



State Environmental Planning Policy (Resilience and Hazards)

1-3 Burrows Road, St Peters

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1-3 Burrows Road, St Peters

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Quality Management

Rev	Date	Remarks	Prepared By	Reviewed By
A	5 Septmber 2022	Draft issue for comment	Renton Parker	Jason Costa
0	6 September 2022	Issued final		

Executive Summary

Background

This report has been prepared by Riskcon Engineering Pty Ltd to accompany a State Significant development application (SSDA) for a proposed warehouse and distribution centre development located at 1-3 Burrows Road, St Peters (the site).

This report has been prepared for to assess the risk profile of the development upon the surrounding land uses to determine whether it is acceptable within the context of the surrounding land zoning.

As summarised in the Table 1 below, this report has also been prepared to address the relevant the Secretary's Environmental Assessment Requirements (SEARs) issued by the Department of Planning and Environment (DPE) for SSD-35962232 on 7 February 2022.

Table 1 SEARs requirements – SSD-35962232

Item	Description of Requirement	Report Reference
15	Hazards and Risks - Where there are dangerous goods and hazardous material associated with the development provide a preliminary risk screening in accordance with SEPP 33. - Where required by SEPP 33, provide a Preliminary Hazard Analysis prepared in accordance with Hazardous Industry Planning Advisory Paper. No. 6 – Guidelines for Hazard Analysis - If the development is adjacent to or on land in a pipeline corridor, report on consultation outcomes with the operator of the pipeline and prepare a hazard analysis.	This report

Conclusions

A review of the quantities of DGs stored at the proposed facility and the associated vehicle movements was conducted and compared to the threshold quantities outlined in Applying SEPP 33. The assessment was conducted both for individual tenancies and for a cumulative effect across the warehouses.

The results of this analysis indicates the threshold quantities for the DGs to be stored and transported are not exceeded (at both the individual tenancy and cumulative levels); hence, the 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:

- The 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
LGA	Local Government Area
RH	Resilience & Hazards
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 accompany a State Significant development application (SSDA) for a proposed warehouse and distribution centre development located at 1-3 Burrows Road, St Peters (the site).

This report has been prepared for to assess the risk profile 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 located at 1-3 Burrows Road, St Peters. 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 stored at the site.
- Compare the quantities of DGs 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 at 1-3 Burrows Road, St Peters (the site). The site comprises two parcels of land (allotments) and is legally described as follows:

- Lot 1 DP 1227450; and
- Lot 11 DP 606737.

The site is an irregular shaped allotment with a total area of approximately 34,614sqm. The site adjoins Burrows Road to the east with a primary curved frontage of approximately 528 metres and adjoins Canal Road to the west with a secondary frontage of approximately 289 metres.

The site is located in the City of Sydney Local Government Area (LGA), at the junction with the Inner West and Bayside LGA's.

The site is currently occupied by older low-rise industrial units that are largely consistent with development in the surrounding area which is predominantly of an industrial nature. The industrial units comprise four large format steel framed warehouse / distribution facilities. These buildings no longer meet the requirements of contemporary industrial users in this market.

The site is situated within an established largely industrial area to the immediate south of the St Peters WestConnex Interchange and well-connected to the Sydney Airport. The locality surrounding the site is characterised by existing industrial and commercial developments, as well as new road and other major transport infrastructure. The Alexandra Canal is located approximately 100 metres to the south-east and east.

A Location Plan including the site is provided in **Figure 3-1** below.



Figure 3-1: Location Plan

An aerial image of the site is provided in **Figure 3-2** below.



Figure 3-2 Aerial image of the site

3.2 Project Background

3.2.1 Planning Proposal PP-2020-298

The applicant recently obtained approval on 16 September 2020 for a Planning Proposal (PP-2020-298) at the site. The approved Planning Proposal amended the *Sydney Local Environmental Plan 2012* (SLEP 2012) by increasing the applicable maximum building height for the site from 18 metres to 30 metres. The Planning Proposal also introduced a set of site-specific controls for 1-3 Burrows Road, St Peters, in the SLEP 2012, including a 6-metre setback control to Burrows Road and Canal Road for landscaping purposes.

3.2.2 Competitive Design Alternatives Process

Goodman undertook a Competitive Design Alternatives Process (competitive design process) with three selected architectural firms following an expression of interest process.

The Jury resolved that the Welsh and Major scheme best demonstrated the ability to achieve design excellence as per Clause 6.21 of the Sydney LEP 2012 and the scheme which best met the design, planning and commercial objectives of the Competition Brief. The Welsh and Major scheme was subsequently awarded the winner of the Competitive Design Process.

3.3 Proposed Development

The vision for the project is to transform the site into a functional and adaptable multi-storey industrial warehouse building that will support industrial expansion in this highly accessible location and build upon strong ecommerce drivers close to Sydney Airport, Port Botany, Cooks River Intermodal Terminal and the Sydney CBD.

This detailed SSDA follows on from the Competitive Design Alternatives Process (competitive design process) undertaken between January and April 2022, whereby, the winning project architects Welsh and Major (W&M) were announced by the Selection Jury (Jury).

This proposed SSDA seeks approval for the following:

- Demolition of all existing structures and buildings on site.
- Site remediation and establishment works.
- Design, construction and operation of a three-storey industrial warehouse and distribution centre building with an ancillary office building, including:
 - Approximately 51,920sqm of total GFA, comprising:
 - 46,900sqm of warehouse and distribution centre GFA; and
 - 5,020sqm of GFA for ancillary office space and retail (café).
 - Maximum building height of RL 33.18 (30.14 height in metres).
 - Operation 24 hours per day seven days a week.
- Provision of a single storey undercroft basement car parking area accessed off Burrows Road which provides 223 car parking spaces (including 12 accessible bays and carshare spaces), 19 motorcycle spaces and end-of-trip facilities (including 72 bicycle parking spaces, showers, lockers and change rooms).
- Site landscaping works including two 6-metre landscaped setback areas to both the Burrows and Canal Roads site frontages, and deep soil and tree canopy coverage provisions.
- Provision of building / business identification signage.

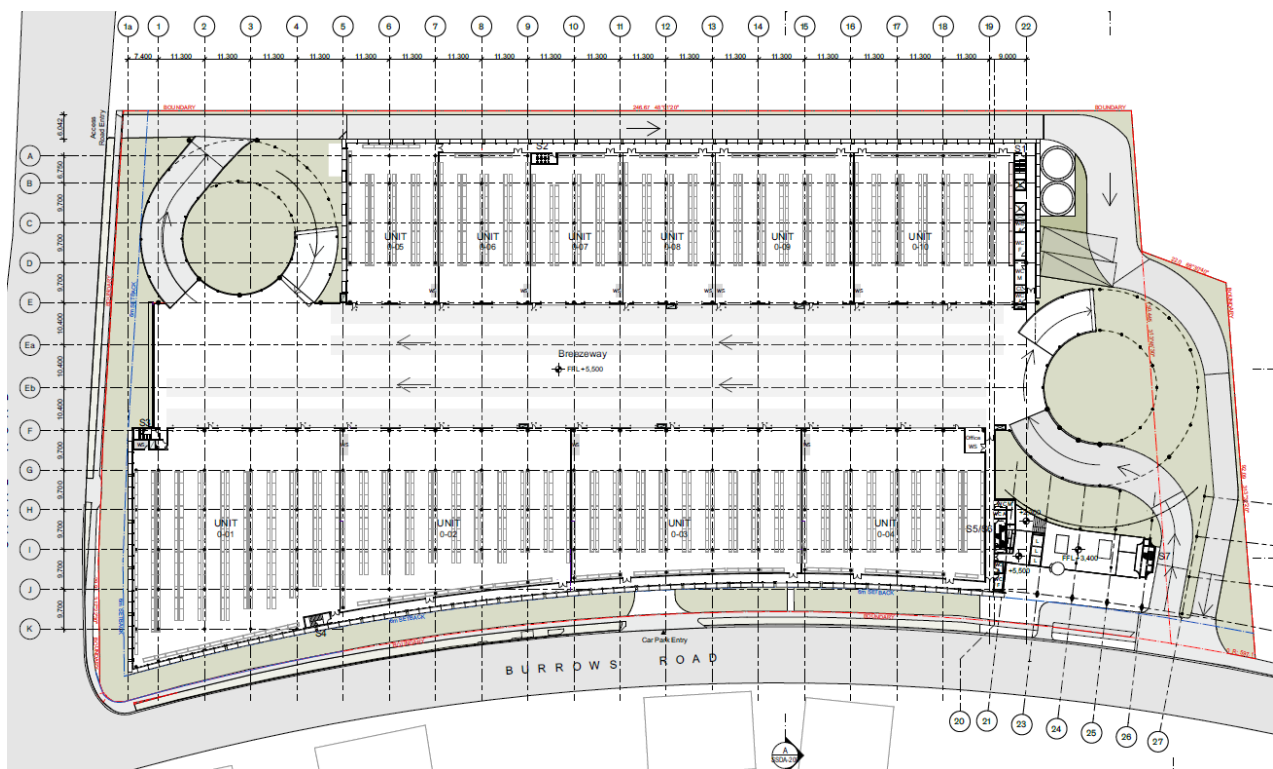


Figure 3-3: Site Plan



Figure 3-4: Artist's Impression of Proposal from North-East Corner of Site

3.4 General Description

The site is composed of two (2) banks of warehouses containing approximately 30 units across the 2 warehouses. There will be six (6) units on ground level and four (4) on the first level of each warehouse.

The tenants for the units at this point are unknown; however, dedicated DG storage is not anticipated to be required, nor is it sought for the facility. It is proposed to provide a level of DG storage to facilitate the operations of tenants which may include the requirement for forklift cylinders, paints, etc.

Table 3-1 has been developed to summarise the proposed allowances for each tenancy.

Table 3-1: DG Allowances per Tenancy

Description	Class	PG	Quantity	Vessel	Total Storage
Forklift cylinders	2.1	n/a	10	18 kg	180 kg
Aerosols	2.1	n/a	-	-	50 kg
Flammable liquids	3	II & III	1	250 L cabinet	250 L
Batteries	8	III	-	-	100 kg

3.5 Quantities of Dangerous Goods Stored and Handled

Table 3-2 has been developed based upon the thirty (30) tenancies containing the quantities outlined in **Table 3-1**.

Table 3-2: Maximum Classes and Quantities of Dangerous Goods Stored

Description	Class	PG	Quantity
Forklift cylinders	2.1	n/a	5,400 kg
Aerosols	2.1	n/a	1,500 kg
Flammable liquids	3	II & III	7,500 L

Batteries	8	III	3,000 kg
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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 to 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 (L)	Class Subject to SEPP (Y/N)
Forklift cylinders	2.1	n/a	5,400 kg	Y
Aerosols	2.1	n/a	1,500 kg	Y
Flammable liquids	3	II & III	7,500 L	Y
Batteries	8	III	3,000 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	-	230	10,000	N

Description	Class	PG	Quantity		SEPP-RH Threshold (kg)	Does SEP-RH Apply? (Y/N)
			L	kg		
Aerosols	2.1	n/a	-			
Flammable liquids	3	II & III	250	250*	5,000	N
Batteries	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 SEP-RH Apply? (Y/N)
			L	kg		
Forklift cylinders	2.1	n/a	-	6,900	10,000	N
Aerosols	2.1	n/a	-			
Flammable liquids	3	II & III	2,500	7,500*	3.8 m (See Figure 4-1 & Figure 4-2)	N
Batteries	8	III	-	3,000	50,000	N

*Assumed density of 1,000 kg/m³

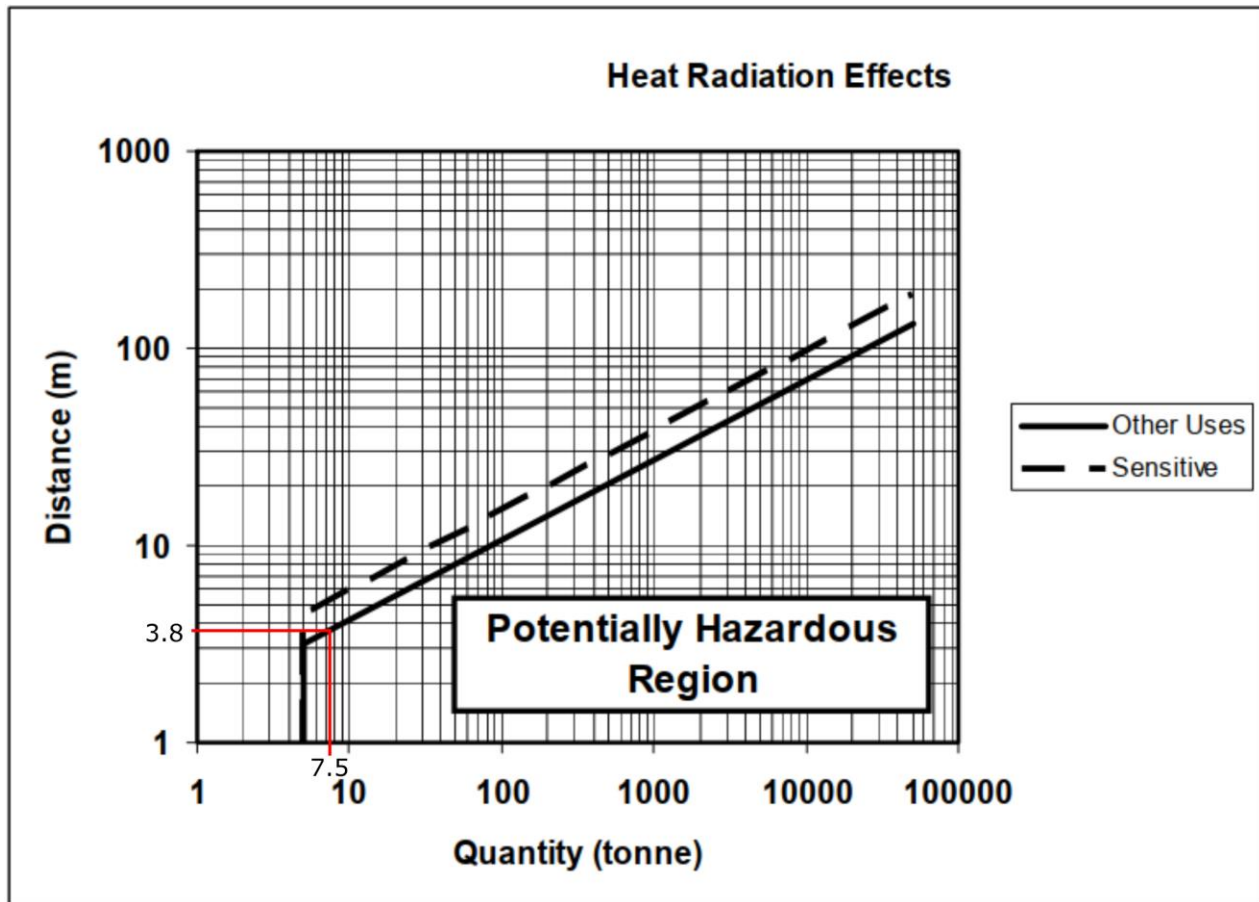


Figure 4-1: Flammable Liquid Threshold Distance

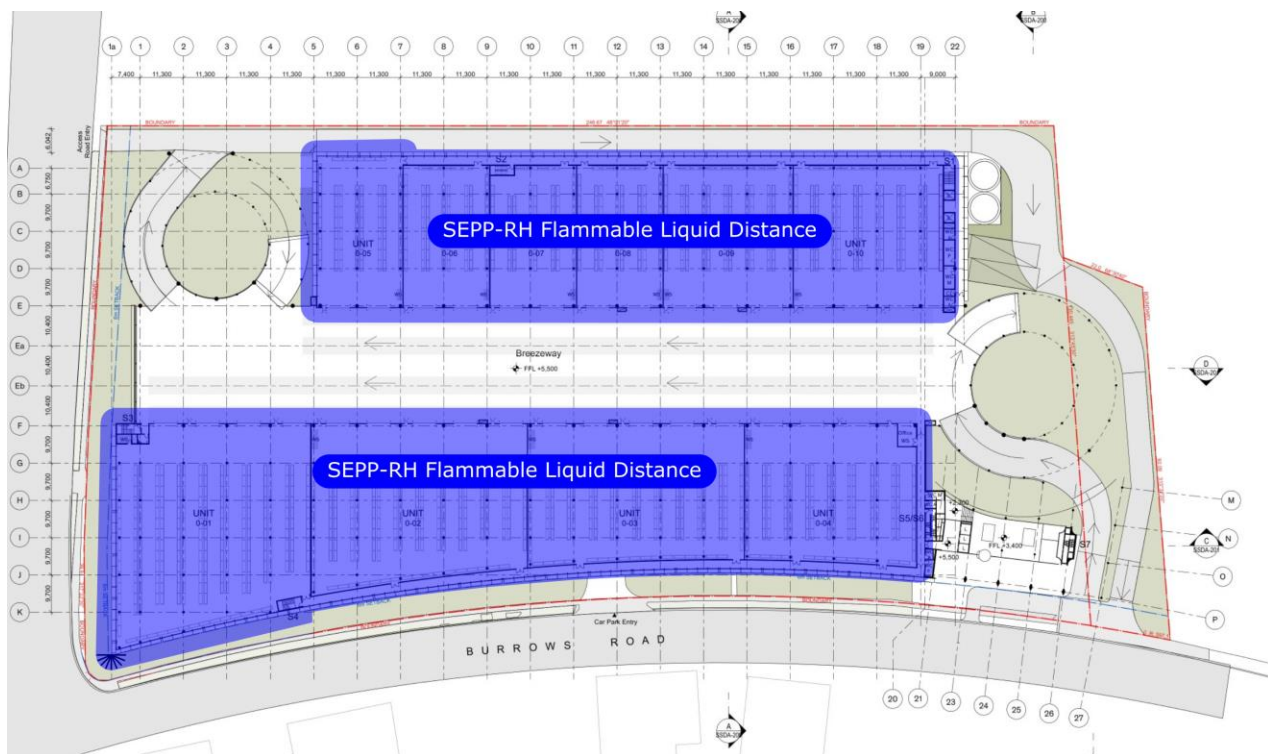


Figure 4-2: Flammable Liquid Threshold Distance Site Overlay

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 storage DGs. Therefore, should the 1-3 Burrows Road warehouse be approved it is necessary to consider the impacts of what may be in the surrounding area.

What is stored in the surrounding warehouse is not known; however, it is possible to review the potential impacts of the 1-3 Burrows Road warehouses 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 within Alexandria 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) licence 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 licence 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 estate 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 stored at the proposed facility and the associated vehicle movements was conducted and compared to the threshold quantities outlined in Applying SEPP 33. The assessment was conducted both for individual tenancies and for a cumulative effect across the warehouses.

The results of this analysis indicates the threshold quantities for the DGs to be stored and transported are not exceeded (at both the individual tenancy and cumulative levels); hence, the 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:

- The 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.
- [4] Standards Australia, AS 1940:2017 - Storage and Handling of Flammable and Combustible Liquids, Sydney: Standards Australia, 2017.
- [5] SafeWork NSW, "Work Health and Safety Regulation," SafeWork NSW, Lisarow, 2017.