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**SEPP33 ANALYSIS**

**PREPARED**

**FOR AURORA PROJECTS PTY LTD**

**GRAYTHWAITE REHABILITATION CENTRE**  
**RYDE HOSPITAL**

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### Disclaimer:

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## **EXECUTIVE SUMMARY**

The NSW Department of Health proposes to construct the new Graythwaite Rehabilitation Centre on its existing Ryde Hospital Campus, near the Fourth Avenue boundary. The Centre will carry only minimal chemical inventories, as it will share existing services on the site, but it will contain a hydrotherapy pool which will require a quantity of water treatment chemical (typically hypochlorite solution or equivalent), which will be the only additional material present in the development in significant quantities.

Because of the presence of these materials, the development is subject to analysis under State Environmental Planning Policy No. 33 – Hazardous and Offensive Development (SEPP33). However, all inventories (and associated transportation arrangements) fall below the threshold limits set out in SEPP33, and therefore the proposed development can be assessed as neither hazardous nor offensive, and therefore no further analysis is required. Details of inventories by class are set out below, to support this conclusion and to assist Council to make the final determination in this regard.

None of the proposed inventories will exceed the “manifest quantity” set out in the Occupational Health and Safety Act and Regulation, and therefore the site will not need to be Notified to WorkCover.

## **Hazardous Materials**

The materials proposed to be stored are set out in the attachment. Note that this inventory represents typical quantities of dangerous goods stored in the entire site. Many of the existing storages will be shared between existing buildings and the new Graythwaite Centre, including existing reticulated medical gas supplies.

The only significant new inventory is the hypochlorite storage associated with the new hydrotherapy pool. The site has not previously had the benefit of such a facility.

Of these materials, only the following are classified as potentially hazardous under SEPP33:

### **Flammable Liquids (Dangerous Goods Class 3)**

Total inventory is of the order of 210 litres, and all materials are either PG II or PG III. The screening method to be used (from Table 1 of "Applying SEPP33") for these materials is "figure 9 graph if greater than 2 cubic meters". The gravimetric equivalent of 210 litres of flammable liquids is approximately 0.17 cubic meter, and therefore no further assessment is required.

Note that no flammable liquids of PG I are stored.

### **Clinical Waste (Class 6.2)**

Quantities of clinical waste are generated on the existing site. They are not shown in the inventory tabulation because there is no designated storage, as they are dealt with on site by autoclave or existing waste management procedures under Department of Health guidelines. The proposed development will continue to make use of these arrangements, so no change is anticipated in either quantities or disposal methods.

## **Corrosives (Class 8)**

The only significant storage of corrosive materials is the hypochlorite storage. The screening method is shown in Table 3 of "Applying SEPP33", which indicates a threshold of 25 tonnes or cubic metres for materials of PG II. The maximum inventory to be stored will be less than 250 litres (approximately 0.25 tonnes), so no issues arise.

## **Transportation Issues**

Table 2 of “Applying SEPP33” sets peak weekly thresholds for vehicle movements involving the above materials. These limits are 45 per week for the flammable liquids, and 30 per week for corrosives. Expected deliveries at the facility are currently one per week for flammable liquids and less than one per month for corrosives. The hydrotherapy pool requirements will increase the vehicle movements for corrosive materials by about two per month (with seasonal variations). The totality of vehicle movements is therefore far below the thresholds, and the proposed facility can therefore be deemed to be not potentially hazardous with respect to transportation.

## **Assessment of Offence**

The proposed facility does not include any processes which generate discharges which can be considered offensive.

The only discharges to atmosphere result from evaporation of solvents (such as ethanol used for sterilisation purposes), and consumption of pool chemicals in the hydrotherapy pool. It should be noted that the proposed development will have no significant impact on existing solvent use. Any atmospheric emissions from the pool will be contained inside the pool building. The corrosive nature of the pool chemicals is neutralised by its use, the by-products being non-offensive materials removed in the filtration process.

## **Conclusion**

The proposed facility falls outside the parameters set out in SEPP33 which could designate the site as potentially hazardous (either with regard to the hazardous material stored or their transportation), or potentially offensive.

The proposed arrangements regarding hazardous materials have been designed with current best medical practice considered. While allowance has been made in the design for alternative materials to be used, if they are deemed to be more efficient (such as newer hypochlorite substitutes), these will be of the same or lesser dangerous goods classification and degree of risk (packing group).

None of the materials have any impact on future use of the site or surrounding land use.

**RYDE HOSPITAL CAMPUS**  
**Including proposed Graythwaite Centre**  
**DANGEROUS GOODS INVENTORIES**

Location	UN No.	Proper Shipping Name	Class	Sub-Risk	Packing Group	Common Name	Hazchem Code	Typical Quantity
<u>Bulk Oxygen Tank</u>	1073	OXYGEN, REGRIGERATED LIQUID	2.2	5.1		Medical Oxygen	2PE	3550 W/C
<u>Flammables Store</u>	1230	METHANOL	3	6.1	II	Methanol	2WE	50 litres
	1090	ACETONE	3		II	Acetone	2[Y]E	50 litres
	1300	TURPENTINE SUBSTITUTE	3		III	Turps	3[Y]E	100 litres
<u>Workshop</u>	1072	OXYGEN, COMPRESSED	2.2	5.1		Oxygen	2[S]	2xD+1xG
	1001	ACETYLENE, DISSOLVED	2.1			Acetylene	2[S]E	2xD+1xG
<u>Gas Cylinder Store</u>	1072	OXYGEN, COMPRESSED	2.2	5.1		Oxygen	2[S]	25 cylinders
	1013	CARBON DIOXIDE	2.2			Carbon Dioxide, Medical	2RE	10 cylinders
	1070	NITROUS OXIDE	2.2	5.1		Nitrous Oxide	2P	10 cylinders
	1002	AIR, COMPRESSED	2.2			Medical Air	2[T]	10 cylinders
<u>Waste Store</u>	1791	HYPOCHLORITE SOLUTION	8		III	Pool Chlorine	2X	20 litres
<u>Pathology Lab</u>	1230	METHANOL	3	6.1	II	Methanol	2WE	2.5 litres
	1090	ACETONE	3		II	Acetone	2[Y]E	5 litres
<u>Graythwaite Hydrotherapy Pool</u>	1791	HYPOCHLORITE SOLUTION	8		III	Pool Chlorine	2X	250 litres