Riskcon engineering

State Environmental Planning Policy No. 33

74 Edinburgh Road, Marrickville

Woolworths Limited
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74 Edinburgh Road, Marrickville

Woolworths Limited

Prepared by

Riskcon Engineering Pty Ltd
Unit 618 /159 Ross Street
Forest Lodge NSW 2037
www.riskcon-eng.com
ABN 74 626 753 820

Quality Management

Rev	Date	Remarks	Prepared By	Reviewed By
A	7 August 2020	Draft issue for comment	Renton Parker	Steve Sylvester
0	26 August 2020	Issued Final		
1	22 January 2021	Incorporated previously unsupplied DG quantities		

Executive Summary

Background

Woolworths Limited (Woolworths) has proposed to occupy a warehouse located at 74 Edinburgh Road, Marrickville to house a range of beverage products including beer, wine and spirits. The site has been issued Secretary Environmental Assessment Requirements (SEARs) which require the site to have a State Environmental Planning Policy No. 33 (SEPP 33) assessment performed to determine whether the facility is potentially hazardous and whether additional risk assessment is required.

Woolworths has commissioned Riskcon Engineering Pty Ltd (Riskcon) to prepare a SEPP 33 assessment for the facility to determine whether the risk profile is acceptable for the location. This document represents the SEPP 33 assessment for the site at 74 Edinburgh Road, Marrickville.

Conclusions

A review of the quantities of DGs stored at the proposed warehouse and the associated vehicle movements was conducted and compared to the threshold quantities outlined in Applying SEPP 33. The results of this analysis indicates the threshold quantities for the DGs to be stored and transported are not exceeded; hence, SEPP 33 does not apply to the project.

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

Recommendations

No recommendations have been made as part of this assessment

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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

1.0 Introduction

1.1 Background

Woolworths Limited (Woolworths) has proposed to occupy a warehouse located at 74 Edinburgh Road, Marrickville to house a range of beverage products including beer, wine and spirits. The site has been issued Secretary Environmental Assessment Requirements (SEARs) which require the site to have a State Environmental Planning Policy No. 33 (SEPP 33) assessment performed to determine whether the facility is potentially hazardous and whether additional risk assessment is required.

Woolworths has commissioned Riskcon Engineering Pty Ltd (Riskcon) to prepare a SEPP 33 assessment for the facility to determine whether the risk profile is acceptable for the location. This document represents the SEPP 33 assessment for the site at 74 Edinburgh Road, Marrickville.

1.2 Scope of Services

The scope of work is to prepare a SEPP 33 assessment for the site located at 74 Edinburgh Road, Marrickville. The assessment does not include any other sites or 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 33 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 or16 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**.

	Vehicle Movements		Minimum quantity* per load (tonne)	
	Cumulative	Peak		
Class	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 SEPP 33 Review

3.1 Proposed Storage Details

Initial review of the site operations indicated minimal quantities of DGs would be stored at the facility; however, to ensure any changes to future operations which may include additional DGs being stored are fully captured, quantities have been specified in excess of what is currently being stored. Provided in **Table 3-1** is an assessment of whether the Class is subject to SEPP 33.

Table 3-1: DG Classes or Materials Stored and Maximum Quantities

Class	Description	PG	Quantity (kg)	Class Subject to SEPP 33 (Y/N)
1.4s	Sparklers / party poppers	n/a	100	N
2.1	Aerosols	n/a	4,500 / 1,125^	Y
2.2	Aerosols	n/a	4,000	N
3	Flammable liquids	III	45,000*	Y
4.1	Flammable solids	III	200	Y
5.1	Oxidising agents	II	200	Y
8	Corrosive substances	II	2,000	Y
9	Miscellaneous DGs	III	500	N

*Density has been calculated based upon spirits containing 40% ethanol by volume resulting in a density of 915 kg/m^3

^Based upon 25% of the product weight being propellant.

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

State Environmental Planning Policy No. 33 – Hazadous and Offensive Developments (SEPP 33) has been developed under the Planning and Assesment Act 1979 to control potentially hazardous and offensive developments and to ensure appropriate safety features are installed at a faclity 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. [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 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.

3.3 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.

- Flammable liquids are classified as Class 3 DGs; hence, Figure 9 shall 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
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4	table 3
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Figure 3-1: Screening Method to be Used

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
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2.1	(LPG only — not including automotive retail outlets[1])	
	10 tonne or16 m^3	if stored above ground
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2.3	5 tonne	anhydrous ammonia, kept in the same manner as for liquefied flammable gases and not kept for sale
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	2.5 tonne	chlorine and sulphur dioxide stored as liquefied gas in containers >100 kg
	100 kg	liquefied gas kept in or on premises
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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

3.3.1 Storage

Threshold limits for the application of SEPP 33 are presented in **Table 3-2** along with maximum DG quantities that will be stored. The only Class assessable is Class 3 which is based upon distance from the storage to the site boundary. Based upon **Figure 3-3** the distance required from the storage to the site boundary is 8 m. A review of the boundaries at the site indicates the closest boundary is 6 m from the warehouse on the north western side of the building. However, this segment of the facility is dedicated to chilled and frozen products which extends 19 m from the wall. Therefore, the closest area the DGs could be stored is 25 m from the site boundary and would subsequently not exceed the SEPP 33 threshold; hence, no further assessment is required.

Table 3-2: Quantities Stored and SEPP 33 Threshold

Class	Description	PG	Quantity (kg)	SEPP Threshold (kg)	Does SEPP 33 (Y/N)
2.1	Aerosols	n/a	1,125	10,000	N
3	Flammable Liquids	III	45,000	Distance based (refer to **Figure 3-3**)	N
4.1	Flammable solids	III	200	5,000	N
5.1	Oxidising agents	II	200	5,000	N
8	Corrosive substances	II	2,000	25,000	N

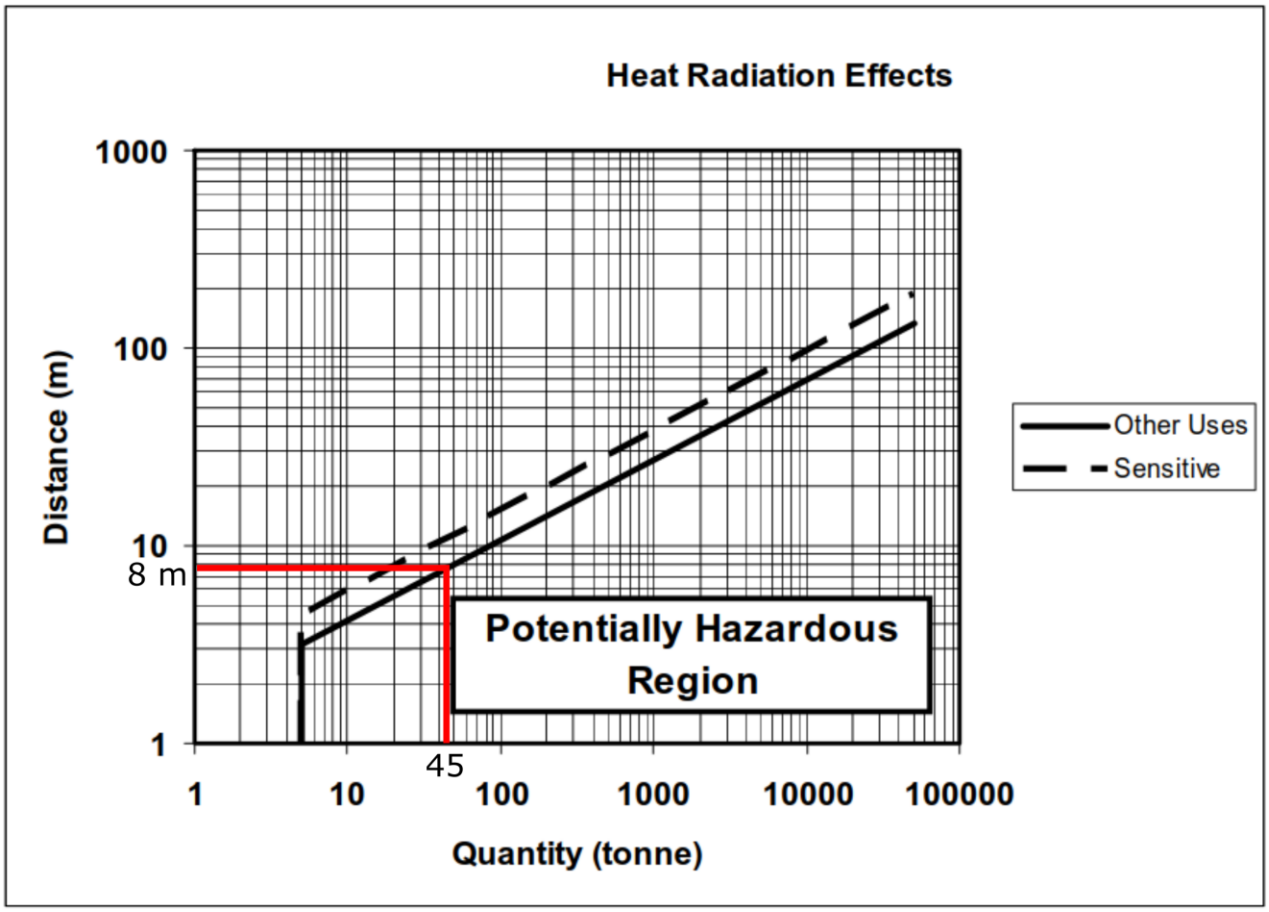

Figure 3-3: Class 3 SEPP 33 Distance

3.3.2 Transport

Table 2 from Applying SEPP 33 has been extracted and reproduced in **Figure 3-4**. The flammable liquids stored are in packages and are PG III which indicates there is no limit on the number of deliveries which can occur. For the other products, the package limits exceed the quantity stored at the facility; hence, movement of the anticipated quantities would not exceed the transport limits. Therefore, the site would not exceed the SEPP 33 transport limits.

	Vehicle Movements		Minimum quantity*	
	Cumulative	Peak	per load (tonne)	
Class	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 3-4: Transportation Screening Thresholds

4.0 Conclusion and Recommendations

4.1 Conclusions

A review of the quantities of DGs stored at the proposed warehouse and the associated vehicle movements was conducted and compared to the threshold quantities outlined in Applying SEPP 33. The results of this analysis indicates the threshold quantities for the DGs to be stored and transported are not exceeded; hence, SEPP 33 does not apply to the project.

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

4.2 Recommendations

No recommendations have been made as part of this assessment.

5.0 References

[1] Department of Planning, “Applying SEPP 33,” Department of Planning, Sydney, 2011.

[2] NSW Department of Planning and Environment, “Applying SEPP33 – Hazardous and Offensive Developments,” NSW Department of Planning and Environment, Sydney, 2011.