

CONSULTANTS ADVICE NOTICE

Project:	Newcastle Jockey Club - SEPP33 Analysis	Ref No.:	RCE-21098
From:	Steve Sylvester	Date:	15 June 21
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cc:			

RE: NEWCASTLE JOCKEY CLUB - SEPP No.33 ASSESSMENT

1. INTRODUCTION

1.1. Background

The Newcastle Jockey Club (NJC) proposes to develop a stable facility at the corner of Chatham and Darling Streets, Broadmeadow, NSW. As part of the development, a number of hazardous chemicals are proposed to be stored, including chemicals listed in the Australian Dangerous Goods Code (or ADG, Ref.1). As the proposed chemicals are listed in the ADG, it is necessary to assess the storage under the provisions of State Environmental Planning Policy No.33 - Hazardous and Offensive Developments (SEPP33.).

The NJC has engaged Avid Project Management Pty Ltd (AVIDPM) to assist with obtaining project approval from the planning regulator. AVIDPM has commissioned RiskCon Engineering Pty Ltd (RiskCon) to prepare a SEPP33 assessment of the proposed NJC facility and to report on the findings of the study for submission with the DA documentation.

This document provides the SEPP33 assessment for the NJC development at the corner of Chatham and Darling Streets, Broadmeadow, NSW.

1.2. Objectives

The objectives of the SEPP33 assessment of the NJC development is to determine whether SEPP33 applies to the proposed stables facility and whether additional studies would be required under the NSW Planning and Assessment Act 1979 and the associated Regulation 2000.

1.3. Scope

The scope of the project is for a SEPP33 assessment of the proposed NJC Stables at the corner of Chatham and Darling Streets, Broadmeadow, NSW. This study is for the assessment of the following hazardous chemicals stored and handled at the site:

- Fertilizers (maximum 3 tonne solid & 0.6 tonne liquid);
- Insecticide (maximum 50 L liquid);
- Fungicide (maximum 60 L liquid);
- Other Chemicals (maximum 50 L); and
- Fuel (maximum 2,500 L diesel and 1,000 L unleaded petrol).

The scope does not include any other chemicals stored at the site or the preparation of additional documents (e.g. Preliminary Hazard Analysis or PHA) required in the event SEPP33 applies to the proposed facility

2. METHODOLOGY

2.1. General

As part of the Planning and Assessment Act (1979) and the Associated Regulation (2000), the storage and handling of chemicals requires assessment against the requirements of State Environmental Planning Policy No. 33 - Hazardous and Offensive Developments. This policy applies to Dangerous Goods which are listed in the Australian Dangerous Goods Code (or ADG, Ref.1). The policy contains a threshold levels for each of the DG classes, above which the policy will apply. Where the quantity of DGs stored at the site exceeds the thresholds listed in the policy, the policy applies to the site and it is necessary to submit a Preliminary Hazard Analysis (PHA) with the Development Application (DA). Where the chemical is not listed in the ADG or quantity of DGs are below the threshold levels in the policy, a SEPP33 assessment is required to be submitted with the DA, demonstrating that the policy does not apply.

In order to demonstrate the DG storage quantities do not exceed the threshold levels, the following assessment approach is applied;

- Review “Applying SEPP33 – Hazardous and Offensive developments” (Ref.2, issued by the Department of Planning, Industry and Environment or DPIE) and determine threshold levels for various Dangerous Goods stored at the proposed NJC stables, listing the maximum permissible values listed in the guideline.
- Develop a list of chemicals stored and handled at the NJC facility and list the maximum storage quantities proposed at the NJC facility;
- Compare the proposed maximum storage quantities to the threshold levels listed in Applying SEPP33 (Ref.2).
- Confirm whether SEPP33 applies to the site and, if so, recommend additional studies for submission to the regulator with the DA. Where SEPP33 is identified not to apply to the proposed development, no further assessment is required with regards to the Dangerous Goods storage.
- Develop a report detailing the SEPP33 assessment and demonstrating whether SEPP33 applies to the site or not, including conclusions and recommendations (if any).

3. BRIEF DESCRIPTION OF THE OPERATIONS AT THE NJC SITE

3.1. Site Location and Surrounding Land Uses

Figure 3.1 shows the regional location of the proposed NJC facility. The proposed NJC facility will be located on the corner of Chatham and Darling Streets, Broadmeadow, NSW. The facility will be located in the south west corner of the Newcastle Racecourse as shown in **Figure 3.2**. The facility is located around 40m across Chatham and Darling Streets from the closest residential areas (to the south and west). The racecourse is located to the north and east.

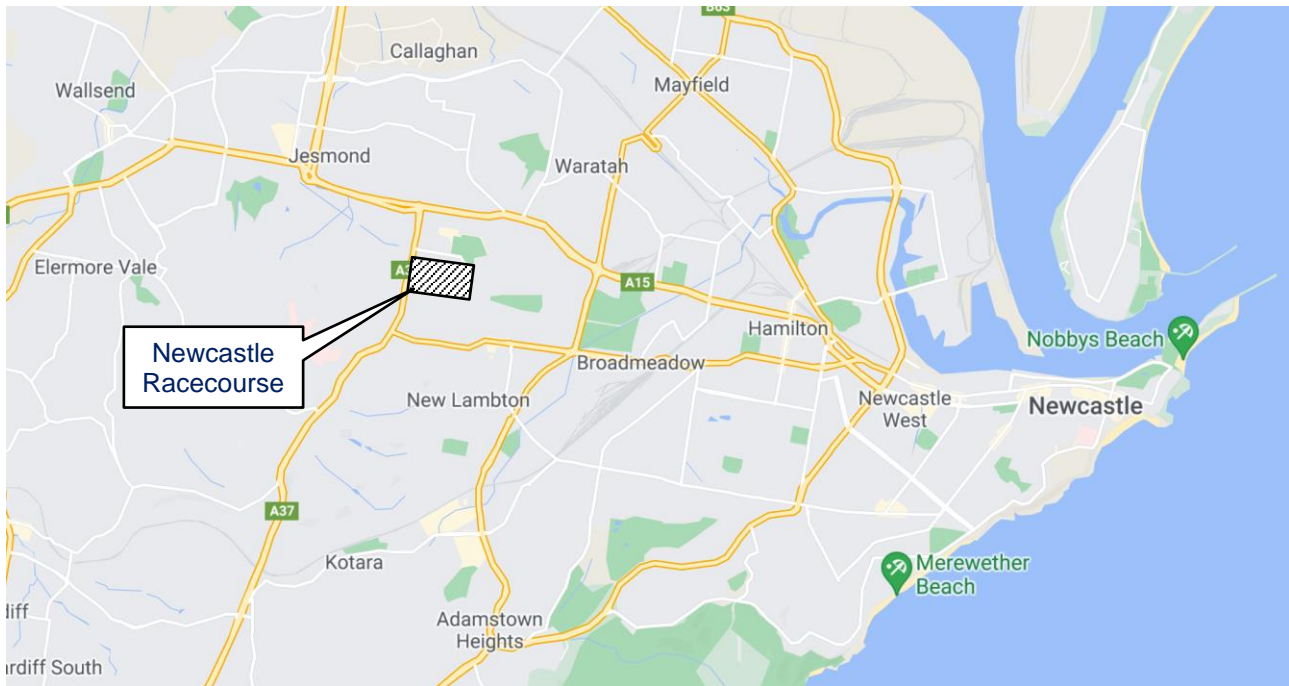


Figure 3.1: Regional Location of the Proposed Newcastle Jockey Club Facility



Figure 3.2: Site Location and Surrounding Land Uses

3.2. Brief Description of the Site Layout and Chemical/DG Storage Areas

Figure 3.3 shows the proposed site layout. Main entry for equine & goods drop-off will be from Chatham Street with the exit into Darling Street. The site maintenance drop-off and pick-up zone entry/exit is off Chatham Street and the site staff car park is off Darling Street.

The site predominantly comprises stables with 6 stable blocks and a pool building. Six (6) horse walkers are located at the site with peripheral buildings, including maintenance shed, general goods storage area, offices and equipment shed.

Appendices B & C show the location of the Chemical store and fuel storage areas. The Dangerous Goods storage area is located on the eastern side of the maintenance shed. Fuel (diesel and petrol) is held in integrally bunded tanks located adjacent to the maintenance drop-off/pick-up zone. The list of chemicals proposed to be stored and handled at the NJC facility is provided below:

Fertilisers:

1. Natrakelp Liquid Seaweed
2. Matchplay MP Enhance
3. GroCal
4. Matchplay MP Origin Granular
5. Barmac Nutri-Gro Plus
6. Calciprill and Magprill

Fungicides:

1. Cavalry Weathergaurd
2. Azoxystrobin
3. Daconil weatherstik
4. Chief aquaflo
5. Thiram 600
6. Bumper 250EC

Herbicides:

1. Frontrow
2. Stadium Turf
3. Yates Zero Aqua
4. Barricade
5. Destiny
6. Pennmag

Insecticides:

1. Abacin
2. Agador
3. Apollo 5c
4. Higran
5. Accelepryn
6. Indemnify

Other Chemicals:

1. Ambient Plus
2. Wet-Out
3. Oro-Turf surfactant
4. Petrol (Motor Spirit or Gasoline)
5. Diesel Fuel

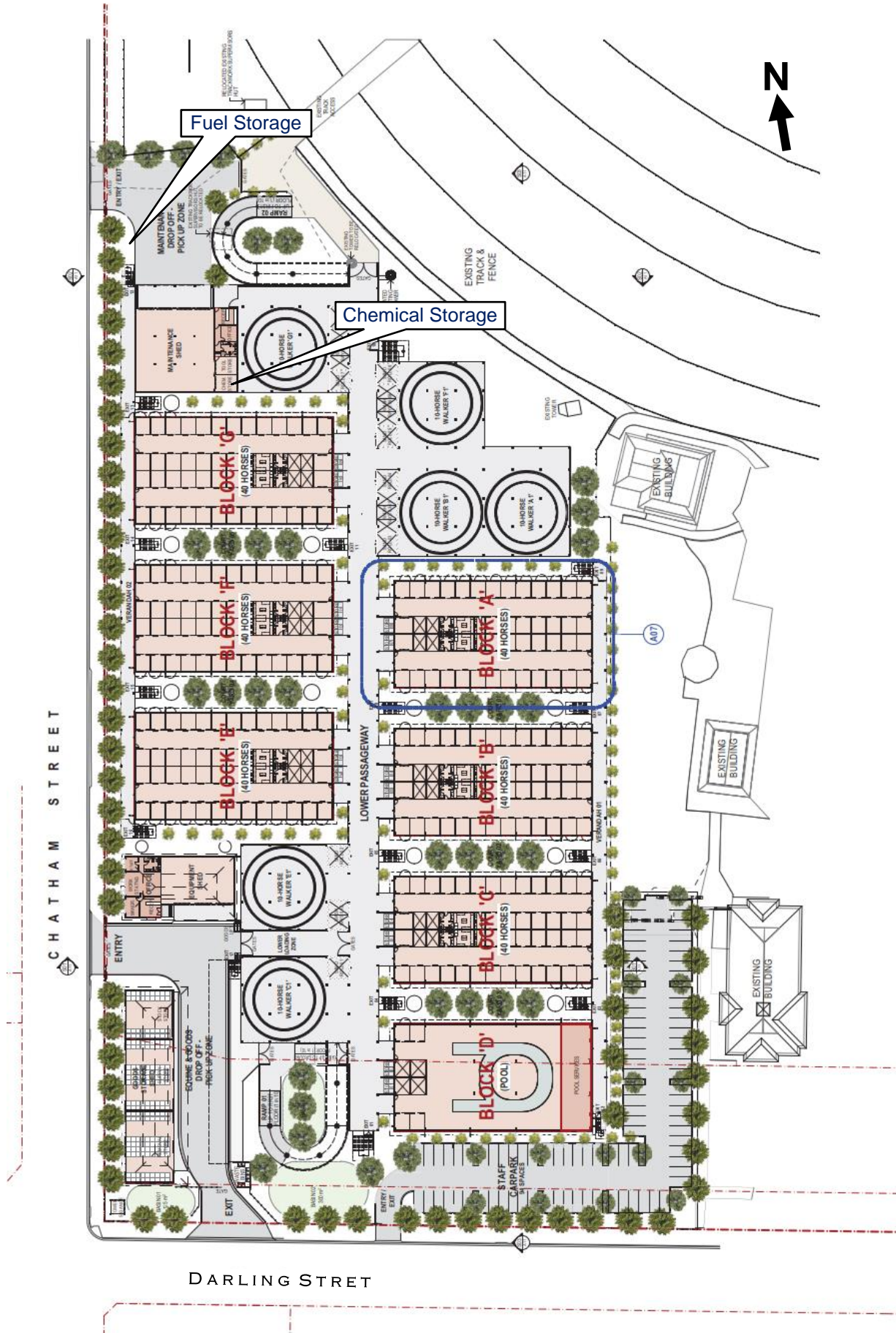


Figure 3.3: Proposed NJC - Site Layout Showing Chemical Storage Areas

4. SEPP33 ASSESSMENT - PROPOSED NEWCASTLE JOCKET CLUB

The application of SEPP33 involves review of three major components associated with Dangerous Goods:

- Storage of DGs - maximum permissible storage thresholds above which SEPP33 applies to a facility;
- Transport of DGs - the number of generated traffic movements is above annual or weekly cumulative vehicle movements, SEPP33 may apply; and
- Offensive Industry - where noise, odour, etc., may cause offense to surrounding land uses, SEPP33 may apply.

Each component of the SEPP33 assessment for the proposed NJC facility is provided in the following sub-sections.

4.1. Dangerous Goods Storage Assessment

Table 4.1 lists the chemicals stored and handled at the proposed NJC facility. This table lists the details of each chemical, including the UN No., Product Name, Proper Chemical Name, DG Class and Package Group where applicable. Chemicals not listed in the ADG (Ref.1) are noted as being Non-DG. The guideline, provided by the DPIE (Applying SEPP33, Ref.2), states that chemicals that are not listed in the Australian Dangerous Goods Code (ADG, Ref.1), Class 9 Dangerous Goods and diesel fuel are not subject to SEPP33 (Page 17, Table 3, Page 37, Page 51 of Applying SEPP33, Ref.2). Hence, only those chemicals subject to SEPO33 have been assessed further in this study and are listed in **Table 4.2**, along with the quantities stored and the maximum permissible threshold values listed in Applying SEPP33 (Ref.2). **Appendix A** contains extracts from Applying SEPP33 showing permissible threshold levels.

Table 4.1: List of Chemicals Stored and Handled on the Newcastle Jockey Club Site

UN. No	Product Name	Proper Chemical Name	Class	Packing Group	Quantity
Fertilisers					
None	Natrakelp Liquid Seaweed	Non Dangerous Good	None	None	Not Subject to SEPP33
None	Matchplay MP Enhance	Non Dangerous Good	None	None	Not Subject to SEPP33
None	Grocal	Non Dangerous Good	None	None	Not Subject to SEPP33
None	Matchplay MP Origin Granular	Non Dangerous Good	None	None	Not Subject to SEPP33
None	Barmac Nutri-Gro Plus	Non Dangerous Good	None	None	Not Subject to SEPP33
None	Calciprill and Magprill	Non Dangerous Good	None	None	Not Subject to SEPP33
Fungicides - Maximum 60 L (Total Storage)					
2996	Calvary Weather-guard	Organochloride Pesticide, Liquid, Toxic	6.1	III	<60 L
3082	Azoxystrobin	Environmentally Hazardous Substance, Liquid, N.O.S.	9	III	Not Subject to SEPP33
3082	Daconil Weatherstik	Environmentally Hazardous Substance, Liquid, N.O.S.	9	III	Not Subject to SEPP33
None	Chief aquaflo	Non Dangerous Good	None	None	Not Subject to SEPP33

UN. No	Product Name	Proper Chemical Name	Class	Packing Group	Quantity
3082	Thiram 600	Environmentally Hazardous Substance, Liquid, N.O.S.	9	III	Not Subject to SEPP33
None	Bumper 250EC	Non Dangerous Good	None	None	Not Subject to SEPP33

Herbicides

None	Frontrow	Non Dangerous Good	None	None	Not Subject to SEPP33
None	Stadium Turf	Non Dangerous Good	None	None	Not Subject to SEPP33
None	Yates Zero Aqua	Non Dangerous Good	None	None	Not Subject to SEPP33
None	Barricade	Non Dangerous Good	None	None	Not Subject to SEPP33
3077	Destiny	Environmentally Hazardous Substance, Liquid, N.O.S.	9	III	Not Subject to SEPP33
None	Pennmag	Non Dangerous Good	None	None	Not Subject to SEPP33

Insecticides - Maximum 660 L (Total Storage)

2902	Abacin	Pesticide Liquid, NOS	6.1	III	<50 L
3082	Agador	Environmentally Hazardous Substance, Liquid, N.O.S.	9	III	Not Subject to SEPP33
3082	Apollo 5c	Environmentally Hazardous Substance, Liquid, N.O.S.	9	III	Not Subject to SEPP33
None	Higran	Non Dangerous Good	None	None	Not Subject to SEPP33
3082	Accelepryn	Environmentally Hazardous Substance, Liquid, N.O.S.	9	III	Not Subject to SEPP33
3082	Indemnify	Environmentally Hazardous Substance, Liquid, N.O.S.	9	III	Not Subject to SEPP33

Other Chemicals - Maximum 50 L (Total Storage)

None	Ambient Plus	Non Dangerous Good	None	None	Not Subject to SEPP33
1993	Wet-Out	Flammable Liquid NOS	3	III	<50L
None	Oro-Turf Surfactant	Non Dangerous Good	None	None	Not Subject to SEPP33

Fuels - Diesel 2,500 L, Petrol 1,000 L

1203	Petrol	Motor Spirits or Gasoline or Petrol	3	II	1,000 L
00C1	Diesel	Diesel Fuel	C1	-	Not Subject to SEPP33

Table 4.2: List of Chemicals Stored and Handled on the NJC Facility that are Subject to SEPP33

UN. No	Product Name	Proper Chemical Name	Class	Packing Group	Quantity (tonnes)	SEPP33 Threshold (tonnes)	SEPP33 Applies (Y/N)
2996	Calvary Weather-guard	Organochloride Pesticide, Liquid, Toxic	6.1	III	110L or 0.145 tonnes	2.5 tonnes	NO
2902	Abacin	Pesticide Liquid, NOS	6.1	III			
1993	Wet-Out	Flammable Liquid NOS	3	III	1050 L or 0.84 tonnes*	5 tonnes	NO
1203	Petrol	Motor Spirits or Gasoline or Petrol	3	II			

* Based on a density of 0.8 kg/L (Ref.: Safety Data Sheets)

Based on a density of 1.32 kg/L (Ref. Safety Data Sheet)

The results of the Dangerous Goods storage assessment has demonstrated that SEPP33 does not apply to the storage of DGs at the proposed NJC facility.

4.2. Transport SEPP33 Assessment

The proposed development may be potentially hazardous if the number of generated traffic movements (for significant quantities of hazardous materials entering or leaving the site) is above the annual or weekly cumulative vehicle movements shown in **Table 4.3**.

Table 4.3: Transportation Screening Thresholds (extracted from Applying SEPP33,Ref.2)
Table 2: Transportation Screening Thresholds

Class	Vehicle Movements		Minimum quantity*	
	Cumulative Annual	Peak or Weekly	per load (tonne)	
			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	

Note: Where proposals include materials of class 1, 6.2 or 7, the Department of Planning, Industry and Environment should be contacted for advice. Classes used are those referred to in the Dangerous Goods Code or ADG.

* If quantities are below this level, the potential risk is unlikely to be significant unless the number of traffic movements is high.

Noting that the maximum stored quantity for the DGs is:

- Class 3 PGII - < 0.8 tonnes (800kg); and
- Class 6.1 PGIII - <0.145 tonnes (145 kg)

The Class 3 PGII storage is less than the minimum quantity per load of 3 tonnes and the Class 6.1 PGIII is less than the minimum quantity per load of 1 tonne. The number of movements are low (less than 1 per week for each of the chemicals. Hence, in both cases, the potential risk is unlikely to be significant (Table 2, Ref.2) as the quantity per load and number of movements is low.

Based on this, SEPP33 does not apply to the transport of DGs to the site.

4.3. SEPP33 Potential Offensive Industry Assessment

Applying SEPP33 (Ref.2) also indicates that potentially offensive development could effectively be regarded as development that would require a pollution control licence from the Department of Planning, Industry and Environment (Environmental Protection Authority) or other public authority. If the licence conditions could not be met, the proposed development would be considered offensive and would not normally be permissible (Ref.2, Page iv).

Noting that the site would not require a licence from the DPIE (EPA), the offensive component of SEPP33 does not apply to the site.

5. CONCLUSION AND RECOMMENDATIONS

5.1. Conclusions

An assessment of the dangerous goods (DGs) stored and handled at the proposed Newcastle Jockey Club for the application of EPP33 was conducted. The analysis identified that only two classes of DGs we subject to the application of SEPP33; Class 3 flammable liquid and Class 6.1 toxic substances. The quantity of each of the DGs proposed for storage at the site is below the maximum permissible threshold levels listed in Applying SEPP33 (Ref.2).

The quantity of DGs transported to the site are below the minimum permissible threshold quantity per load above which SEPP33 would apply. Based on this, "...the potential risk is unlikely to be significant unless the number of traffic movements is high" (Page 18, REf,2). The number of movements are less than 1 per week for each of the DG classes, which is not considered high.

A pollution control licence is not required for the proposed NJC, hence, it is considered that the site would not be "potentially offensive".

Based on this analysis, it is concluded that SEPP33 does not apply to the proposed Newcastle Jockey Club facility at the Newcastle Racecourse, NSW.

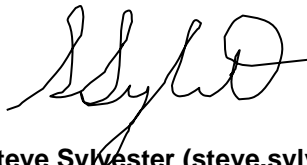
5.2. Recommendations

At this stage of the development no further analysis with regards to SEPP33 is required, however, in the event there are any changes to the proposed DG storage quantities, a review of the SEPP33 analysis should be conducted and where the SEPP33 threshold quantities are exceeded, it is recommended that a Preliminary Hazard Analysis be prepared and submitted with the DA.

6. REFERENCES

1. "The Australian Code for the Transport of Dangerous Goods by Road and Rail", known as The Australian Dangerous Goods Code or ADG, ed. 7.7, 2020, Federal Office of Road Safety, Canberra, ACT;
2. Applying SEPP 33 (2011), "Hazardous and Offensive Development Application Guidelines", NSW Department of Planning and Infrastructure.;

For and on behalf of RiskCon Engineering Pty Ltd,



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Technical Director – Risk Engineering

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APPENDIX A

EXTRACT FROM APPLYING SEPP33 - HAZARDOUS & OFFENSIVE DEVELOPMENT

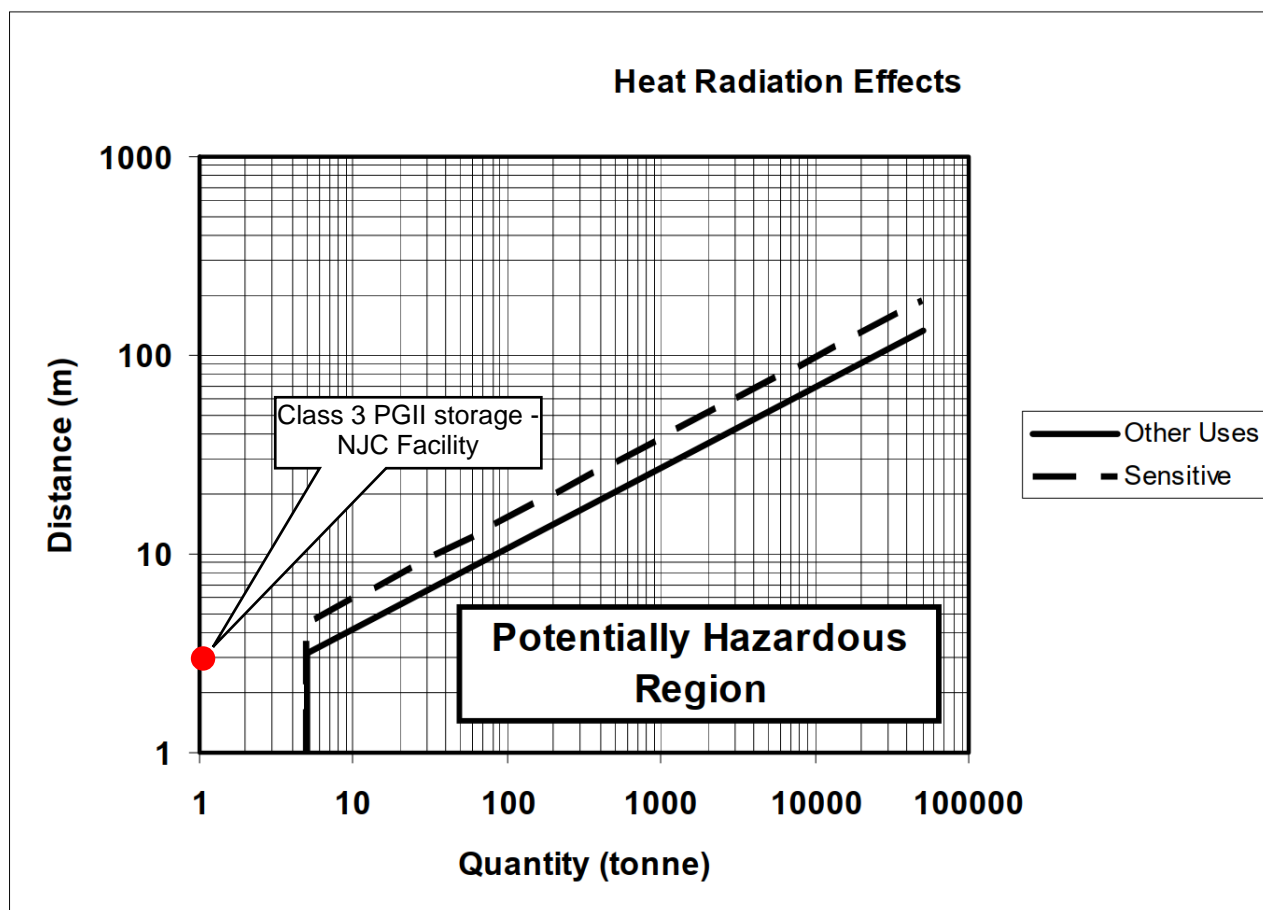
Table 3: General Screening Threshold Quantities

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

Note: The classes used are those referred to in the Australian Dangerous Goods Code and are explained in Appendix 7.



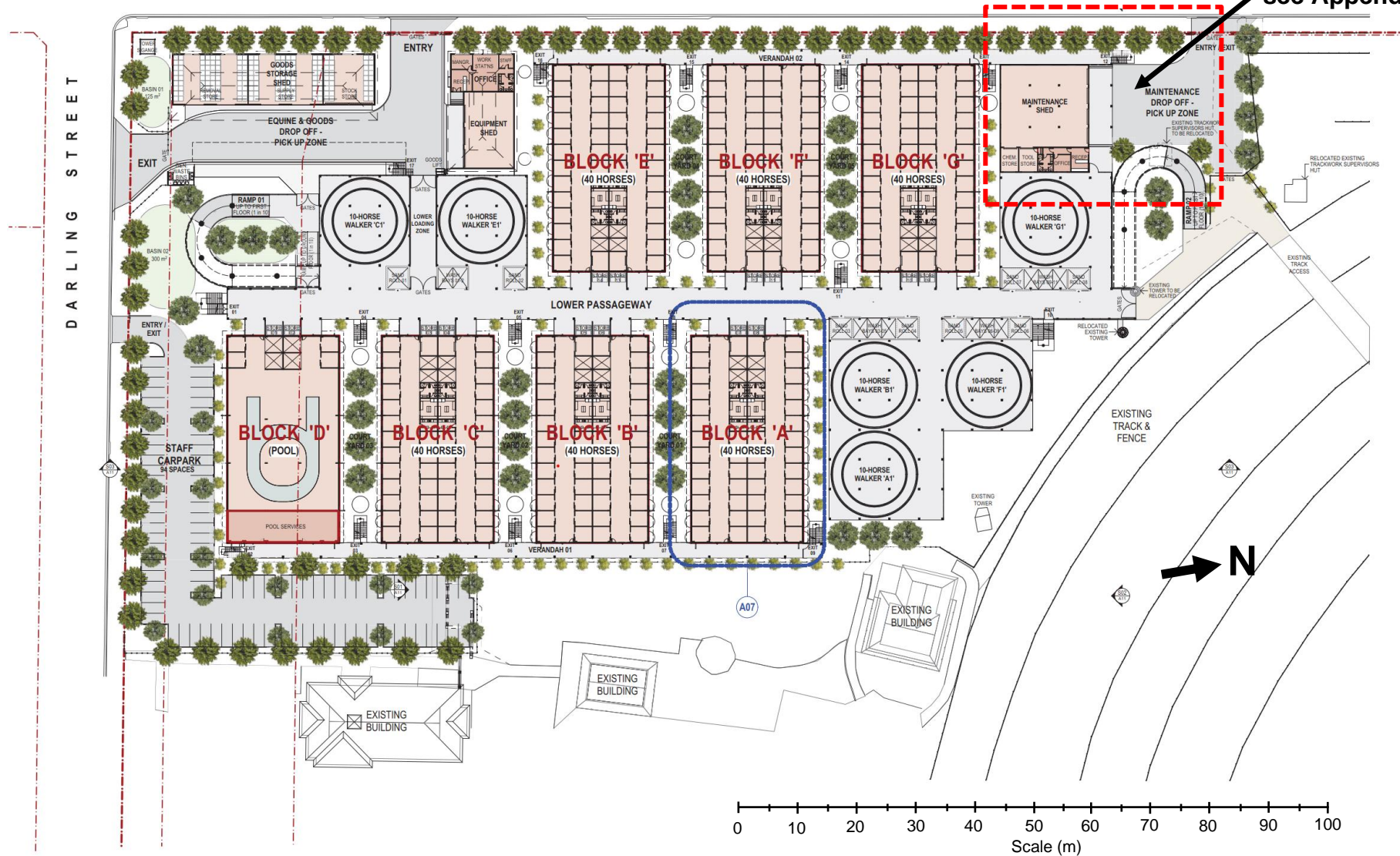
Figure 9: Class 3PGII and 3PGIII Flammable Liquids



APPENDIX B - SITE LAYOUT PLAN

CHATHAM STREET

DG Storage Area
see Appendix C



APPENDIX C - DANGEROUS GOODS LOCATIONS

