



State Environmental Planning Policy No. 33

416 Berrima Road, Moss Vale

Austral Masonry (NSW) Pty Ltd
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State Environmental Planning Policy No. 33

416 Berrima Road, Moss Vale

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A	20 February 2020	Draft Issue for Comment	Renton Parker	Steve Sylvester
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Executive Summary

Background

Austral Masonry (NSW) Pty Ltd (Austral) has proposed to develop a new site at 416 Berrima Road, Moss Vale. An initial application was submitted to the Department of Planning and Environment who provide Secretary Environmental Assessment Requirements (SEARS) requiring the preparation of a State Environmental Planning Policy No. 33 (SEPP 33) report.

If the assessment determines SEPP 33 to be exceeded, a Preliminary Hazard Analysis (PHA) is required to be submitted with the Development Application. Brickworks Land & Development, on behalf of Austral, has engaged Riskon Engineering Pty Ltd to prepare the SEPP 33 for the site.

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 facility 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
LPG	Liquefied Petroleum Gas
SEPP	State Environmental Planning Policy

1.0 Introduction

1.1 Background

Austral Masonry (NSW) Pty Ltd (Austral) has proposed to develop a new site at 416 Berrima Road, Moss Vale. An initial application was submitted to the Department of Planning and Environment who provide Secretary Environmental Assessment Requirements (SEARS) requiring the preparation of a State Environmental Planning Policy No. 33 (SEPP 33) report.

If the assessment determines SEPP 33 to be exceeded, a Preliminary Hazard Analysis (PHA) is required to be submitted with the Development Application. Brickworks Land & Development, on behalf of Austral, has engaged Riskon Engineering Pty Ltd to prepare the SEPP 33 for the site.

1.2 Scope of Services

The scope of work is to prepare a SEPP 33 assessment for the warehouse located at 416 Berrima Road, Moss Vale. 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 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 SEPP 33 Review

3.1 Proposed Storage Details

The maximum quantities of products and DGs that are to be stored at the warehouse, are shown in **Table 3-1**. The data has been taken from existing site operations provided by the client. 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	Class Subject to SEPP 33 (Y/N)
2.1	Aerosols	n/a	2,000 L / 1,100 kg*	Y
2.2	Cylinders	n/a	300 L	N
2.2(5.1)	Oxygen	n/a	150 L	Y
3	Flammable liquids (cabinet)	II & III	250 L	Y
	Flammable liquids (cabinet)	II & III	250 L	Y
	Flammable liquids (Workshop)	II & III	4,000 L	Y
4.1	Flammable solids	II	1 kg	Y
5.1	Oxidising agent	II	1 kg	Y
8	Corrosive Substances	II	1,000 L	Y
9	Miscellaneous DGs	III	500 L	N

*Density of LPG taken to be 550 kg/m³

Note: All other densities taken to be 1,000 kg/m³

3.2 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. [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.

- LPG is classified as a Class 2.1 gas; hence, Table 3 shall be used.
- 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
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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**.

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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')	
	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

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 results summarised in the table indicates the SEPP 33 criteria is not exceeded; hence, no further assessment would be required.

Table 3-2: Quantities Stored and SEPP 33 Threshold

Class	Description	PG	Quantity	SEPP Threshold (kg)	SEPP 33 Exceeded (Y/N)
2.1	Aerosols	n/a	1,100 kg	10,000	N
3	Flammable liquids (cabinet)	III	250 kg	5,000	N
	Flammable liquids (cabinet)	II & III	250 kg	5,000	N
	Flammable liquids (Workshop)	II & III	4,000 kg	5,000	N
4.1	Flammable solids	II	1 kg	5,000	N
5.1	Oxidising agent*	II	301 kg	5,000	N
8	Corrosive Substances	II	1,000 kg	25,000	N

*Oxygen included within the Class 5.1 total with conservative density assumption of 1,000 kg/m³

3.3.2 Transport

With respect to the impact of transporting DGs, the DGs at the site are used as part of operations and are only transported to the facility when existing stockpiles are empty. Based upon the limited quantities used at the site, the transport limits are not expected to be exceeded. Therefore, SEPP 33 would not apply to the transport operations at the site.

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 facility 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.