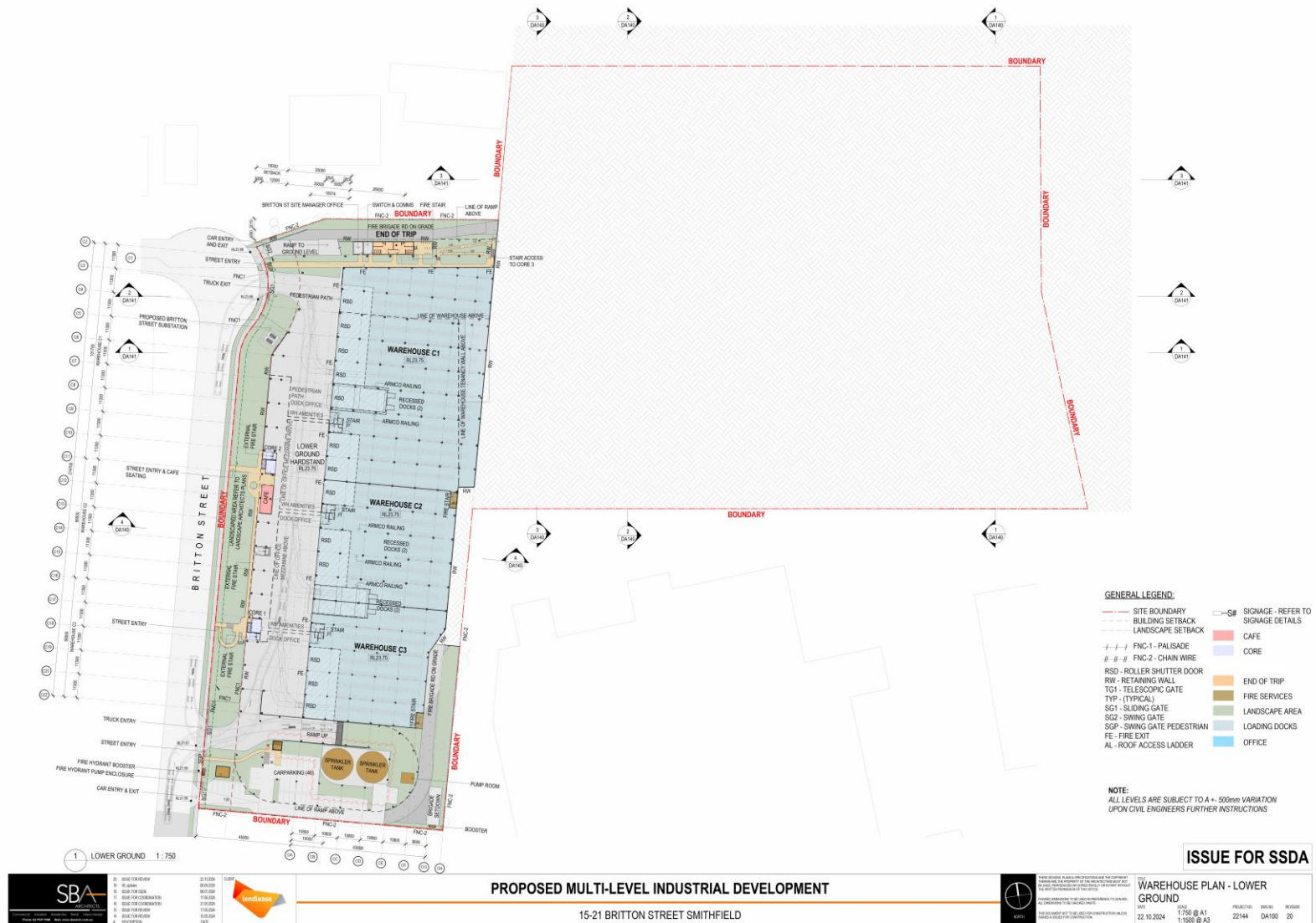




Figure 3-3:Ground Level Warehouse Layout



Figure 3-4: Level 1 Warehouse Layout

4.0 SEPP Review

4.1 Proposed Storage Details

The maximum quantities of products and DGs that are to be stored at the facility, are shown in **Table 4-1**. The data has been estimated to provide some flexibility for units that may potentially store DGs as part of operations within the tenancies. Provided in **Table 4-1** is an assessment of whether the Class is subject to SEPP-RH.

Table 4-1: DG Classes or Materials Stored and Maximum Quantities

Description	Class	PG	Total Quantity (kg / L)	Class Subject to SEPP (Y/N)
Forklift cylinders	2.1	n/a	1,575 kg	Y
Aerosols	2.1	n/a	1,050 kg	Y
Flammable liquids	3	II & III	3,360 L	Y
Batteries (lead-acid)	8	III	2,100 kg	Y

4.2 Application of Chapter 3 of the State Environmental Planning Policy – Resilience & Hazards

State Environmental Planning Policy (Resilience and Hazards) 2021 (which now includes the former SEPP 33) has been developed under the Environmental Planning and Assessment Act 1979 to control potentially hazardous and offensive developments and to ensure appropriate safety features are installed at a facility to ensure the risks to surrounding land uses is minimised.

The policy includes a guideline that assists government and industry alike in determining whether SEPP-RH applies to a specific development. The guideline, “Applying SEPP 33 - Hazardous and Offensive Developments” (Ref. [1]) provides a list of threshold levels, for the storage of DGs, above which the regulator considers the DG storage to be potentially hazardous. In the event the threshold levels are exceeded, SEPP-RH applies and a Preliminary Hazard Analysis (PHA) is required, followed by a series of hazard analysis studies stipulated by the Department of Planning and Environment in the conditions of consent.

4.3 Assessment of Hazards

4.3.1 Storage Individual Tenancies

Threshold limits for the application of SEPP-RH are presented in **Table 4-2** along with maximum DG quantities that will be stored in each tenancy. The results summarised in the table indicates the SEPP-RH criteria is not exceeded; hence, no further assessment would be required. It is noted, that this assessment has been conducted on an individual tenancy; hence, it would be necessary to assess the cumulative impact of the tenancies all holding the DG quantities. This has been conducted in **Section 4.3.2**.

Table 4-2: Quantities Stored and SEPP-RH Threshold (Individual Tenancies)

Description	Class	PG	Quantity		SEPP-RH Threshold (kg)	Does SEPP-RH Apply? (Y/N)
			L	kg		
Forklift cylinders	2.1	n/a	-	125	10,000	N
Aerosols	2.1	n/a	-			
Flammable liquids	3	II & III	160	160*	5,000	N
Batteries (lead-acid)	8	III	-	100	50,000	N

*Assumed density of 1,000 kg/m³

4.3.2 Storage Cumulative

Threshold limits for the application of SEPP-RH are presented in **Table 4-3** along with maximum DG quantities that will be stored at the site. The results summarised in the table indicates the SEPP-RH criteria is not exceeded; hence, no further assessment would be required.

Table 4-3: Quantities Stored and SEPP-RH Threshold (Cumulative)

Description	Class	PG	Quantity		SEPP-RH Threshold (kg)	Does SEPP-RH Apply? (Y/N)
			L	kg		
Forklift cylinders	2.1	n/a	-	4,830	10,000	N
Aerosols	2.1	n/a	-			
Flammable liquids	3	II & III	3,360	3,360*	5,000	N
Batteries (lead-acid)	8	III	-	2,100	50,000	N

*Assumed density of 1,000 kg/m³

4.3.3 Transport

Any DGs stored at the sites will be used for operational purposes; hence, there would be no regular deliveries of DG quantities in packages exceeding the transport limit thresholds. Therefore, the transport thresholds would not be expected to be exceeded by the development.

Therefore, the transport limits within SEPP 33 would not be exceeded; hence, with respect to transport, SEPP-RH does not apply.

4.3.4 Surrounding Area Cumulative Assessment

The surrounding area contains multiple warehouses and industrial facilities which may store DGs. Therefore, should the development be approved it is necessary to consider the impacts of what may be in the surrounding area.

What is stored in the surrounding warehouses are not known; however, it is possible to review the potential impacts of the development to determine whether this may result in an unacceptable accumulation within the surrounding area.

The quantities of goods proposed to be stored are all for ancillary use and would be considered minor storages under the DG standards which govern the storage and handling of these products. Minor storages are considered to pose minimal risk to on and offsite uses. Furthermore, the quantities stored in each tenancy and cumulatively are well below the thresholds within Applying SEPP 33. Therefore, it would be considered that the potential for offsite impact, such that the risks

overlap with the surrounding areas would be negligible. Therefore, the cumulative risk posed by the development is considered to not exceed the acceptable thresholds and thus SEPP-RH does not apply, and no further assessment is required.

4.4 Assessment of Offense

SEPP-RH also contains a requirement for review of operations that may cause offense in the form of odour, environmental impact, nuisance (noise), etc. An indication of whether “offensiveness” may occur at the facility is whether an Environmental Protection Authority (EPA) license is required for specific operations at the site (Ref. [2] and [3]).

A review of the facilities operations indicates that there are no processes that would result in the manufacture, production, or transfer of materials in a form that may result in the release of bulk materials at the site or that could result in odour generation or excessive noise. An EPA license would not be required for this site.

Further, there would be no unusual operations that would cause potential odours, or excessive noise at the closest residential areas. Therefore, it is considered that noise generated from the site operations would not exceed the background noise already exposed at residential areas.

In summary, there is no potential for “offensive” operations at the site or noise that has been assessed as part of the DA and therefore SEPP-RH does not apply in this case.

5.0 Conclusion and Recommendations

5.1 Conclusions

A review of the quantities of DGs that may be stored at the proposed facility and the associated vehicle movements was conducted for the purpose of a preliminary risk screening in accordance with “Applying SEPP 33”. The assessment was conducted both for individual tenancies and for a cumulative effect across the warehouse.

The results of this analysis indicates the threshold quantities for the DGs that may be stored and transported are not exceeded (at both the individual tenancy and cumulative levels); hence, Chapter 3 of SEPP (Resilience and Hazards) does not apply to the project. Furthermore, a review of the potential to cause offense was conducted which indicated the site operations would be unlikely to result in noise or odour to occur at levels which would cause offense.

As the facility is not classified as potentially hazardous or offensive, it is not necessary to prepare a Preliminary Hazard Analysis for the facility as Chapter 3 of SEPP (Resilience and Hazards) does not apply.

5.2 Recommendations

Notwithstanding the above, the following recommendations have been made:

- Any Dangerous Goods (DG) shall be stored in accordance with the Work Health and Safety Regulation 2017 and any documentation required by the Regulation shall be prepared prior to occupying the space with DGs.

6.0 References

- [1] Department of Planning, "Applying SEPP 33," Department of Planning, Sydney, 2011.
- [2] "Protection of the Environment Operations (General) Regulation," 2009.
- [3] "Protection of the Environment Operations Act," 1997.