



State Environmental Planning Policy No. 33

89 - 151 Old Castlereagh Road, Castlereagh

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Sydney Helicopters Pty Limited

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Quality Management

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A	13 September 2021	Draft issue for review	Renton Parker	Steve Sylvester
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Executive Summary

Background

Sydney Helicopters Pty Limited has proposed to develop a new helicopter airbase to house their operations following the acquisition of their existing site by Transport NSW. Secretary Environmental Assessment Requirements (SEARs) issued for the development require the assessment against the State environmental Planning Policy No. 33 (SEPP 33) to review the potential for an offsite impact.

Colliers International, on behalf of Sydney Helicopters, 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 89-151 Old Castlereagh Road, Castlereagh.

Conclusions

A review of the quantities of Dangerous Goods (DGs) stored at the proposed helicopter airbase 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

The following recommendations have been made:

- The documentation required by the Work Health and Safety Regulation 2017 for the materials and commodities stored shall be prepared prior to occupation of the facility.

Secretary Environmental Assessment Requirements

Provided in the following table is a summary of the Secretary Environmental Assessment Requirements (SEARs) for the development and how they have been addressed.

SEARs	Response to SEARs
Hazards and risk – including: a preliminary risk screening completed in accordance with <i>State Environmental Planning Policy No. 33 – Hazardous and Offensive Development</i> and Applying SEPP 33 (DoP, 2011), with a clear indication of class, quantity and location of all dangerous goods and hazardous materials associated with the development. Should preliminary screening indicate that the project is “potentially hazardous” a Preliminary Hazard Analysis (PHA) must be prepared in accordance with <i>Hazardous Industry Planning Advisory Paper No. 6 – Guidelines for Hazard Analysis</i> (DoP, 2011) and <i>Multi-Level Risk Assessment</i> (DoP, 2011)	This report

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Abbreviations

Abbreviation	Description
ADG	Australian Dangerous Goods Code
DA	Development Application
DGs	Dangerous Goods
SEPP	State Environmental Planning Policy

1.0 Introduction

1.1 Background

Sydney Helicopters Pty Limited has proposed to develop a new helicopter airbase to house their operations following the acquisition of their existing site by Transport NSW. Secretary Environmental Assessment Requirements (SEARs) issued for the development require the assessment against the State environmental Planning Policy No. 33 (SEPP 33) to review the potential for an offsite impact.

Colliers International, on behalf of Sydney Helicopters, 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 89-151 Old Castlereagh Road, Castlereagh.

1.2 Scope of Services

The scope of work is to prepare a SEPP 33 assessment for the proposed helicopter airbase to be located at 89-151 Old Castlereagh Road, Castlereagh. 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 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.

2.3 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 (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 Location and Layout

The proposed airbase is located at 89-151 Old Castlereagh Road, Castlereagh which is approximately 61 km west of the Sydney Central Business District (CBD). **Figure 3-1** shows the regional location of the site in relation to the Sydney CBD.

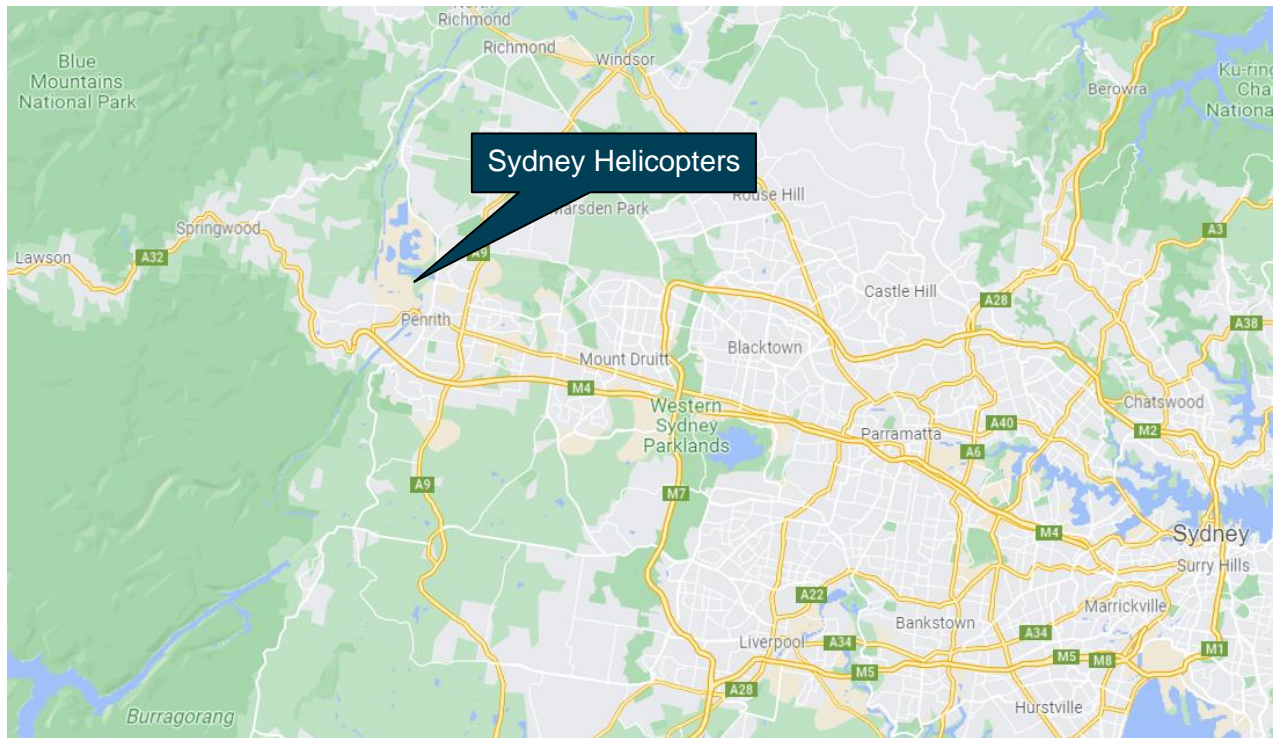


Figure 3-1: Site Location (source Google Maps)

3.2 General Description

The proposed development will involve the demolition of existing buildings and associated infrastructure around the site. The site will be developed into a helicopter facility which consists of the following:

- Demolition of two (2) single storey sheds and integrated hardstand extending beyond the food print of the sheds
- Demolition of one (1) small single storey shed and associated pavement
- Removal of one (1) inground tank
- Removal of one (1) flood light
- Removal of less than ten (10) trees
- Reinstatement of grass turf in locations of removed hardstands and pavement
- New concrete hardstand in location of existing concrete hardstands
- New lighting as required for the FATO

3.3 Quantities of Dangerous Goods Stored and Handled

Table 3-1 summarises the total quantity of goods stored and handled at the site.

Table 3-1: Quantities of DGs Stored and Handled

Class	PG	Description	Quantity (kg)
2.1	n/a	Aerosols (i.e. paint, degreasers)	250 kg
3	II	Flammable liquids (Jet A1)	30,000 L / 24,000 kg
3	II & III	Flammable liquids	250 kg

*Based upon a density of 800 kg/m³

It is anticipated that the site will use 250,000 L of fuel a year resulting in approximately 9 deliveries of fuel a year.

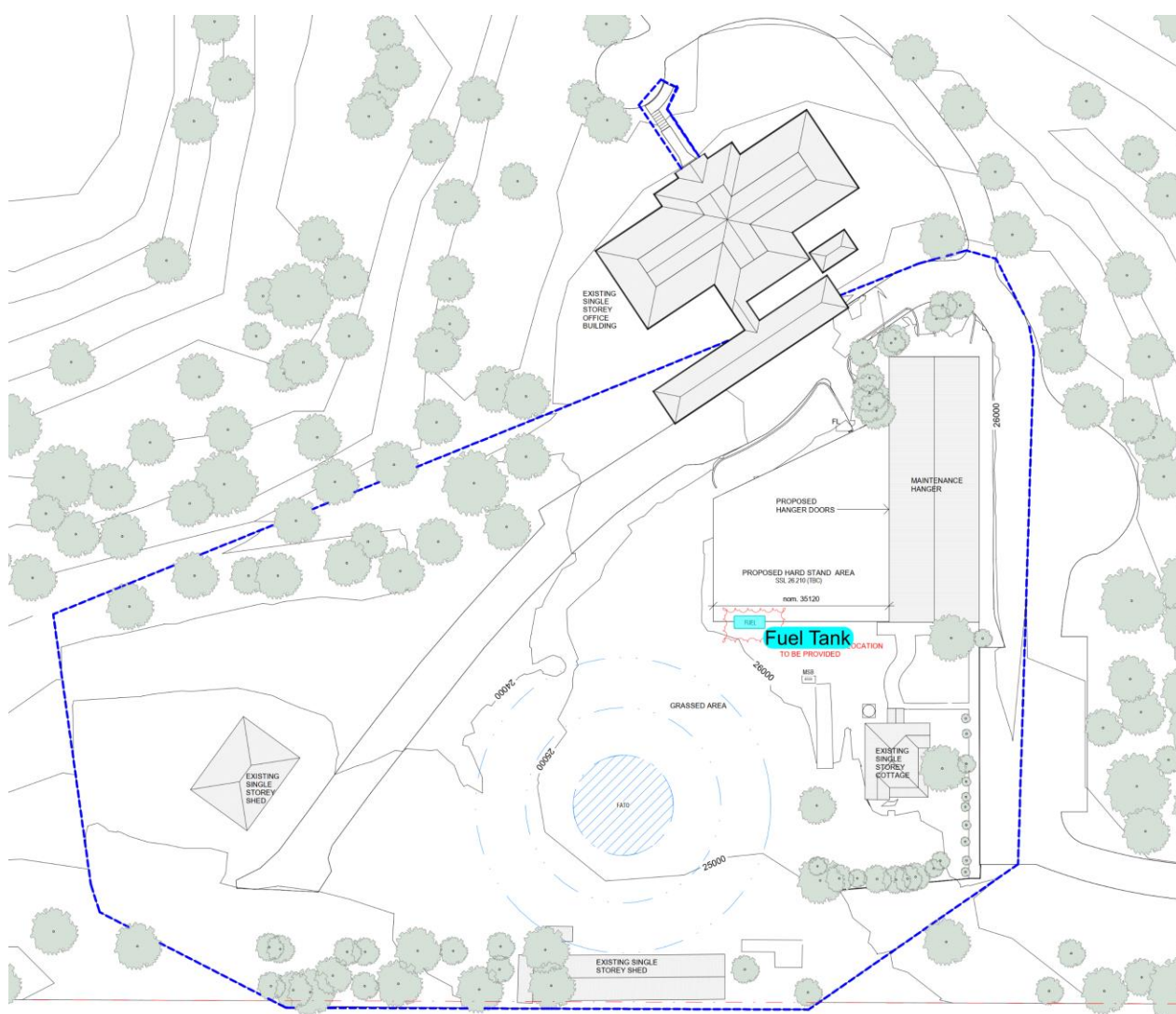


Figure 3-2: Site Layout

4.0 SEPP 33 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 taken from existing site operations provided by the client. 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	PG	Description	Quantity (kg)	Class Subject to SEPP 33 (Y/N)
2.1	n/a	Flammable gases (aerosols)	100	Y
3	II	Flammable liquids (Jet A1)	24,000	Y
3	II & III	Flammable liquids	250	Y

4.1.1 Storage

Threshold limits have been taken from **Section 2.3** which were extracted from Applying 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 as part of the site approval with respect to DGs.

Table 4-2: Quantities Stored and SEPP 33 Threshold

Class	PG	Description	Quantity (kg)	SEPP Threshold (kg)	Does SEPP 33 (Y/N)
2.1	n/a	Flammable gases	100	10,000	N
3	II	Flammable liquids (Jet A1)	24,000	6 m separation distance (Figure 4-1)	N
3	II & III	Flammable liquids	250	5,000	N

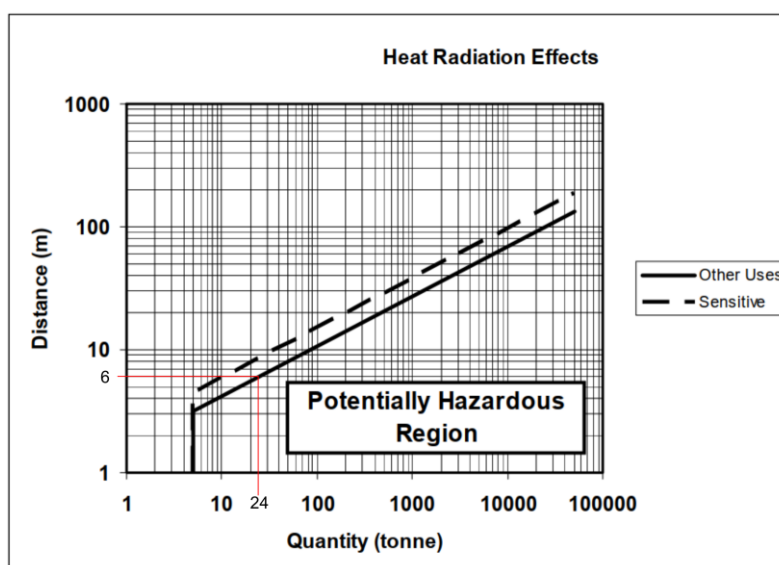


Figure 4-1: SEPP 33 Separation Distance for Flammable Liquids

4.1.2 Transport

The site does not operate as a facility that sends and receives DGs. It uses consumable amounts of DGs in small volume packages. Fuel is expected to use 250,000 L a year resulting in 9 deliveries per year which is below the transport threshold for flammable liquids. Therefore, the transport limits would not be expected to be exceeded and SEPP 33 would not apply to the transport of DGs.

5.0 Conclusion and Recommendations

5.1 Conclusions

A review of the quantities of Dangerous Goods (DGs) stored at the proposed helicopter airbase 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.

5.2 Recommendations

The following recommendations have been made:

- The documentation required by the Work Health and Safety Regulation 2017 for the materials and commodities stored shall be prepared prior to occupation of the facility.

6.0 References

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