Pinnacle
Risk Management Pty Ltd

Pinnacle Risk Management Pty Limited
ABN 83 098 666 703

PO Box 5024
Elanora Heights NSW 2101

Telephone: (61 2) 9913 7284
Facsimile: (61 2) 9913 7930
Email: deanshewring@optusnet.com.au

14 November 2023

BESIXWatpac

Subject: Moree Hospital, State Environmental Planning Policy (Resilience and Hazards) 2021, Part 3, SEPP 33

It is proposed to increase the number of medical gas cylinders stored at Moree Hospital. As part of the assessment process, an "Applying SEPP 33" analysis is required.

A site layout drawing showing the existing and proposed Dangerous Goods stores is shown in Attachment 1.

The Applying SEPP 33 analysis is shown in Attachment 2.

The facility is currently a potentially hazardous facility as the quantity of LPG stored on the site exceeds the SEPP 33 criterion of 10 te. The proposed changes, however, do not increase the quantity of LPG storage. As shown in the site layout drawing in Attachment 1, the existing LPG tanks are suitably located away from the existing and proposed cylinder stores. It is assumed that the existing facility is currently approved.

The other Dangerous Goods stored at the facility include oxygen (as liquid in a tank and gas in cylinders), Nitronox (a mixture of oxygen and nitrous oxide in cylinders) and nitrous oxide (in cylinders). These are subsidiary class 5.1 substances. The total storage quantity of this Dangerous Goods class is 4.72 te. This is the combined quantity from the existing and proposed stores. As this is less than the SEPP 33 criterion of 5 te and the transport frequencies are significantly less than the SEPP 33 criteria then these substances are not deemed to be potentially hazardous. There are also no credible propagation events between the LPG tanks and the various Dangerous Goods class 5.1 stores that would lead to any unacceptable off-site risks. Correspondingly, a Preliminary Hazard Analysis (PHA) is not recommended for this project.

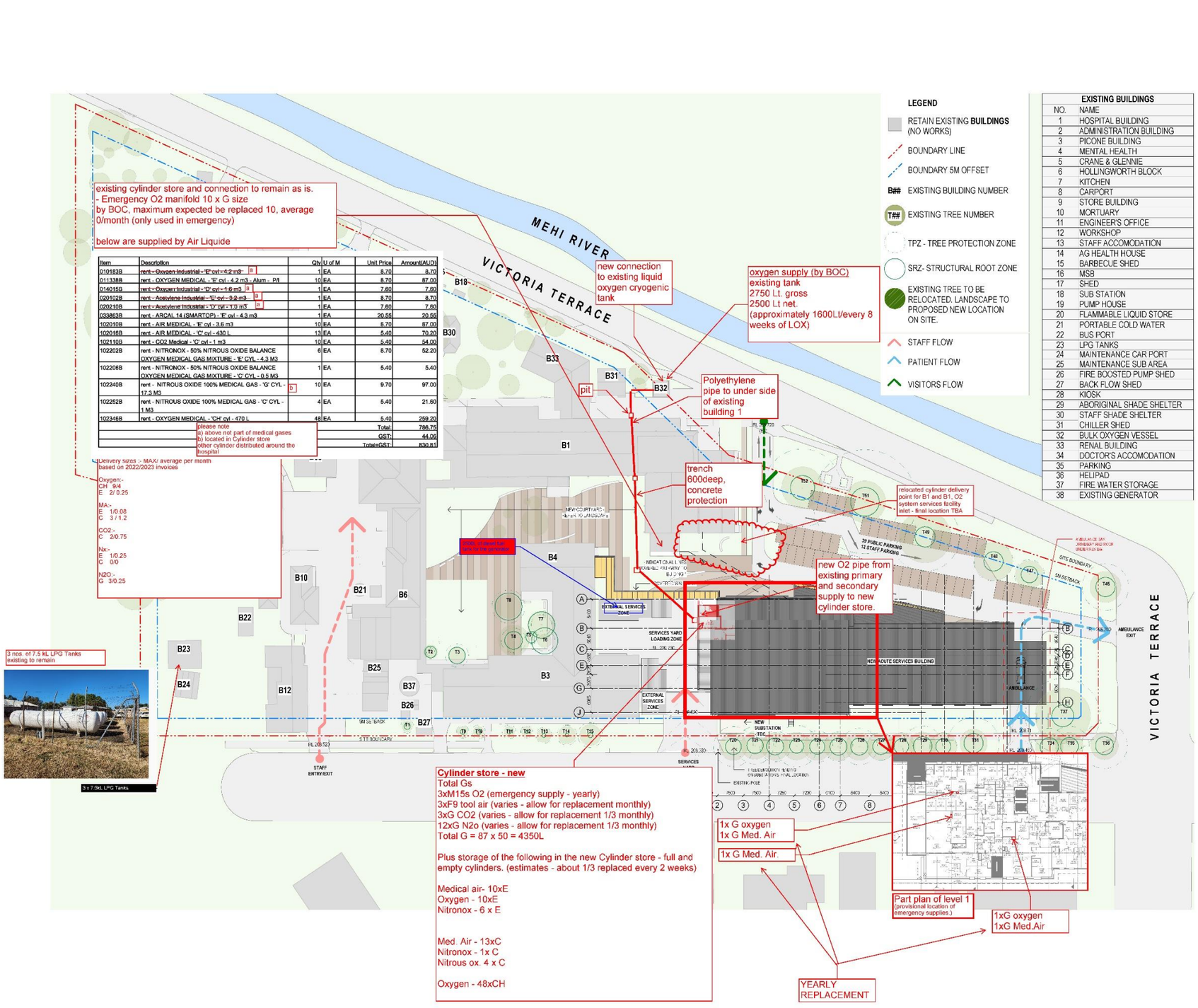
There are no other known hazardous materials associated with the project that would deem the facility to be a potentially hazardous facility, e.g. combustible dust.

Yours sincerely,

D Shewring

Dean Shewring
Principal Risk Consultant

Attachment 1
Site Layout Drawing



Item	Description	Qty	U of M	Unit Price	Amount(AUD)
010183B	rent - Oxygen Industrial - "E" cyl - 4.2 m3	1	EA	8.70	8.70
011338B	rent - OXYGEN MEDICAL - "E" cyl - 4.2 m3 - Alum - P/I	10	EA	8.70	87.00
014015B	rent - Oxygen Industrial - "D" cyl - 1.6 m3	1	EA	7.60	7.60
020102B	rent - Acetylene Industrial - "E" cyl - 3.2 m3	1	EA	8.70	8.70
020210B	rent - Acetylene Industrial - "D" cyl - 1.0 m3	1	EA	7.60	7.60
033863B	rent - ARCAL 14 (SMARTOP) - "E" cyl - 4.3 m3	1	EA	20.55	20.55
102010B	rent - AIR MEDICAL - "E" cyl - 3.6 m3	10	EA	8.70	87.00
102016B	rent - AIR MEDICAL - "C" cyl - 430 L	13	EA	5.40	70.20
102110B	rent - CO2 Medical - "C" cyl - 1 m3	10	EA	5.40	54.00
102202B	rent - NITRONOX - 50% NITROUS OXIDE BALANCE OXYGEN MEDICAL GAS MIXTURE - "E" CYL - 4.3 M3	6	EA	8.70	52.20
102206B	rent - NITRONOX - 50% NITROUS OXIDE BALANCE OXYGEN MEDICAL GAS MIXTURE - "C" CYL - 0.5 M3	1	EA	5.40	5.40
102240B	rent - NITROUS OXIDE 100% MEDICAL GAS - "G" CYL - 17.3 M3	10	EA	9.70	97.00
102252B	rent - NITROUS OXIDE 100% MEDICAL GAS - "C" CYL - 1 M3	4	EA	5.40	21.60
102346B	rent - OXYGEN MEDICAL - "CH" cyl - 470 L	48	EA	5.40	259.20
				Total:	786.75
				GST:	44.06
				Total+GST	830.81

Attachment 2
Applying SEPP 33 Analysis

Dangerous Good / Materials	DG Class	DG Subsidiary Risk	Storage Quantity (te)	SEPP 33 Threshold Value	Transport Frequency	Mode of Transport	SEPP 33 Threshold Transport Frequency	Is a PHA Required:	Comments
DG Class 2.1:									
Existing LPG (3x 7.5 m3 aboveground tanks)	2.1	-	13	10 te	Once every 2 weeks	Tankers	30/week and the load needs to be >2 te (Table 2)		This storage exceeds the SEPP33 criterion of 10 te, however, it is existing. The proposed modifications do not increase the storage of DG 2.1. The LPG tanks are also located approximately 100 m from the new development, i.e. good separation distance
DG Class 5.1:									
Existing Oxygen (2.75 m3 liquid storage tank)	2.2	5.1	3.1	5 te	Once every 8 weeks (typically 1.8 te)	Tanker	30/week and the load needs to be >2 te (Table 2)	No	DG 2.2 is excluded from the risk screening. DG 5.1 is included in the risk screening. The tank is located approximately 30 m from the closest cylinder store, i.e. good separation distance
Existing Cylinders:									
BOC Emergency Oxygen (10x G size cylinders)	2.2	5.1	0.112		0		30/week and the load needs to be >5 te (Table 2)		Emergency use only
LAA Medical Oxygen (10x E size cylinders)	2.2	5.1	0.057		2 cylinders per month		30/week and the load needs to be >5 te (Table 2)		
LAA Medical Oxygen (48x CH size cylinders)	2.2	5.1	0.030		9 cylinders per month		30/week and the load needs to be >5 te (Table 2)		
LAA Nitronox (6x E size cylinders)	2.2	5.1	0.041		1 cylinder per month		30/week and the load needs to be >5 te (Table 2)		
LAA Nitronox (1x C size cylinders)	2.2	5.1	0.001		Typically 0		30/week and the load needs to be >5 te (Table 2)		
LAA Nitrous oxide (10x G size cylinders)	2.2	5.1	0.322		3 cylinders per month		30/week and the load needs to be >5 te (Table 2)		
LAA Nitrous oxide (4x C size cylinders)	2.2	5.1	0.007		Typically 0		30/week and the load needs to be >5 te (Table 2)		
Total:			0.571						

Dangerous Good / Materials	DG Class	DG Subsidiary Risk	Storage Quantity (te)	SEPP 33 Threshold Value	Transport Frequency	Mode of Transport	SEPP 33 Threshold Transport Frequency	Is a PHA Required:	Comments
New Cylinders:									
Emergency Oxygen (45x G size cylinders)	2.2	5.1	0.505		Once per year		30/week and the load needs to be >5 te (Table 2)		
Nitrous oxide (12x G size cylinders)	2.2	5.1	0.386		Once every 3 months		30/week and the load needs to be >5 te (Table 2)		
Medical Oxygen (10x E size cylinders)	2.2	5.1	0.057		Once every 2 weeks		30/week and the load needs to be >5 te (Table 2)		
Nitronox (6x E size cylinders)	2.2	5.1	0.041		Once every 2 weeks		30/week and the load needs to be >5 te (Table 2)		
Nitronox (1x C size cylinders)	2.2	5.1	0.001		Once every 2 weeks		30/week and the load needs to be >5 te (Table 2)		
Nitrous oxide (4x C size cylinders)	2.2	5.1	0.007		Once every 2 weeks		30/week and the load needs to be >5 te (Table 2)		
Medical Oxygen (48x CH size cylinders)	2.2	5.1	0.030		Once every 2 weeks		30/week and the load needs to be >5 te (Table 2)		
Total:			1.028						
Level 1 Cylinders:									
Oxygen (2x G size cylinders)	2.2	5.1	0.022		Once every year		30/week and the load needs to be >5 te (Table 2)		
Total for DG 5.1:			4.72	5 te				No	