

STATE ENVIRONMENT PROTECTION POLICY (WATERS)

AEA Melbourne's collated comments June 2018

Overall Comments including on Policy Impact Assessment

- We are in strong support of the amalgamation of the surface water and groundwater SEPPs including the schedules, although consider some more work needs to be done to ensure compatibility, streamlining, and general ease of use (refer to detailed comments below).
- We support the separation of the SEPP (Waters) into a core document and an implementation plan.
- Whilst we understand the intent of removing duplications and material which is already in the EP Act, this does reduce the usability of the SEPP as a standalone document. It would be beneficial to include links in the final version of the online document to direct users quickly to the specific relevant clauses in the Act to which the SEPP refers. This concept could also be expanded to link to other guidelines referenced in the SEPP, helping to ensure the user is referring to the current version of each of these guidelines.
- 'Grandfathering' of the old SEPPs and transition to use of the new SEPP needs to be carefully considered, and guidance provided. For example:
 - Detail the approach to existing audits-in-progress during the transition period;
 - How to deal with potential re-classification of groundwater segments resulting from the new TDS ranges (for example, groundwater with a TDS of 1,100 mg/L would change from Segment B to Segment A2). This may also cause confusion with reference to historical audits, GQRUZs, other online data etc. Reclassification of groundwater may result in additional beneficial uses requiring protection.
 - How to deal with operational audits of landfills which are ongoing and due annually.
- Throughout the policy, please ensure clear specification of all units, preferably consistent with those commonly reported by laboratories. For example nitrate (as N), rather than just nitrate. It would also be helpful to include conversion equations where necessary (eg N to NO₃ and S to SO₃). This is an aspect which is often undertaken incorrectly or not at all by those responsible for monitoring and reporting water data.

Detailed Comments on draft SEPP (Waters)

PART I – APPLICATION

6. Definitions

Many of these definitions could be written in language which is simpler for the general public to understand, for example:

- Primary contact recreation – include examples of PCR activities (such as swimming, surfing).

Other comments:

- Clarify whether *wastewater* definition includes dewatering of excavations (under what circumstances), and contaminated groundwater which is extracted for monitoring purposes.

10. Applied, adopted or incorporated matters

- Include reference to the end notes in which the specific documents are listed.

PART II – PROTECTION OF ENVIRONMENTAL QUALITY

DIVISION 1 – PROTECTED BENEFICIAL USES

13. Objectives (etc.)

No comments on Clauses 13 and 14.

15. Beneficial uses of groundwater

- Subclauses (2)(a) and (3)(a) - There is a lack of guidance with regards to what is a reasonable yield for each beneficial use. For example, what yield is considered low enough that groundwater extraction is not feasible?
- Consider mentioning vapour intrusion from groundwater to be consistent with the ASC NEPM – protection of buildings and structures should include consideration of vapours in indoor air originating from groundwater (if volatile contaminants are present).

16. Beneficial uses of surface water

No comments.

DIVISION 2 – ENVIRONMENTAL QUALITY INDICATORS AND OBJECTIVES

17. The environmental quality indicators and objectives

- Subclause (3) – is the intention that regional objectives will be published for indicators where the natural background quality is lower or higher than the Schedule 3 objectives? This would be useful, otherwise it will be difficult to be consistent in applying this clause.

Explanatory Notes:

- There are a number of beneficial uses which do not have specific environmental quality indicators or objectives – not just *Traditional Owners' and Aboriginal Victorians' cultural values* and *Cultural and spiritual values*, but also *Navigation and shipping* and *Industrial and commercial use*. Further guidance is needed here in order for assessors to evaluate whether these beneficial uses are protected or not, even if only qualitatively. Under what circumstances is it necessary to determine site-specific objectives for these uses? How would an assessor go about doing this? Some indication is given for *Traditional Owners' and Aboriginal Victorians' cultural values*, but none for the other beneficial uses. Is this a case of needing to wait for future guidance to be developed? What happens in the interim? How do you undertake a risk assessment for cultural and spiritual values?

DIVISION 3 – TARGET SETTING

18. Developing interim regional targets in priority areas (etc.)

No comments on Clauses 18 and 19.

PART III – RULES AND OBLIGATIONS

DIVISION 1 – ALL WATERS

SUBDIVISION 1 – WASTE AND WASTEWATER MANAGEMENT

20. Management of discharges to surface waters (etc.)

No comments on Clauses 20 to 26.

SUBDIVISION 2 – MANAGEMENT OF SPECIFIC RISKS TO BENEFICIAL USES

32. Planning schemes and permits

No comments.

33. Protecting catchment areas used to supply water

No comments.

34. Urban Stormwater

- Consider including a specific subclause relating to whether dewatering water during development works (ie groundwater pumped out from deep excavations and/or basements) is allowed to be discharged to stormwater or to sewer and if so, under what circumstances. Or require that Councils consider and publish guidelines on this issue.

35. Management of saline discharges (etc.)

No comments on Clauses 35 to 41.

42. Management of construction activities

- See comment on Clause 34 – discharge of dewatering water. As a minimum, if this water is potentially contaminated, it should be analysed prior to discharge. Define whether dewatering water is considered to be wastewater.

DIVISION 2 – SURFACE WATERS

SUBDIVISION 1 – PROTECTING SURFACE WATER BENEFICIAL USES

43. Management of groundwater risks to surface waters

No comments – clause applies to water corporations only.

SUBDIVISION 2 – MANAGING CATCHMENT RISKS TO BENEFICIAL USES

No comments on Subdivision 2 – all catchment management issues (Clauses 44 to 52).

DIVISION 3 – GROUNDWATER

SUBDIVISION 1 – PROTECTING GROUNDWATER BENEFICIAL USERS

53. Prevention of groundwater pollution

No comments.

54. Direct waste discharge to groundwater

- Suggestion: “(3)(b) there will be no **adverse** impact to beneficial uses beyond the boundary of the premises on which the project is being conducted”. This allows for *in situ* remediation of down-gradient properties, where the aim is to improve groundwater quality/restore beneficial uses.

Explanatory Notes:

- Correct title: The Cleanup and Management of **Polluted** Groundwater (EPA Publication 840).

55. Non-aqueous phase liquids

Explanatory Notes:

- It would be helpful to define what is meant by ‘NAPL is present’, as EPA has recently become more stringent in this regard. For example, if an oily sheen would be considered as NAPL then that should be mentioned in the notes.

56. Rising water tables

No comments.

SUBDIVISION 2 – IDENTIFYING AND MANAGING POLLUTANTS IN GROUNDWATER

57. Hydrogeological assessment

No comments.

58. Groundwater attenuation zones

- The meaning of Subclause (2) is unclear and seems to contradict the explanatory notes – should Subclauses (c) and (d) be ‘and’ rather than ‘or’ clauses? That is, intention is all these subclauses are satisfied before an attenuation zone can be declared?

Explanatory Notes:

- Suggested rewording for clarification: “Clause 58 provides that if the Authority is satisfied all practicable measures have been taken to prevent pollution of groundwater, it may designate attenuation zones (through a works approval, licence or notice) for the listed activities ~~if satisfied all practicable measures have been taken to prevent pollution of groundwater.~~”
- Subclause (3) in the notes should instead reference Subclause (2), and Subclause (4) should reference Subclause (3).

59. Groundwater quality restricted use zones

- Clause 59(5): Is this clause intended to apply even to a premises which is not the source of the groundwater pollution which led to the GQRUZ?

- Clarify purpose of Clause 59(5)(a): “risk of further degradation of groundwater quality in the groundwater quality restricted use zone as a result of an activity or proposed activity at the premises, beyond a proposed or currently designated attenuation zone”. Is this saying that a premises may continue to pollute even if a GQRUZ is in place? How can that be defined as clean up to the extent practicable (source is not removed)?
- Suggestion: “(5)(b) **adverse** impact to a beneficial use of surface waters or groundwater, beyond the boundaries of the groundwater quality restricted use zone.”

SCHEDULES

Schedule 1: Segments

- It is essential that proper mapping of all these surface water segments and sub-segments is undertaken and is made publicly available, for example on the EPA website or as an overlay on the *Visualising Victoria’s Groundwater* website. Currently it is often not possible to accurately identify the correct segment if the area in question happens to be close to a segment boundary, particularly with reference to contaminated sites which may not be directly adjacent to a surface water body.

1. *Groundwater segments*

Explanatory Notes:

- Clarify that lowest measured TDS should define the Segment.

2. *Surface water segments*

- As per earlier comments, the exact segment boundaries are currently mapped only on Figure 1 of the Waters SEPP, with no spatial references such as GPS coordinates or surface features overlaid. It would be much clearer if a map was provided with, for example, major roads or other features marked and it would be also very useful if this data was provided as an interactive map which could be zoomed in to check a specific area.
- Mapping should be as detailed as possible, for example including aquatic reserves, wetlands (lakes vs swamps etc.), urban growth boundary as further overlays on the interactive map.

3. *Segment definitions*

Further clarification is required in these definitions, and there also seems to be some doubling up. For example:

- What is defined as ‘mountain’ compared with ‘upland’?
- Lowland reaches of the Yarra, Maribyrnong and Werribee rivers are listed both in ‘*Central Foothills and Coastal Plains*’ and ‘*Urban*’ segments – are there parts of these river catchments in each segment? Perhaps it would be clearer to list the tributaries of these rivers in the Urban segment (or are there still some sections outside the urban boundary?), and the mainstem in the *Central Foothills and Coastal Plains* segment?

- Exclusion of the mainstem of the Yarra, Maribyrnong and Werribee rivers needs to be highlighted in the schedule, not just the explanatory notes – do these rivers then revert back to *Central Foothills and Coastal Plains*, or are there separate objectives and indicators?
- Undeveloped land in Urban Growth Zones – does this divert back to *Central Foothills and Coastal Plains*, or are there separate objectives and indicators?
- Interactive maps as previously discussed would be very helpful in clarifying.
- It would be also helpful to publish a map of catchments, rather than just the rivers themselves, to assist in determining where specific boundaries are with respect to surface water run-off and likely groundwater discharge points.

(4) *Marine and estuarine segments:*

- Estuaries should also be added as a map overlay.
- Sub-segments should be marked on the map also.

Schedule 2: Beneficial Uses

- It would be more practical to define specific areas where groundwater dependent ecosystems are present, as it is otherwise difficult to assess this beneficial use.
- Areas of potential mineral water supply could also be an overlay on the interactive map.
- **Table 2:** Delete ‘tick’ in the A1 segment box for Potable water supply (acceptable), as there should not be an overlap between desirable and acceptable potable use.
- **Table 5:** All the specific exclusions based on geographical areas need to be clearly mapped (on a map which can be zoomed in to a specific area and including coordinates and references to other features such as major roads) and the map should be publicly accessible, eg on the EPA website – clear definition of these areas is essential for consultants and others undertaking monitoring to determine if they apply to the area being studied.

Schedule 3: Environmental Quality Indicators and Objectives

1. *Environmental quality indicators and objectives*

- Subclause (4) – In order to implement this subclause, ‘background levels’ for aquatic reserves should be published/publicly available (eg on EPA website).

2. *Inland waters*

- Subclause (5) – Define the mainstem exception further up in the guidelines (in Schedule 1).

3. *Marine waters*

- These additional objectives are not practical, as there is no simple way of determining if the nutrient inputs will have effects on seagrass and algal blooms. Suggest this clause is reworded to make clear that the indicators are the seagrasses and blooms, and that if they are observed to be adversely impacted then the nutrient inputs need to be further evaluated.

Explanatory Notes:

- Reword first sentence – meaning unclear.

4. *Aquaculture*

- Subclause (2) – this specification requires tissue sampling, and is not practical for a screening level assessment. Clarify whether the ‘water dependent ecosystems’ objectives can be applied for screening purposes, or under what circumstances tissue sampling is required (eg, is it only if a problem is suspected? Is it only if there are existing commercial aquaculture operations in a surface water body?)

5. *Weight of evidence objectives*

- **Table 1 to Table 11** – Highlight in table headings that these cover ecosystems and species, not other beneficial uses. Not clear in these tables the differentiation between different segments where there are exceptions etc. (Yarra, Werribee, Maribyrnong rivers).
- **Table 12** – need to clarify units in this table, perhaps with footnotes. For example, ‘concentrations >90%’ means ‘greater than 90% ecosystem protection value. May need to cross-reference other tables.

6. *Water based recreation*

- Subclause (6)(a) – this subclause reads as if only short-term (rather than chronic) risks for chemical hazards in water based recreation need to be considered. This is inconsistent with the NHMRC (2008) document and with EPA guidance. Further definition of acceptable chemical concentrations in recreational waters is required, not just ‘must not be contaminated with chemicals that are either toxic or irritating to skin or mucous membrane’. To quote Paracelsus, “The dose makes the poison”.

Explanatory Notes:

- The reference to the NHMRC document is incorrect. The correct title and date is *Guidelines for Managing Risks in Recreational Water* (2008).
- How do SEPP users know that a specific water body has a low buffering capacity? Is there going to be more guidance provided on this?

7. *Groundwater*

- Subclause 7 does not provide a practical method of screening against protection of industrial and commercial water quality use, especially when these are theoretical uses only and not existing. More guidance is required – for example can this be assessed qualitatively? Is the intention for Victorian or Australian guidelines to eventually be derived for these uses? What should assessors/auditors do in the interim?

Schedules 4 to 6: POLLUTANT LOAD REDUCTION TARGETS (etc.)

These schedules not reviewed.

Endnotes

Table of Applied, Adopted or Incorporated Matter

- Need to make clear which is the current version of these guidelines – eg ADWG are on rolling revision and current version is 3.4 (published October 2017).
- This table is not very useful unless there is a mechanism to keep it up to date (not just when the SEPP is revised) – eg we know the ANZECC 2000 guidelines are currently being revised.
- It would be practical to publish a similar table online with links to the latest version of each document referred to from the original source – this will ensure currency.

Contact Details

Please contact [REDACTED] if any further details are required.