



State Environmental Planning Policy No. 33

657-769 Mamre Road, Kemps Creek

Ardex Australia Pty Ltd
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657-769 Mamre Road, Kemps Creek

Ardex Australia 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

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Quality Management

Rev	Date	Remarks	Prepared By	Reviewed By
A	13 July 2021	Draft issue for comment	Lucy Jimenez	Renton Parker
0	24 August 2021	Issued Final		
1	21 September 2021	Updated date to align with issued SEARs		

Executive Summary

Background

Frasers Property has been commissioned to construct, fit out and operate a manufacturing facility and associated warehouse facility at 657-769 Mamre Road, Kemps Creek (proposed Lot 12) which will be occupied and operated by Ardex Australia Pty Ltd (Ardex). As part of the design, it was identified that some of the products stored and used in manufacturing are classified as Dangerous Goods (DGs); hence, the site is subject to the State Environmental Planning Policy No. 33 (SEPP 33) and must be assessed against this policy to determine whether the risk profile of the site is suitable for the land zoning.

Frasers Property has commissioned Riskcon Engineering Pty Ltd (Riskcon) on behalf of Ardex 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 Ardex site at 657-769 Mamre Road, Kemps Creek.

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, and the development is not considered offensive; 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

The following recommendation has been made:

- The documentation required by the Work Health and Safety Regulation 2017 shall be prepared prior to occupation.

SEARS Items Addressed

The table below provides a reference to how the SEARs have been addressed.

SEARS Item	Report Section Responding to SEARS
Hazards and Risk – SEPP 33, including a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development	Section 3

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Abbreviations

Abbreviation	Description
ADG	Australian Dangerous Goods Code
DA	Development Application
DGs	Dangerous Goods
DPE	Department of Planning and Environment
PG	Packing Group
SEPP	State Environmental Planning Policy

1.0 Introduction

1.1 Background

Frasers Property has been commissioned to construct, fit out and operate a manufacturing facility and associated warehouse facility at 657-769 Mamre Road, Kemps Creek (proposed Lot 12) which will be occupied and operated by Ardex Australia Pty Ltd (Ardex). As part of the design, it was identified that some of the products stored and used in manufacturing are classified as Dangerous Goods (DGs); hence, the site is subject to the State Environmental Planning Policy No. 33 (SEPP 33) and must be assessed against this policy to determine whether the risk profile of the site is suitable for the land zoning.

Frasers Property has commissioned Riskcon Engineering Pty Ltd (Riskcon) on behalf of Ardex 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 Ardex site at 657-769 Mamre Road, Kemps Creek.

1.2. Scope of Services

The scope of work is to prepare a SEPP 33 assessment for the warehouse located at 657-769 Mamre Road, Kemps Creek. 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 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.

3.0 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 provided by the client. Provided in **Table 3-1** is an assessment of whether the DG Class is subject to SEPP 33.

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

Class	Description	Packing Group (PG)	Quantity (kg)	DG Subject to SEPP 33 Review? (Y/N)
1.4s	Explosives	n/a	100	N
2.1	LPG	n/a	900	Y
3	Flammable Liquid	II	111,675	Y
		III	71,973	Y
4.1	Flammable Solids	n/a	484	Y
5.1 (6.1)	Oxidising Substances (sub-risk Toxic Substances)	III	153	Y
6.1	Toxic Substances	II	2,000	Y
8	Corrosive Substances	II	13,302	Y
		III	21,297	Y
9	Miscellaneous DGs	III	315,485	N

*Assuming density of 1,000 kg/m³

The proposed site layout has been shown in Figure 3-1.

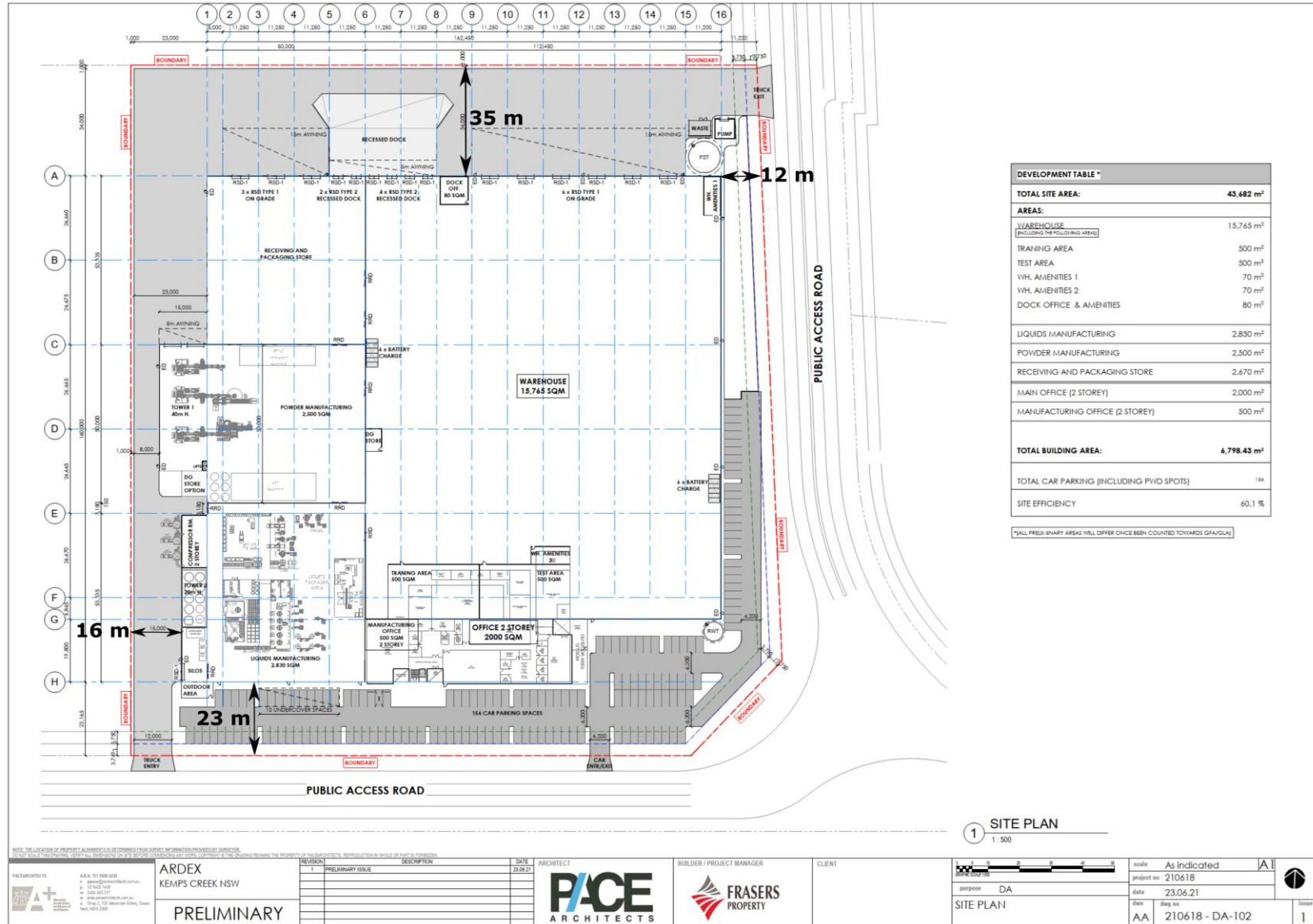


Figure 3-1: Proposed Site Layout

3.2 Data taken from “Applying SEPP 33”

Figure 3-2, 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, hence Table 3 (**Figure 3-3**) shall be used.
- Flammable liquids are classified as Class 3 DGs. As more than 5 tonnes of flammable liquids will be stored, **Figure 3-4** shall be used.
- Flammable solids are classified as Class 4.1 DGs, hence Table 3 (**Figure 3-3**) shall be used.
- Sodium Nitrate is classified as Class 5.1 (Oxidising Substance), with sub-risk Class 6.1 (Toxic Substance), hence Table 3 (**Figure 3-3**) shall be used, and the quantity will be assessed against the threshold for both classes.
- Toxic substances are classified as Class 6.1 DGs, hence Table 3 (**Figure 3-3**) shall be used.
- Corrosive substances are classified as Class 8 DGs, hence Table 3 (**Figure 3-3**) 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
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 3-2: Screening Method to be Used

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

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 3-3: General Screening Threshold Quantities

Table 9 from “Applying SEPP 33” has been extracted and is shown in **Figure 3-4**. To determine the maximum quantity of Class 3 DGs which can be stored on-site without exceed the SEPP 33 threshold, the minimum distance to the site boundary was determined. As shown in Figure 3-1, the smallest distance to the boundary is 9 m, and hence the maximum quantity which can be stored is 70 tonnes.

Figure 9: Class 3PGII and 3PGIII Flammable Liquids

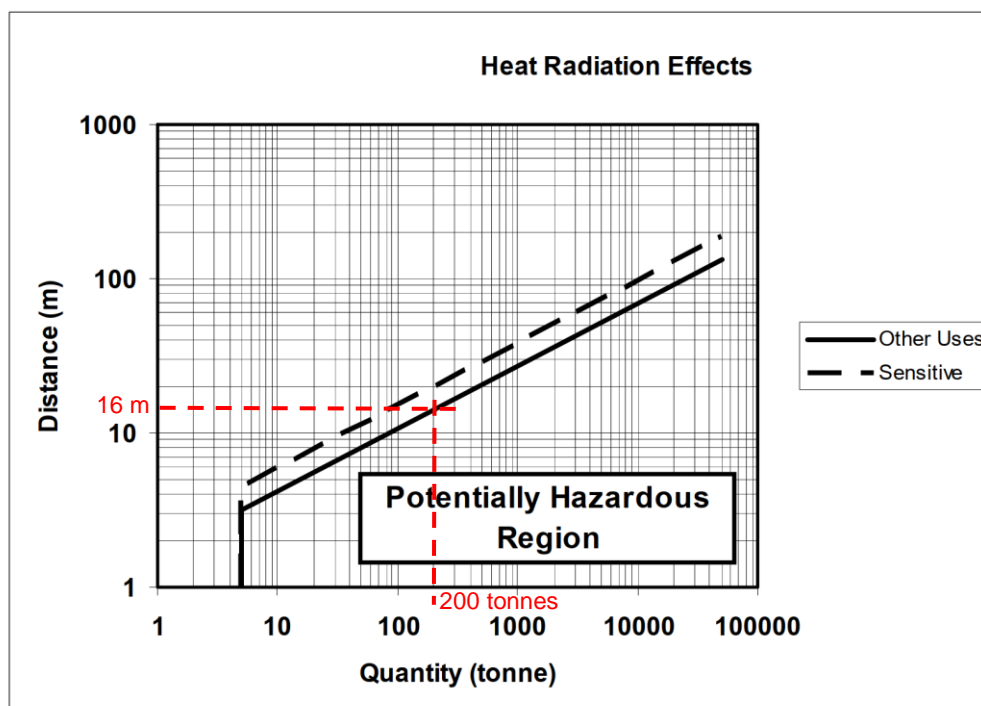


Figure 3-4: SEPP 33 Storage Screening Threshold for Flammable Liquids

3.3 Assessment of Hazards

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 (kg)	SEPP Threshold (kg)	Threshold Exceeded? (Y/N)
2.1	LPG	n/a	900	10,000	N
3	Flammable Liquids	II	111,675	200,000	N
		III	71,973	200,000	N
4.1	Flammable Solids	II	484	5,000	N
5.1	Oxidising Substances	III	153	5,000	N
(6.1)	(sub-risk Toxic Substances)			2,500	N
6.1	Toxic Substances	II	2000	2,500	N
8	Corrosive Substances	II	13,302	25,000	N
		III	21,297	50,000	N

3.3.2 Transport

Table 2 from Applying SEPP 33 has been extracted and reproduced in **Figure 3-5**. 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.

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 3-5: Transportation Screening Thresholds

3.4 Assessment of Offense

SEPP 33 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. A review of the warehouse and manufacturing 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.

The total quantity of chemicals stored at the Ardex facility is approximately 537 tonnes (<550 kL). The Protection of Environmental Operations Act 1997 (Ref. [2]) and Regulations 2009 (Ref. [3]) indicates that chemical storage facilities that exceed 5,000 kL of storage would trigger an administrative fee unit. As there is less than 550 kL of chemicals stored, an administrative fee unit is not triggered, and a licence is not required for the site.

Further, there would be no unusual operations that would cause potential odours, or noise closest residential area is located over 1.5 kms from the site and noise from normal warehouse operations would not impact this area.

In summary, there is no potential for “offensive” operations at the site and therefore SEPP 33 does not apply in this case.

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, and the development is not considered offensive; 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

The following recommendation has been made:

The documentation required by the Work Health and Safety Regulation 2017 shall be prepared prior to occupation.

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.