Bunnings Group Ltd

18/09/2019

SEPP33 SCREENING RISK ASSESSMENT

Proposed Bunnings Warehouse

Corner Stuart Road and Bringelly Road, Leppington, NSW

BRINGELLY ROAD, LEPPINGTON

SEPP33 SCREENING RISK ASSESSMENT

IDENTIFICATION TABLE

Client/Project owner	Bunnings Group Ltd
Project	Bringelly road, Leppington
Study	SEPP33 Screening Risk Assessment
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Framework	
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APPROVAL

Version	Name		Position	Date	Signature	Modifications
Final Rev 1.0	Leonard Gawecki			18/09/2019		
	Simon Meiers			18/09/2019		
	Duncan Bender			18/09/2019		

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1. INTRODUCTION AND SCOPE OF REPORT

1.1 Background

As at 30 June 2018, Bunnings Australia and New Zealand operates out of 369 trading locations employing approximately 44,000 team members.

Bunnings Properties Pty ltd (hereafter known as Bunnings) is currently preparing a Development Application for a new warehouse facility at the corner of Stuart Road and Bringelly Road, Leppington. As part of this proposal, it is proposed to store, handle and transport a range of dangerous goods, to a level consistent with any other Bunnings Warehouse across NSW and Australia generally.

In NSW any industrial proposal that includes the storage or transport of dangerous goods must be viewed against the requirements of State Environment Planning Policy 33 (SEPP 33).

SEPP 33 requires the applicant to first undertake a screening analysis, to determine whether a Preliminary Hazard Analysis (PHA) is required to accompany the Development Application (DA) or not.

1.2 Proposal Identifiers

Name and location of proposed activity	Corner Stuart road and Bringelly Road, Leppington, NSW, 2179
Proponent / source of funding	Bunnings Group Ltd
Applicant	Bunnings Group Ltd
Council Area	Liverpool Council
Description of Proposal	Bunnings Warehouse Development
Title description	Proposed Lot 3 in a re-subdivision of Lots 10 and 11 DP1222985, and Lots 1-4, and 10-13 DP29104.

1.3 Purpose

This SEPP 33 review is to accompany the Development Application (DA). The objectives of this SEPP 33 screening report are to:

- Address the requirements of the SEARS issued on 30 August 2019
- Describe the existing site in its context
- Provide information on the proposed works

- Provide a screening analysis of the key issues and implications of the proposed development against SEPP 33 threshold requirements for storage and transport of bulk and packaged dangerous goods.
- Determine whether a Preliminary Hazard Analysis (PHA) is required to accompany the development application, and
- Consult with Jemena with regard to impacts (if any) upon the nearby high-pressure gas pipeline.

2. DESCRIPTION OF PROPOSED DEVELOPMENT

The proposed development comprises demolition, bulk earthworks, construction, fit out of a Bunnings Warehouse with associated signage, and construction of a new alignment of Bringelly road and a roundabout, and additional car parking and landscaping. The location plan is shown in Figure 1. The new Bunnings warehouse building proposed will occupy the greater part of the site with a total floor area of 16,853 m2, over a total site area of approximately 51,350 m2.

Main Warehouse	8974 m^2
Timber Trade area	2955 m^2
Building Materials & Landscape yard	1753 m^2
Outdoor Nursery	1233 m^2
Bagged Goods canopy	1861 m^2
Main Entry	77 m^2

Total Floor area - **16853 m^2**

A total of 382 parking spaces will be provided, with vehicle access from either Stuart Road or Bringelly Road. All these facilities are combined in an integrated plan as depicted in **Figure 2– Plan View of Bunnings Leppington Warehouse.**

(Note: reference should be made to the DA and supporting documentation for further details)

2.1 Zoning

The subject site is located in land currently zoned WSP - SEPP Western Sydney Parklands as shown in Figure 3.

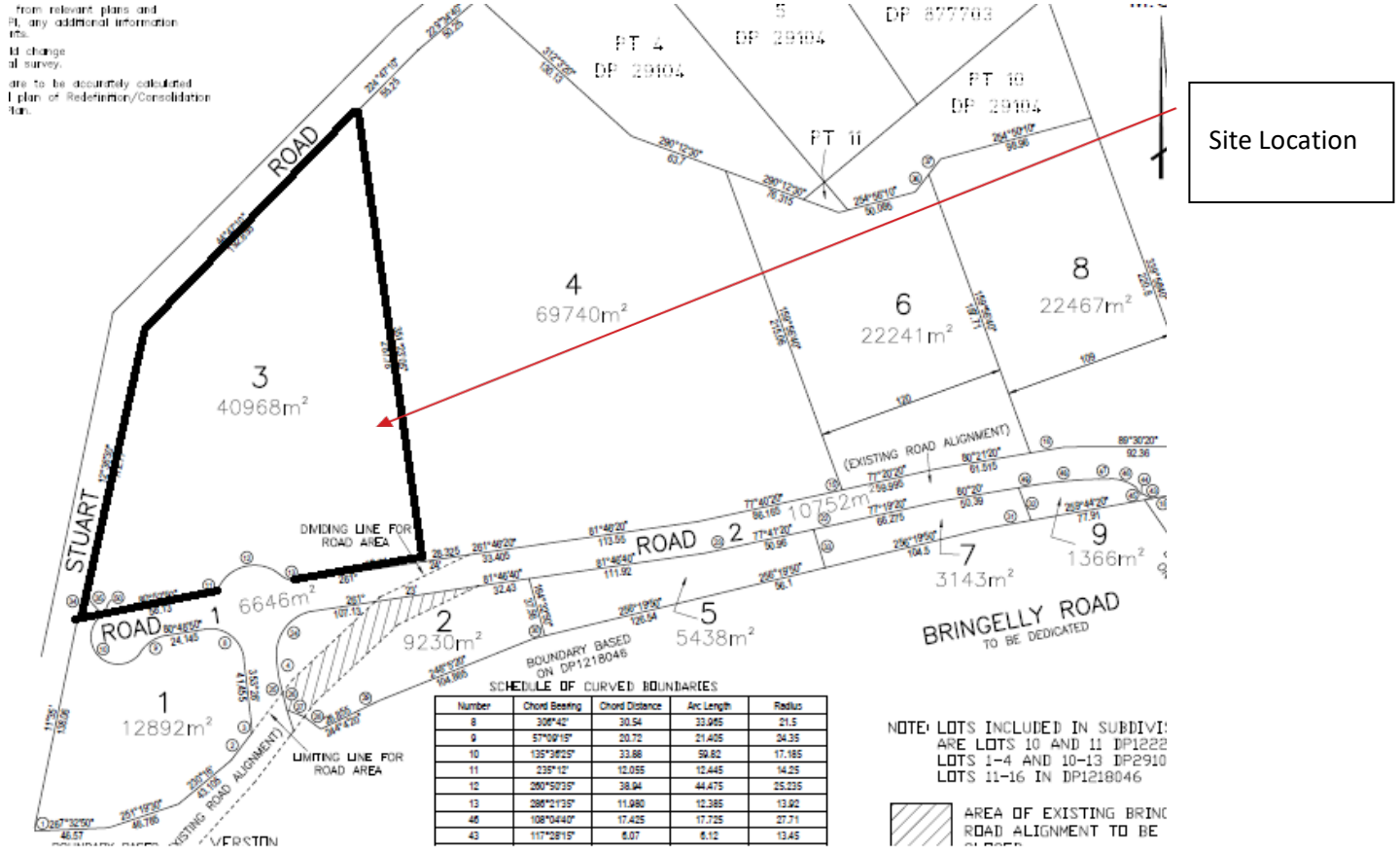

Figure 1 – Locality Plan

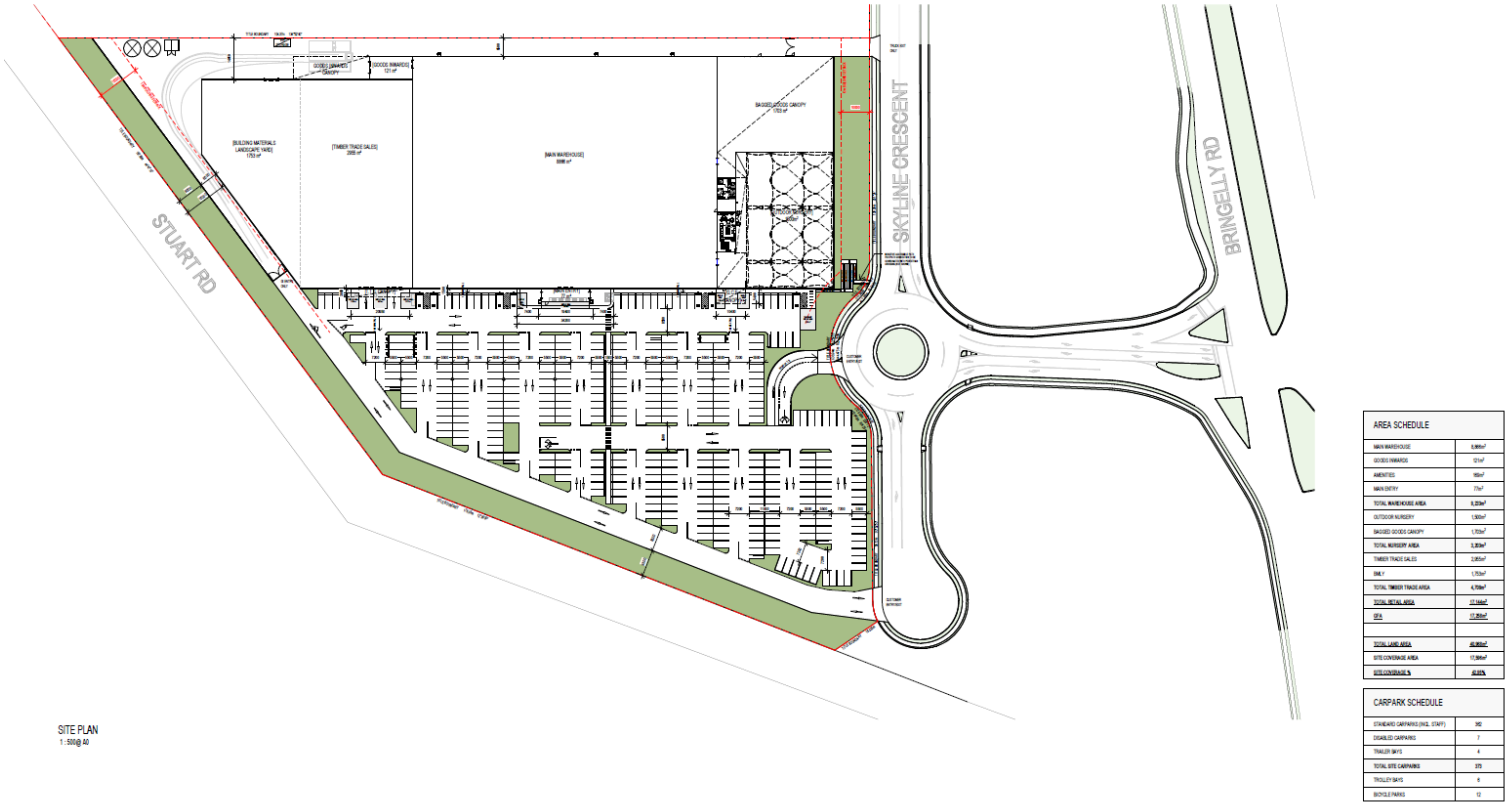

Figure 2 – Plan View of proposed Bunnings Leppington Warehouse

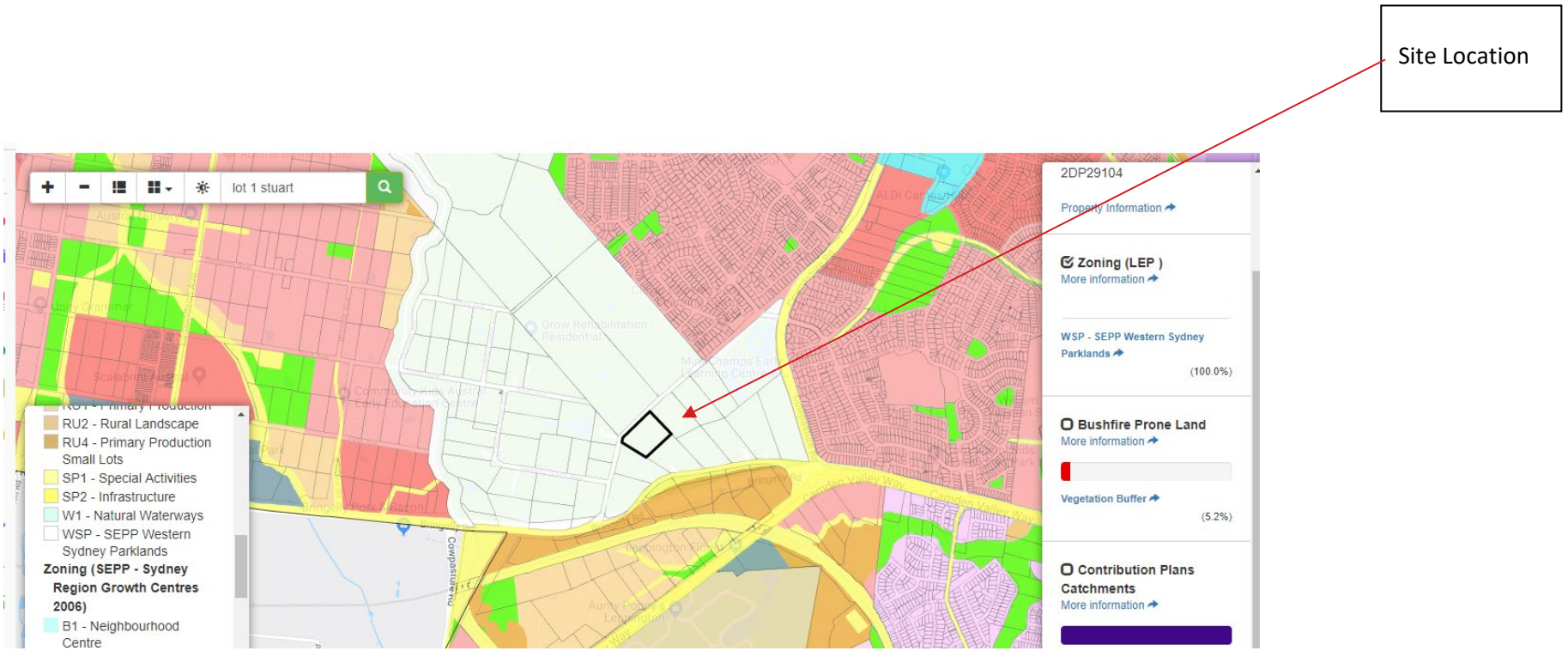

Figure 2 – Zoning Map

3. DANGEROUS GOODS STORAGE AND TRANSPORT

3.1 Dangerous Goods Storage

As part of Bunnings operations, it is necessary to store and handle a number of Dangerous Goods. These goods are listed in Appendix A – Dangerous Goods Stored by dangerous good class. The table provides the material, type of container, dangerous goods class, and maximum quantity stored.

Note 1. Bunnings advise that there will be no bulk storage of LP Gas, or other bulk dangerous goods associated with the proposed warehouse.

3.2 Transport of Dangerous Goods

Dangerous Goods movements are summarised in Appendix B - Predicted Dangerous Goods Movements. Note that most dangerous goods will be received in Utes or flatbed Lorries, and are generally packaged or manufactured goods, in small containers or pails (typically 20 L or less).

4. SEPP33 SCREENING ANALYSIS

The general screening quantities for dangerous goods stored and transported are provided in Tables 2 and 3 respectively.

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

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

Table 2 – General Screening Threshold Quantities for Dangerous Goods Stored

	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	

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

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

Table 3 – Transportation Screening Thresholds

The screening method is described in the NSW Department of Planning's document *Applying SEPP 33'*, and essentially if the quantity of dangerous goods stored or transported as proposed by Bunnings does not exceed the Threshold quantities contained in Tables 2 & 3 above then a Preliminary Hazard Analysis (PHA) study is not required.

4.1 SEPP33 Screening Review Findings

The potential maximum quantities for dangerous goods (under SEPP 33) envisaged are as described in Table 1. Subject to the notes 1 – 4.

Class	Proposed Quantity Stored (kg) by DG class. See Appendix A	SEPP33 Threshold based on 300m to residents (kg)	SEPP33 Threshold based on 100 m to commercial (kg)	Conclusion/ Determination
2.1 – Flammable Gases and aerosols (excluding LP Gas – see Note 2,3 and 4)	2000 kg	10,000 (Note 2)	5,000 (Note 2)	Not exceeded– See note 4
2.1 LP Gas (Note 4)	8000	10 ,000	10 ,000	Not exceeded
Class 3 Pg II & III including Paints, thinners	9460	100,000	20,000	Not exceeded
Class 4.1 – Flammable solids	30	5 ,000	5 ,000	Not exceeded
Class 5 –Oxidizers	905	5 ,000	5 ,000	Not exceeded
Class 6	80	2,500	2,500	Not exceeded
Class 8 pg II	2180	25,000	25,000	Not exceeded
Class 9 pg III	20	no limit	no limit	Not exceeded
C1 and C2 combustible liquids (e.g. Diesel) See Note 1	2150	no limit	no limit	Not exceeded

Table 2: Screening Analysis Outcome

Note 1. - If Diesel is stored with other flammables then it is to be treated as Class 3 Pg III. (this is not the case at Bunnings Leppington)

Note 2 – The Distance to boundary is taken as 6.5m, as this is the set-back from the boundary at Stuart Road to the main warehouse building, and the distance to nearest residential areas is 300m to those residents across Stuart Road, and 500m to commercial areas across Twenty Sixth Avenue, as depicted in Figure 4.

Note 3 – The distance from the aerosol store to the boundary is around 50m (this gives a threshold quantity for aerosols of 4000 kg).

Note 4 - LPG, as defined in AS1596 — LP Gas Storage and Handling, though classified as a flammable gas (2.1), is treated separately for screening purposes and should not be grouped with the other class 2.1 flammable gases

4.2 Dangerous Goods Truck Movements

The document '*Applying SEPP33'* includes a number of tables and graphs against which the transportation screening thresholds are compared with the proposed tanker deliveries for the site, these are summarised in Appendix B.

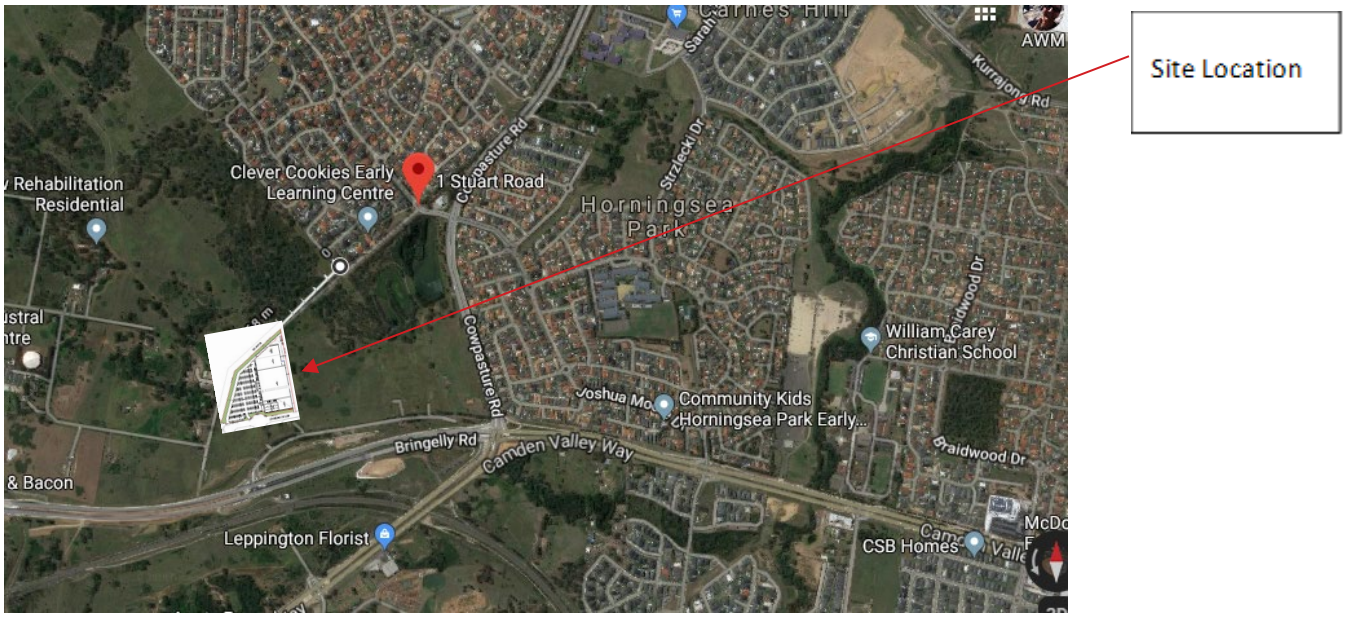

Figure 4 – Distances to nearest residential and Commercial Areas.

5. CONCLUSIONS AND RECOMMENDATIONS

It is concluded that SEPP33 does not apply to the Bunnings Leppington Warehouse proposal, and therefore a Preliminary Hazard Analysis (PHA) is not required to accompany the DA.

However, it is recommended that this Screening Review be included with the DA documentation to Council to demonstrate that SEPP 33 does not apply to the current proposal.

Note that this report can be tabled to demonstrate SEPP 33 thresholds are not exceeded, and under such circumstances, the NSW Department of Planning and Environment considers the proposed development non-hazardous by definition.

6. CONSULTATION WITH APA & JEMENA

Contact was made with APA DBYD consortium (which is funded by utility organisations, Including Jemena Energy throughout Australia) . The Eastern HP Gas Pipeline (EGP) does not transect the site, nor is located on its boundary as shown in Appendix C. Hence the APA Office have advised that there are no risk implications to the excavation or construction works under taken by Bunnings at the Leppington site, Lot 3 , located on the opposite side of Camden Valley Way to the EGP, some 400m away.

7. REPORT AUTHOR AND QUALIFICATIONS

The Author of the report is Mr. Leonard Gawecki, MBA, BE (Chem), MIE (Aust), ANZIFF, AIDGC. Currently Principal Risk Engineer with Scott Lister, and Board Member of the Australian Institute of Dangerous Goods Consultants (AIDGC). Leonard is also registered as an approved consultant with the Major Hazards Unit of the NSW Department of Planning for Hazard Analysis and Risk Assessment. A summary CV is provided in Appendix D – Risk Engineer.

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8. REFERENCES

1. Hazardous Industry Planning Advisory Paper No.6 – Guidelines for Hazard Analysis, Department of Planning, NSW, 2011.
2. State Environmental Planning Policy No.33 – Hazardous and Offensive Development Application Guidelines (2011), "Applying SEPP 33", Department of Planning NSW.
3. Multi-Level Risk Assessment, Department of Infrastructure, Planning, and Natural Resources – May 2011.
4. Hazardous Industry Planning Advisory Paper No.4, "Risk Criteria for Land Use Safety Planning", NSW Department of Infrastructure, Planning, and Natural Resources (2011)

APPENDIX A – BUNNINGS – TYPICAL DANGEROUS GOODS STORAGE

Dangerous Goods Manifest – Summary of Major Dangerous Goods Storage Depots

Date reviewed: _____ By: _____

Depot	Name of Dangerous Substance	Class	PG	Expected Max Qty Kgs/Lts
LPG 1&2	Liquid Petroleum Gas – Exchange Cylinders	2	n/a	8000
G	Insect Sprays, etc	2	n/a	450
G	Granular chlorine, chlorine tablets, Spa tablets, Stabilized Chlorine	5	II	880
G	Spa Shock – Sodium Persulphate	5	III	20
G	Liquid Chlorine, Salt Cell Cleaner	8	III	1000
G	Matches	4.1	III	10
G	Citronella Oil	C1	n/a	900
G	Motor Oil, Lubricant Oil	C2	n/a	1030
D	Aerosols, Spray Paints etc.	2	n/a	1250
D	Methylated Spirits, Thinners, etc.	3	II	350
D	Turpentine, Kerosene, etc.	3	III	1150
D	Manufactured product - Paint, Adhesives, Sealants	3	III	7360
D	Paint Stripper	6	III	80
D	Fibreglass Catalyst	5	II	5
D	Linseed Oil, Degreaser	C1	n/a	220
T	Ramset Explosive Cartridges	1	II	80
T	Turpentine, Kerosene, etc.	3	III	350
T	Methylated Spirits, Thinners, etc.	3	II	250
T	Aerosols, Spray Paints etc.	2	n/a	300
T	Hydrochloric Acid, Caustic Soda	8	II	1080
T	Oxalic Acid	8	III	100
T	Camphor, Napthalene	4.1	III	20
T	Adhesives	9	III	20

TOTAL DANGEROUS GOODS STORAGE: - 24,825 L/Kg

APPENDIX B – PREDICTED DANGEROUS GOODS MOVEMENTS

Product Name/ Description	Typical Products	Bunnings Leppington Proposed DG Vehicle Max Movements/ Annum	NSW DOP Threshold	Conclusion / Determination
Class 2.1 LP Gas	LP Gas refill bottles usually swap and go arrangements. Typically 9 kg bottles	50	500	Deliveries are generally made weekly or fortnightly, or as required.
Class 2.1 flammable gases - such as acetylene / aerosols etc.	MAPGAS for plumping supplies, and aerosol paints are the main items here. Butane refill / lighters.	50	500	Deliveries are generally made weekly or fortnightly, or as required.
Class 2.2 Exempt, hence no storage limits for argon, nitrogen or rare/inert gases - however must consider sub-classes also – hence need to cover compressed Oxygen	Generally Not applicable	0	NA	NA
Class 2.3 - No proposal to store 2.3 goods	Generally Not applicable	0	NA	NA
Class 3 – PG 1 (BP < 35 o C) includes MATERAILS WITH UN NO. 1993, and 1263	Generally Not applicable	0	NA	NA
Class 3 – PG II or III includes X55, methanol, kerosene, & turpentine, generally in 1-liter plastic bottles	Flammable Liquids such as Kerosene, Methylated Spirits. Solvent based Paints, Class 3 PG II or III	50	750 - 1000	Deliveries are generally made weekly or fortnightly, or as required.

Product Name/ Description	Typical Products	Bunnings Leppington Proposed DG Vehicle Max Movements/ Annum	NSW DOP Threshold	Conclusion / Determination
Class 4 – Flammable solids	Matches and similar items are classed as ADG Class 4 - Flammable solids.	12	200	Deliveries are generally made weekly or fortnightly, or as required.
Class 5.1 and 5.2 – Organic Peroxides	Pool Chlorine (dry powder) or liquid.	50	500	Deliveries are generally made weekly or fortnightly, or as required.
Class 6 – Poisons, Biocides etc.	Agricultural products, weedicides, herbicides, pesticides. Round Up and other brands	0		
Class 7 – Radioactive material	Generally Not applicable	0	NA	NA
Class 8 PG II includes mild caustic washes in drums	Acid solutions, Caustic Cleaners, cleaning products,	50	500	Deliveries are generally made weekly or fortnightly, or as required.
Class 9 - Miscellaneous	Waste oil or waste products	50	1000	Waste collections are weekly, however these are mainly putrescible wastes are not liquid wastes or waste oils.
Note : The bulk of the truck movements of chemicals are dedicated to Class C1 and C2 combustible oils – which are deemed non-hazardous by NSW DOP	Cooking oils / canola oils / olive oils motor oils are all examples of Class C1 and C2 combustible liquids.	50	NA	Deliveries are generally made weekly or fortnightly, or as required.
	TOTAL Predicted Annual Dangerous Goods Delivery Movements	**362**		**No transportation thresholds exceeded.**

APPENDIX C – EASTERN GAS PIPELINE

APA Group ACN 083 009 278
Level 1, 121 Wharf Street
Spring Hill, QLD 4000
GPO Box 1390, QLD 4001
APA Group | apa.com.au

18 September 2019

APA Reference: 443780

Leonard Gawecki
Principal Risk Consultant
Systra Scottlister
Level 15, Chifley Square
Sydney NSW 2000

EMAIL OUT: lgaweck@systra.com

Dear Leonard,

RE: **Proposed Warehouse (Bunnings) at Bringelly Road, Leppington**

Thank you for your Dial Before you Dig Enquiry on 5 September 2019 in relation to works associated with a Bunnings Warehouse within the Bringelly Road Business Hub.

APA has statutory obligations to ensure our pipelines are maintained and operated in accordance with Australian Standard 2885. The site is located approximately 400m from APA's Moomba to Sydney Ethane Pipeline at the closest point. Therefore APA has no concerns regarding any direct impact on the pipeline, as a result of the possible development and construction activity on the site.

The site is within the pipeline measure length (area of consequence). However, APA has no concerns on this basis, given the proposed development:

- is not for a sensitive use under AS2885 ("use by members of the community who may be unable to protect themselves from the consequences of a pipeline failure") such as an Aged Care Facility, Education Establishment or Child Care Centre; and
- is not expected to change the land use classification (under AS2885) from the current Residential (T1) location class.

Please contact me on 07 3223 3385 or planningnsw@apa.com.au should you wish to discuss the contents of this correspondence, or have any further queries.

Yours faithfully,

Ben Setchfield
Senior Urban Planner
Infrastructure Planning and Protection

APPENDIX D – CV PRINCIPAL RISK CONSULTANT – MR LJ GAWECKI

CURRICULUM VITAE

Leonard GAWECKI, June 2018

GAWECKI, Leonard John **Principal Risk Engineer**		Nationality Years of Experience:	**Australian** **25**

EDUCATION

1999 – 2000: Master of Business Administration (MBA), Southern Cross University, Kuala Lumpur Campus (Malaysia).
1979 – 1983: Bachelor of Engineering, (Chemical), University of Sydney.

PROFESSIONAL AFFILIATIONS

- Current Vice-President and Board Member, Australian Institute of Dangerous Goods Consultants (AIDGC)
- Member, Institute of Engineers MIE (Aust)
- Member, Environment Institute of Australia (EIA)
- Member, Australian Fire Protection Association (AFPA)

SOFTWARE

- MS Suite, including Word, Excel, PPT, and MS-Project.
- @RISK
- BowTie-XP
- TNO-Risk Curves, Effects, SAFETI and PHAST

KEY Experience

Currently engaged as a Principal risk engineering contractor with SYSTRA Scott Lister.
Leonard has over 30 years of experience in Safety Engineering and Risk Assessment, with many of the Tier 1 and Tier 2 Project Design and Delivery Companies including Bechtel, Jacobs Engineering and SKM, and has developed core competencies covering, HAZOP/ HAZAN / FMECA / Fault and Event tree analysis / BowTie studies / QRA studies/ Value Management / Constructability and Safety (CHAIR) Studies for large infrastructure projects covering road, rail, water, mining and oil and gas. Some signature projects follow.