



State Environmental Planning Policy No. 33
Warehouse 4E, Oakdale Industrial Estate, Kemps Creek

State Environmental Planning Policy No. 33

Warehouse 4E, Oakdale Industrial Estate, Kemps Creek

Goodman Pty Ltd

Prepared by

Riskcon Engineering Pty Ltd

Unit 618/159 Ross Street

Forest Lodge, NSW 2037

www.riskcon-eng.com

ABN 74 626 753 820

© Riskcon Engineering Pty Ltd. All rights reserved.

This report has been prepared in accordance with the scope of services described in the contract or agreement between Riskcon Engineering Pty Ltd and the Client. The report relies upon data, surveys, measurements and results taken at or under the particular times and conditions specified herein. Changes to circumstances or facts after certain information or material has been submitted may impact on the accuracy, completeness or currency of the information or material. This report has been prepared solely for use by the Client. Riskcon Engineering Pty Ltd accepts no responsibility for its use by other parties without the specific authorization of Riskcon Engineering Pty Ltd. Riskcon Engineering Pty Ltd reserves the right to alter, amend, discontinue, vary or otherwise change any information, material or service at any time without subsequent notification. All access to, or use of, the information or material is at the user's risk and Riskcon Engineering Pty Ltd accepts no responsibility for the results of any actions taken on the basis of information or material provided, nor for its accuracy, completeness or currency.

Goodman Pty Ltd

Document No. RCE-21076_Goodman_SEPP33_Final_16Jun21_Rev(1)

Date 16/07/2021

Quality Management

Rev	Date	Remarks	Prepared By	Reviewed By
A	27 th May 2021	Draft issue for comment	Jason Costa	Renton Parker
B	27 th May 2021	Minor amendments		
0	23 rd June 2021	Final issued		
1	16 th July 2021	Final revised to include LPG		

Executive Summary

Background

Goodman is leasing a warehouse to a client at Oakdale West, Kemps Creek to house their storage and distribution operations. A review of their operations indicates a portion of their products contain ethanol concentrations exceeding 24% which results in a classification as a Class 3 Flammable Liquid under the Australian Dangerous Goods Code (ADG). The site therefore requires a screening assessment against State Environmental Planning Policy No. 33 (SEPP 33) (Ref. [1]) per the NSW Environmental Planning and Assessment Regulations 2000 (Ref. [2]).

Goodman has requested Riskcon to prepare a SEPP 33 assessment to allow for the compliant storage and handling of DGs on the site per the Environmental Planning and Assessment Regulations 2000 and to determine whether further assessment is required to investigate the potential for off-site impacts.

Conclusions

A review of the storage of flammable liquids at the proposed site was conducted and compared to the threshold quantities outlined in Applying SEPP 33. It was determined that the facility will be compliant with “Applying SEPP 33” and thus the EPA Regulation if the storage of flammable liquids is no closer than 10 m to the site boundary. This will prevent the facility from being considered potentially hazardous.

As the facility is not classified as potentially hazardous, it is not necessary to prepare a Preliminary Hazard Analysis for the facility as SEPP 33 does not apply.

Recommendations

Notwithstanding the above, the following recommendation has been made:

- The documentation required by the Work Health and Safety Regulation 2017, applicable to the site DG storage(s), shall be prepared for the site prior to occupation.
- Review of the DG storage design against applicable Australian Standards to ensure that the risks posed have been managed So Far As Is Reasonably Practicable (SFARP).

Table of Contents

Executive Summary	i
1.0 Introduction	4
1.1 Background	4
1.2 Scope of Services	4
2.0 Site Description	5
2.1 Site Location	5
2.2 Adjacent Land Uses	5
2.3 General Description	5
3.0 Methodology	7
3.1 General Methodology	7
3.2 Data taken from "Applying SEPP 33"	7
4.0 SEPP 33 Review	9
4.1 Proposed Storage Details	9
4.2 Application of State Environmental Planning Policy No.33 – Hazardous and Offensive Developments	9
4.3 Data taken from "Applying SEPP 33"	9
4.3.1 Storage	11
4.3.2 Transport	11
5.0 Conclusion and Recommendations	13
5.1 Conclusions	13
5.2 Recommendations	13
6.0 References	14

List of Figures

Figure 2-1: Site Location	5
Figure 2-2: Site Layout	6
Figure 3-1: Screening Methods	7
Figure 3-2: General Screening Threshold Quantities	8
Figure 4-1: Screening Method to be Used.	10
Figure 4-2: Class 3 PG II & III Flammable Liquid Screening Method (Figure 9)	10
Figure 4-3: Allowable flammable liquids storage area (green)	11
Figure 4-4: Transportation Screening Thresholds	12

List of Tables

Table 4-1: DG Classes or Materials Stored and Maximum Quantities	9
Table 4-2: Quantities Stored and SEPP 33 Threshold	11

Abbreviations

Abbreviation	Description
ADG	Australian Dangerous Goods Code
DA	Development Application
DGs	Dangerous Goods
DPE	Department of Planning and Environment
SEPP	State Environmental Planning Policy
SFARP	So Far As Is Reasonably Practicable

1.0 Introduction

1.1 Background

Goodman is leasing a warehouse to a client at Oakdale West, Kemps Creek to house their storage and distribution operations. A review of their operations indicates a portion of their products contain ethanol concentrations exceeding 24% which results in a classification as a Class 3 Flammable Liquid under the Australian Dangerous Goods Code (ADG). The site therefore requires a screening assessment against State Environmental Planning Policy No. 33 (SEPP 33) (Ref. [1]) per the NSW Environmental Planning and Assessment Regulations 2000 (Ref. [2]).

Goodman has requested Riskcon to prepare a SEPP 33 assessment to allow for the compliant storage and handling of DGs on the site per the Environmental Planning and Assessment Regulations 2000 and to determine whether further assessment is required to investigate the potential for off-site impacts.

1.2 Scope of Services

The scope of work is to prepare a SEPP 33 assessment for Warehouse 4E at Oakdale Industrial Estate, Kemps Creek NSW. Should any additional studies be required (i.e. PHA) these are not included within the scope of works. No other sites are included within the scope of works.

2.0 Site Description

2.1 Site Location

The site is located at Warehouse 4E in Oakdale Industrial Estate, Kemps Creek NSW which is approximately 36 km west of the Sydney Central Business District (CBD). **Figure 2-1** shows the regional location of the site in relation to the Sydney CBD. Provided in **Figure 2-2** is the layout of the site.

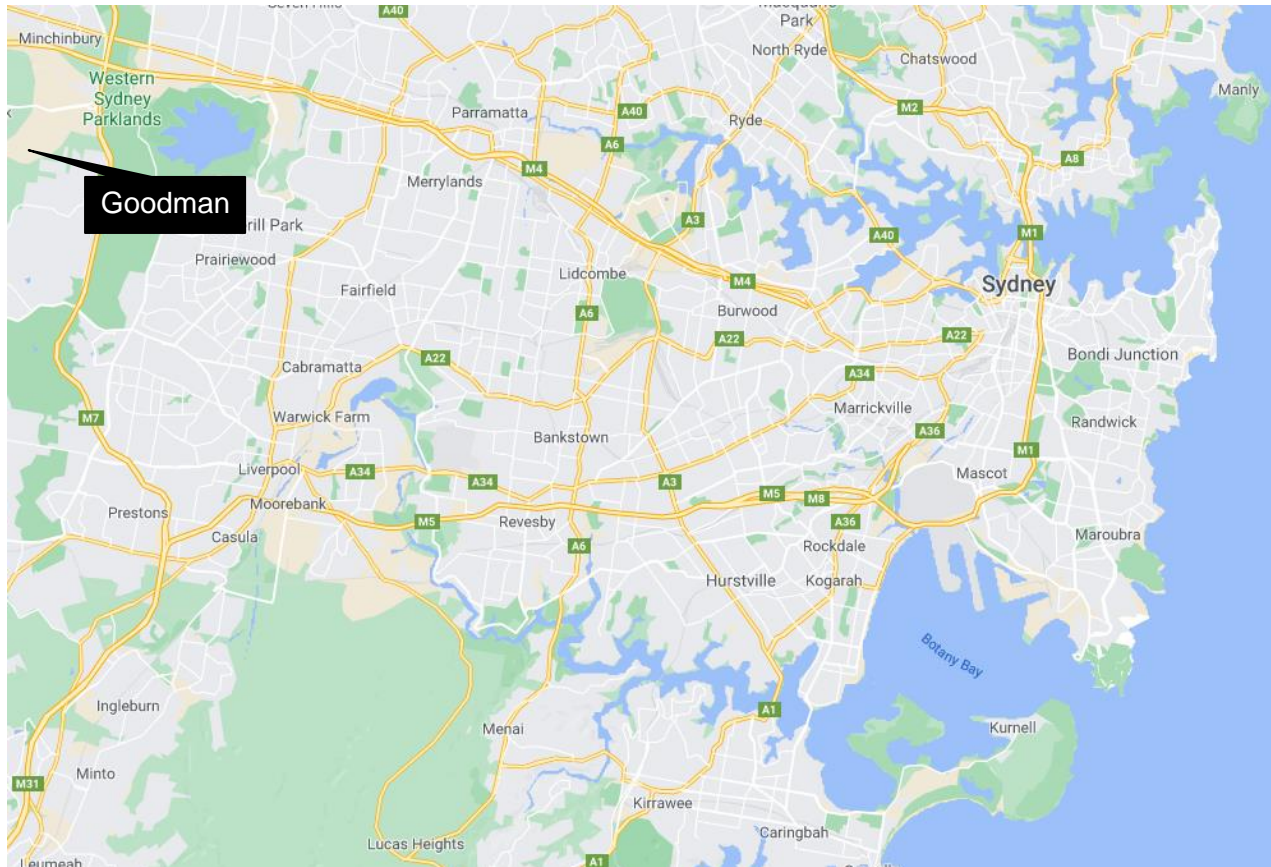


Figure 2-1: Site Location

2.2 Adjacent Land Uses

The land is located in an industrial area surrounded by the following land uses, which are adjacent to the site:

- North – Industrial warehousing
- South – Industrial warehousing
- East – Industrial warehousing
- West – Industrial warehousing

2.3 General Description

The site consists of a single large warehouse building (34,000 m²), a main two-storey office, workshop and two dock offices on either side of the warehouse. The entirety of the warehouse floorspace is for general racking.

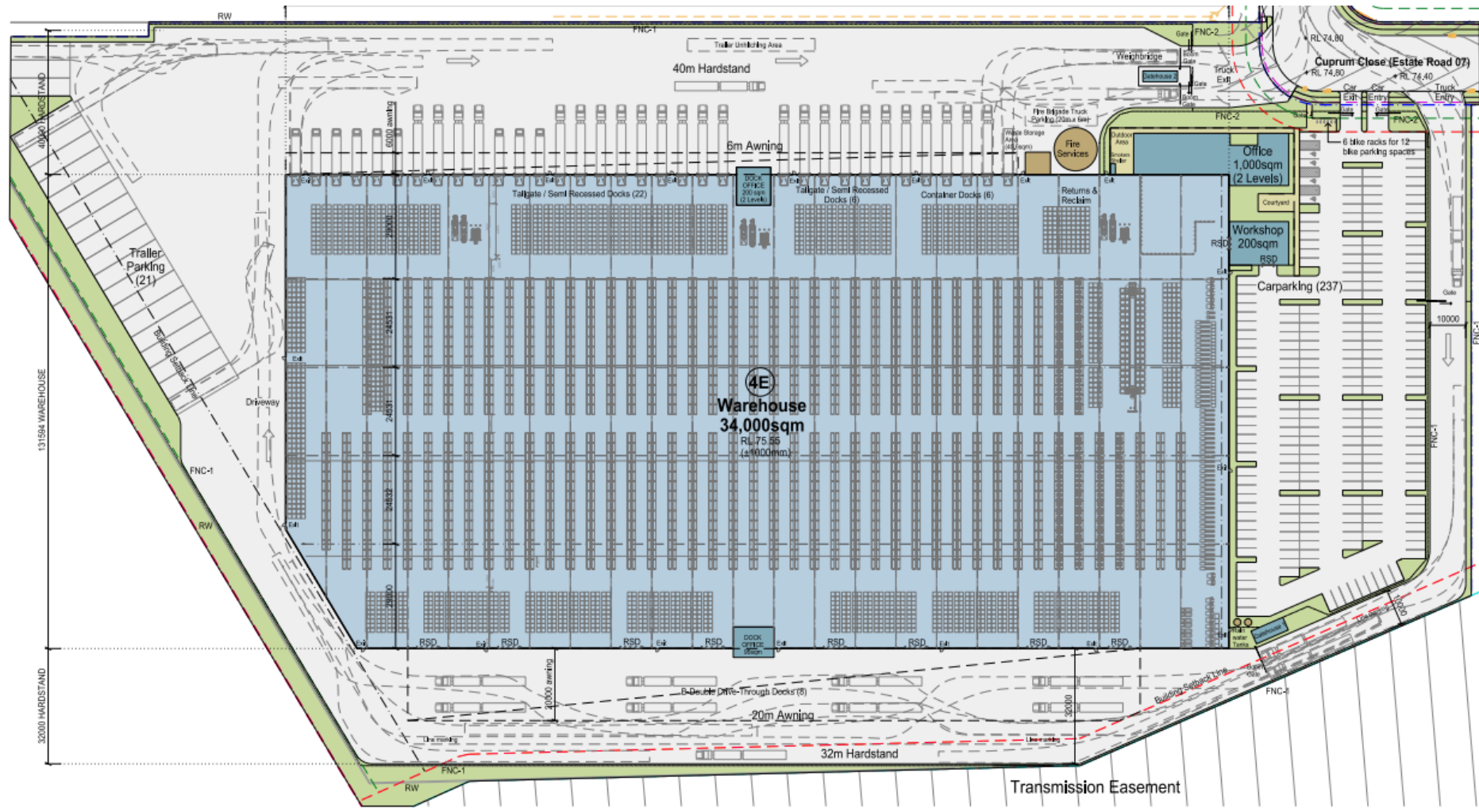


Figure 2-2: Site Layout

3.0 Methodology

3.1 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. [3]) 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. [3]).
- Report on the findings of the SEPP 33 assessment.

3.2 Data taken from “Applying SEPP 33”

Figure 3-1, 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. [3]).

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 3-1: Screening Methods

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

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 3-2: General Screening Threshold Quantities

4.0 SEPP 33 Review

4.1 Proposed Storage Details

The maximum quantities of products and DGs that are to be stored at the warehouse, are shown in **Table 4-1**. Provided in **Table 4-1** is an assessment of whether the Class is subject to SEPP 33.

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

Class	Description	PG	Quantity (kg or L)	Subject to SEPP 33? (Y/N)
2.1	Flammable gas - LPG	-	720 L WC*	Y
3	Flammable liquids	II	87,000 kg	Y

*Water Capacity

4.2 Application of State Environmental Planning Policy No.33 – Hazardous and Offensive Developments

State Environmental Planning Policy No. 33 – Hazardous and Offensive Developments (SEPP 33) has been developed under the 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 33 applies to a specific development. The guideline, “Applying SEPP 33 - Hazardous and Offensive Developments” (Ref. [3]) 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 33 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 Data taken from “Applying SEPP 33”

Figure 4-1, extracted from “Applying SEPP 33” provides details on the application of Figures or Tables from the same document to determine the applied screening Threshold.

- 87 tonnes of Class 3 PG II flammable liquids are to be stored. Given that the storage exceeds 5 tonne, Figure 9 from “Applying SEPP 33” shall be used.
- 720 L Water Capacity of LPG bottles are also to be stored. Table 3 from “Applying SEPP 33” outlines that the screening threshold for above ground LPG storage not including automot

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 4-1: Screening Method to be Used.

Figure 9 from “Applying SEPP 33” has been extracted and is shown in **Figure 4-2**.

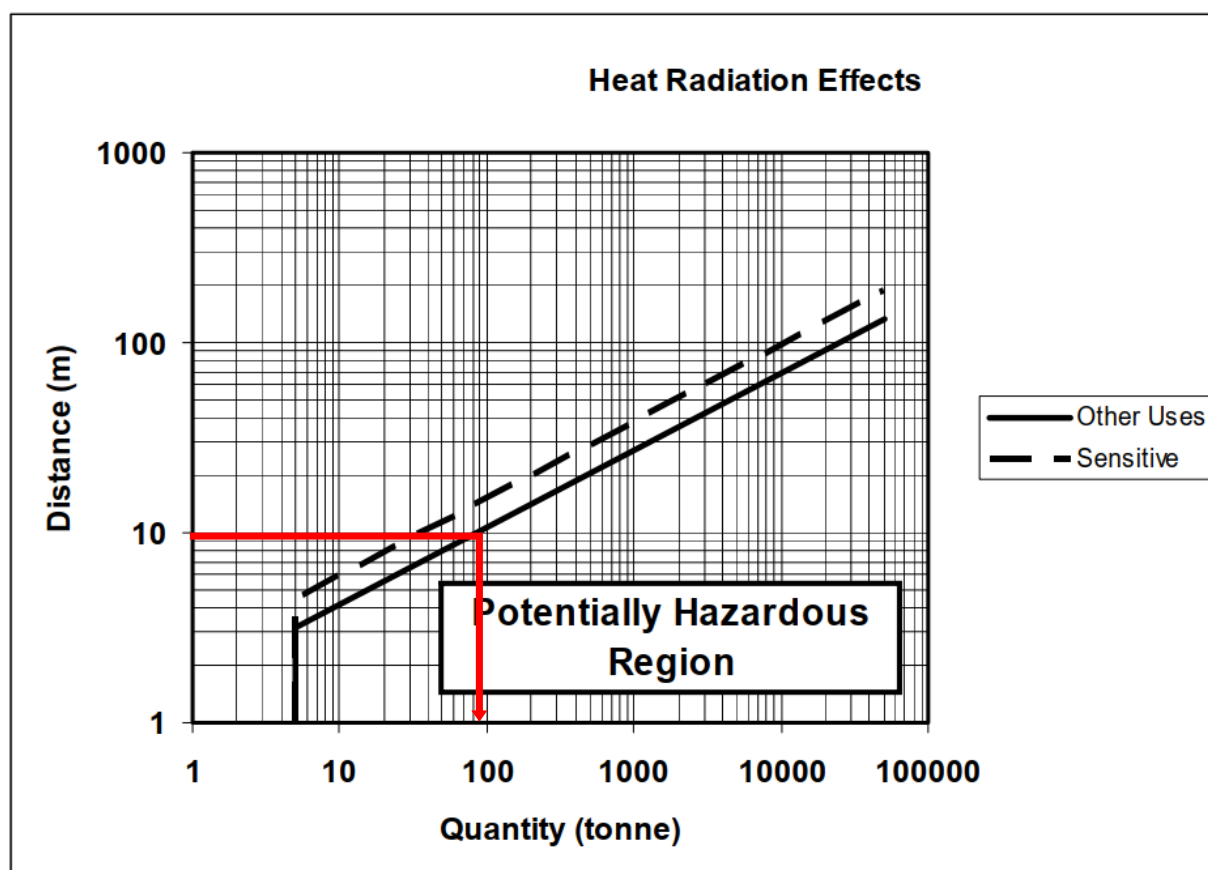


Figure 4-2: Class 3 PG II & III Flammable Liquid Screening Method (Figure 9)

4.3.1 Storage

As flammable liquid storage is limited by distance from the boundary (i.e. other uses) within “Applying SEPP 33”, in order to remain compliant, the storage of flammable liquids on the site shall be at least 10 m from the nearest boundary. It is noted that all proposed racking space within the warehouse appears to be greater than 10 m from the site boundary and so storage within the currently proposed racking will be unrestricted by this requirement. The perimeter of the main warehouse building is 14 m from the site boundary and so any spill which does occur inside may extend to the inner wall and still exceed the SEPP 33 threshold boundary distance.

Table 4-2: Quantities Stored and SEPP 33 Threshold

Class	Description	PG	Quantity (kg)	SEPP Threshold	SEPP 33 exceeded? (Y/N)
2.1	Flammable gas - LPG	-	720 L WC	10,000 kg	N
3	Flammable liquid	II	87,000	10 m from boundary	N

The area in which flammable liquids may be stored is shown highlighted green in **Figure 4-3** to be the entire interior of the main warehouse building.



Figure 4-3: Allowable flammable liquids storage area (green)

4.3.2 Transport

Table 2 from Applying SEPP 33 has been extracted and reproduced in **Figure 4-4**. A review of the figure with reference to the quantities stored indicates the warehouse storage would not exceed the cumulative annual transport limits based solely on the total quantity which is stored in the warehouse. Therefore, SEPP 33 does not apply to the transport operations at this site. Similarly, based on similar sites, it is not expected that vehicle movements or total volume transported will exceed these limits.

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 4-4: Transportation Screening Thresholds

5.0 Conclusion and Recommendations

5.1 Conclusions

A review of the storage of flammable liquids at the proposed site was conducted and compared to the threshold quantities outlined in Applying SEPP 33. It was determined that the facility will be compliant with “Applying SEPP 33” and thus the EPA Regulation if the storage of flammable liquids is no closer than 10 m to the site boundary. This will prevent the facility from being considered potentially hazardous.

As the facility is not classified as potentially hazardous, it is not necessary to prepare a Preliminary Hazard Analysis for the facility as SEPP 33 does not apply.

5.2 Recommendations

Notwithstanding the above, the following recommendation has been made:

- The documentation required by the Work Health and Safety Regulation 2017, applicable to the site DG storage(s), shall be prepared for the site prior to occupation.
- Review of the DG storage design against applicable Australian Standards to ensure that the risks posed have been managed So Far As Is Reasonably Practicable (SFARP).

6.0 References

- [1] NSW Department of Planning and Environment, "Applying SEPP33 – Hazardous and Offensive Developments," NSW Department of Planning and Environment, Sydney, 2011.
- [2] New South Wales Government, "Environmental Planning and Assessment Regulation 2000," New South Wales Government, Sydney, 2000.
- [3] Department of Planning, "Applying SEPP 33," Department of Planning, Sydney, 2011.