

State Environment Protection Policy (Waters)

Submission by

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The submission is made by providing response to key clauses of the policy in the order in which they occur in the draft policy and are presented in the following table.

Policy Clause	Page no	Draft Policy Content	SLR's Comment
-	-	General	The amalgamation of the surface water and groundwater policy is most welcome development and should lead to efficiencies in administration of the law and protection of the environment.
6	4	Definitions of "background" and "ambient"	Need to include "ambient" as opposed to "background" whereby the concentration of an indicator is elevated above background due to non-point source, diffuse (defined) or general impacts from urbanisation.
6	7	Definition of contamination	There needs to be a definition of "contamination"
6	6	Definition of "groundwater quality restricted use zone"	This was originally "polluted groundwater zone" and the variation of policy in 2004(?) to introduce GQRUZ was cosmetic and not an improvement in communication – I suggest revert to "polluted groundwater zone"
6	6	Definition of groundwater	There is no definition of groundwater which is needed and should be linked to a definition of aquifer.
6	6	Definition of "landfill cell"	This is open to legal challenge as cells start as open, uncapped structures and final capping often not constructed for years following commencing and indeed completion of filling. Whereas the potential for a cell to be a contamination source starts soon after filling commences. Delete reference to cap.
6	7	Definition of non-aqueous phase liquid	Definition seems imprecise – "form a discrete layer" – where, how measured. There are better definitions available. Not consistent with definition in EPA Pub 840.
6	7	Definition of permeability	The definition is imprecise and needs to say for the purposes of policy it is equivalent to hydraulic conductivity – even though the two are not exactly equivalent

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6	7	Definition of pollutant	Definition should include "chemical compound" – pathogen does not address all bacterial and viral species that might not be pathogens but potentially are pollutants
6	7	Definition of water table	Definition is imprecise and should read "means the <u>upper surface of saturation</u> in an unconfined aquifer at which the water pressure is equal to atmospheric pressure;
6	7	Definitions	There is not definition of "waters" although the term is used throughout the policy -perhaps is should mean surface water and/or groundwater.
42	41	Management of construction activities	Should also cover protection of groundwater
50	47	Dredging	Dredging in some cases can damage confining layers over aquifers – an example is the Koo Wee Rup basin aquifers extending under Western Port Bay. This was subject to studies and controls in the 1970s.
54	50	Direct waste discharge to groundwater	Should include "any excavated shaft or well"
54	50	Permitted waste discharges	This should include injection of groundwater from geothermal sources whether treated, untreated or cooled.
54	50	Groundwater remediation	This clauses is a most welcome addition – however "Remediation: is not a defined term in EP Act or SEPP – needs to be related to the definition of "Clean Up" in the EP Act
55	51	Non-aqueous phase liquids	This clause is a most welcome addition and removes need to revert to EPA – the applicable guidelines should enable the use of overseas guidelines, perhaps via a new EPA guideline on Natural Attenuation and Natural Source Zone Depletion? Given the lack of this then perhaps Pub 668 should be revised to provide ample guidance on these, consistent with ITRC and ASTM etc from the US.
56	52	Rising water table	Placement of dredge spoil in coastal areas can also cause water table rise.
57	52	Hydrogeological assessments	As the lead author of EPA Pub 668, this clauses is a most welcome addition to the policy giving a power and clear guidance. The guideline will need updating and perhaps could include technical guidance eon MNA and NSZD.
58	53	Groundwater attenuation zones	Given the permitted discharges in clause 54, perhaps there should be a linkage between 54 and 58.
58(2)(e)	53	High permeability and low attenuations	While the intent of the clause is welcome, it is too imprecise – what denotes high and low?. Specific hydrogeological setting should be cited e.g. karstic terrain. Low attenuation would seem less important and more subjective than high permeability. Attenuation is arguable more a property of the contaminants and natural chemistry of the groundwater than of the

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			aquifer fabric. Dual porosity should not be seen as attenuation given reversibility.
59	55	Groundwater Clean up to extent practicable	The old policy made this mandatory – the authority “will require clean up to extent practicable”. The new policy reduces this to “may require clean up”. This is welcomed and would seem to imply a lessening (risk-based) of intent to police CUTEF to the current highly (sometimes unnecessarily) rigorous degree.
Schedule 1	57	Figure 1 Surface Water Segments	This figure is at a very small scale and the detail needed to enable a person to identify their location relative to a boundary of a segment would require a much larger scale figure or drawing e.g. the segment boundary location in the lower Yarra River. Can this be put on the EPA website at a larger scale?
Schedule 1 Table 1	63	Human consumption after appropriate treatment	It is unclear whether this is intended to apply only to public water undertakings only (Table 3 implies this) or also to private supplies such as private/domestic water supply bores (often no formal treatment). Is there intended to be a protection area mapped for the Wonthaggi desalination plant – it is not shown on Figure 1?
Schedule 1 Table 1	63	Agriculture & irrigation	Stock water and irrigation would seem to be separable beneficial uses, as in the existing SEPP Groundwater. The water quality tolerances for stock water and irrigation are very different with toxicants being more relevant to stock than crops which are mostly affected by salts, boron etc. While stock in limited cases can tolerate saline groundwater, this is not the case for crops – Segment D & E should not be promoted as suitable for irrigation.
Schedule 1 Table 1	63	Industrial & Commercial	It would assist if the wide range of potential water quality tolerances was mentioned e.g. high purity water to saline wash-down water
Schedule 1 Table 1	64	Buildings & structures	It could be helpful to mention “structures on and below the ground surface”
Schedule 1 Table 1	64	Geothermal properties	This should just say what can cause detriment to geothermal water quality – i.e. cold water. Other properties of introduced water that can be deleterious to a geothermal aquifer are turbidity, microbiological agents and also geochemically incompatible waters.
Schedule 3 7. Groundwater	95	Water dependent ecosystems	This is a most welcome clarification that the point of compliance is at the receiving surface water. It could be made more explicit by adding - “(a) groundwater discharge to a surface water body must not cause the receiving waters to be affected ...”