

Memorandum

ARUP

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Subject FPCC SEPP33 Advice

This memo provides a discussion with respect to whether SEPP33 is required for the Forensic Pathology & Coroners Court (FPCC).

State Environmental Planning Policy No.33 (SEPP33) provides a systematic approach to planning and assessing proposals for potentially hazardous and offensive developments. The purpose of SEPP33 is to only accept proposals which are suitably located, and which can be built and operated with an adequate level of safety and pollution control.

The New South Wales Department of Planning released the guidelines *Applying SEPP33*, to assist with identification and assessment of potentially hazardous and offensive developments. There is a checklist and risk screening procedure to identify whether a development is considered a potentially hazardous industry.

The FPCC building will store quantities of dangerous goods (DGs). The PC3 facility will require a chemical liquid treatment system or a thermal waste treatment system. As such, the chemical and water treatment industries may be potentially hazardous and/or offensive, and may fall within SEPP33.

The anticipated quantities of DGs to be stored in the FPCC is summarised in Table 1.

Table 1: Anticipated Dangerous Goods Storage Quantities

Dangerous Goods	Dangerous Goods Class	HazChem Code	Storage Quantity	
			Total Quantity	Container size & No
10% & 20% Formalin	Not a DG, but a hazardous substance		2000 L	1000 L IBC
Sodium Hydroxide pellets	DG 8 (PGII)	2W	10 L	5 L bucket
Formic Acid 85-88%	DG 8 / 3 (PGII)	2X	5 L	2.5 L glass bottle
Hydrogen Peroxide	DG 5.1 / 8 (PGI or PGII)	2P	1 L	500 ml plastic container
Alcohol	DG 3 (PGII or PGIII)	2YE / 2Y	40 L	20 L drum
TOTAL			56 L	

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The SEPP33 Guidelines provide a risk screening method and screening thresholds for each class of DGs, which can be used to determine if a proposed development is potentially hazardous. These are summarised in Table 2. The anticipated quantities of DGs stored are below the SEPP33 thresholds.

Table 2: Screening Threshold Quantities and Distances (from SEPP33)

Dangerous Goods	Dangerous Goods Class	Storage Quantity		Screening Threshold / Distance	Is This Potentially Hazardous?
		Total Quantity	Container size & No		
10% & 20% Formalin	Not a DG, but a hazardous substance	2000 L	1000 L IBC		
Sodium Hydroxide pellets	DG 8 (PGII)	10 L	5 L bucket	25T	No
Formic Acid 85-88%	DG 8 / 3 (PGII)	5 L	2.5 L glass bottle	25T	No
Hydrogen Peroxide	DG 5.1 / 8 (PGI or PGII)	1 L	500 ml plastic container	5T	No
Alcohol	DG 3 (PGII or PGIII)	40 L	20 L drum	5T	No

For the quantities of DGs to be stored, it is not anticipated that these volumes will generate traffic movements greater than the thresholds provided in the SEPP33 Guidelines. These are summarised in Table 3.

Table 3: Screening Threshold Quantities for Transportation (from SEPP33)

Dangerous Goods	Dangerous Goods Class	Storage Quantity		Transportation Screening Threshold	
		Total Quantity	Container size & No	Vehicle Movements (Cumulative Annual / Peak Weekly)	Quantity per Load (Bulk / Package)
10% & 20% Formalin	Not a DG, but a hazardous substance	2000 L	1000 L IBC		
Sodium Hydroxide pellets	DG 8 (PGII)	10 L	5 L bucket	500T per year / 30T per week	2T / 5T
Formic Acid 85-88%	DG 8 / 3 (PGII)	5 L	2.5 L glass bottle	500T per year / 30T per week	2T / 5T
Hydrogen Peroxide	DG 5.1 / 8 (PGI or PGII)	1 L	500 ml plastic container	500T per year / 30T per week	5T / 10T
Alcohol	DG 3 (PGII or PGIII)	40 L	20 L drum	750T per year / 45T per week	3T / 10T

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Using the risk screening techniques in the *Applying SEPP33* document, the FPCC is not considered to be potentially hazardous. Hence the application of codes and standards should be sufficient in providing protections and risk mitigation.