



IAH Victoria Branch

Submission by International Association of Hydrogeologists (Victoria Branch)

To: DELWP / EPA

On: State Environment Protection Policy (Waters)

By: 19 June 2018

The submitting organisation

The International Association of Hydrogeologists is the international peak scientific professional organisation engaged in groundwater resources management. It has a global membership of more than 4000 hydrogeologists, groundwater scientists and engineers, and one of its largest national chapters is the Australian Chapter, with more than 500 members.

This submission has been assembled by the Victorian Branch of the Australian Chapter of the IAH based input from members. The IAH appreciates the opportunity to provide this submission to the SEPP review and any queries should be directed to the undersigned.

Regards

Ben Hall

Acting President

Phone: [REDACTED]
[REDACTED]

Tara Taylor

Secretary

[REDACTED]
[REDACTED]

Submission

1 Overview

IAH Victoria agrees with the approach of combining two State Environment Protection Policies (SEPPs) - Waters of Victoria, and Groundwaters of Victoria, into one policy. The IAH has reviewed the draft SEPP (Waters) in light of the three objectives of the SEPP:

1. To provide a framework to protect and improve the quality of Victoria's waters.
2. To improve certainty for the industry to enable compliance.
3. To improve clarity for industry to enable improved compliance.

Overall, the Draft SEPP (Waters) has achieved these objectives. This submission details specific matters that the IAH would like to bring to the attention of the policy planners when considering finalisation of the SEPP.

2 Specific Matters

The following table details specific matters the IAH have noted in our review.

Item within SEPP (Waters) Draft Policy	Comment
Aquifer yield to sustain beneficial use 15(2)(a) 15(3)(a) 15(3)(b)(iii) p15-16	IAH suggests that the SEPP includes guidance around typical bore yield required to sustain beneficial use. This to provide clarity around rules for what constitutes a low yielding aquifer. This will be useful in the context of the Newer Volcanics aquifer, for example, which is widespread across Victoria and often has low yield, but may have locally high yielding areas.
Stygofauna / subterranean fauna 15(2)(e) 15(4) p15-16	<p>The presence of stygofauna is relatively unknown in Victoria. Does the EPA have a current understanding of areas where beneficial use for stygofauna will require protection? Will all projects need to consider the potential presence of stygofauna, assuming much of Victoria has not been specifically assessed?</p> <p>It is noted that 15(2)(e) states that the Authority may determine beneficial use will not apply if the definition relates to stygofauna. 15(4) states that the Authority may require an assessment of stygofauna. What is the extent of investigation required to ensure adequate investigation into presence, value and protection of stygofauna?</p> <p>It is noted there is no definition of subterranean fauna on p8.</p>

Item within SEPP (Waters) Draft Policy	Comment
Management of sewerage systems 27 p26	Consideration has been given to infrastructure leaking sewage to the environment. Has consideration been given to the effect of leaky infrastructure dewatering local aquifers, and subsequent effect this may have on local groundwater quality and beneficial use of connected surface water bodies? It is noted several sewers across Melbourne are locally draining groundwater, affecting groundwater flow paths and potentially influencing beneficial use.
Management of construction activities 42 p41	It is noted that the objective of the clause is to reduce the risk of sediments and other pollutants entering surface waters from construction activities, including dewatering. Does the Authority intend to produce best practice of guidelines for groundwater management during construction aligned with this item? Further clarity around implied beneficial use changes as a result of groundwater dewatering would be useful. As an additional note, anecdotally there are numerous existing basements in Melbourne that continue to drain groundwater (which is variably saline) and is discharged to stormwater. Is there a policy/guideline targeting existing structures?
Groundwater quality restricted use zones 59(2) 59(5)(a) p54-55	Groundwater use adjacent to GQRUZs should be considered in the context of mobilisation of plumes and affecting beneficial outside of the GQRUZ. This requires SRW to have a mechanism to interact with the Authority, who will identify and assess risk of degradation of groundwater quality in the GQRUZ as a result of adjacent groundwater activities – has this been considered?
Buildings and structures p64	Clarity around this item would be appreciated – does it relate to native groundwater corrosiveness to structures, or changed beneficial use that may affect buildings and structures?
Geothermal Schedule 3 – (7:10) p96	(a) “no activity must affect the geothermal properties of groundwater” appears to be overly restrictive. For example, extracting groundwater for the purposes of space and water heating is an effective, low carbon use of moderate to high temperature groundwater. Geothermal schemes outside of Victoria commonly include reinjection of cooled groundwater without which does change the geothermal properties immediately surrounding the injection bore while preserving the groundwater resource. It is not clear that clause (b) is adequate to allow for some practical change in groundwater temperatures for this type of scheme. In our opinion, some further consideration or clarification of the acceptable level of change on geothermal properties of groundwater is required.

Item within SEPP (Waters) Draft Policy	Comment
Managed Aquifer Recharge p51	The draft SEPP appears to be silent of the issue of Managed Aquifer Recharge other than a mention of “Guidelines for managed aquifer recharge (MAR) – health and environmental risk management (EPA Publication 1290)” in the Explanatory Notes box on p51. Is it envisioned that the main policy document relating to MAR is the Guideline? This should be clearly stated. Otherwise, the changes in the groundwater quality associated with MAR require some consideration in the SEPP.