

## **Draft SEPP (Water) comments - David Tiller**

**May 2018**

My comments relate to the inland and estuarine components of SEPP (Waters).

### General

SEPP (Waters) is an appropriate evolution of the 2003 SEPP (WoV), which in itself was a major change from the 1988 SEPP (WoV). The major components that should make the Policy work remain: the use of the ANZECC & ARMCANZ approach for developing objectives; clearly stated responsibilities; and, explicitly identified documentation to successfully implement the Policy. The development of supporting documentation will be important in the successful implementation of the Policy. An enforceable MER program is needed. This was the major omission in the 2003 Policy implementation and an MER must compel responsible agencies to undertake evaluation and report it.

### Water quality objectives

**Dissolved oxygen:** As in SEPP (WoV), the environmental objectives are determined on the basis of actual data collected from the segments. One exception, however, is the use of a default value for the upper dissolved oxygen objective of 110% saturation (Schedule 3, Table 1). This has been taken directly from ANZECC & ARMCANZ 2000 and is not based on Victorian data or expert experience. While I have not analysed the data, I would almost certainly expect higher dissolved oxygen levels than 110% in high quality water environments. My experience suggests that 120% or even 130% is not unusual in healthy aquatic ecosystems. I suggest EPA re-visits the objective by looking at the data or conferring with EPA's experts to review the upper dissolved oxygen objective. This should also apply to estuaries (Table 4), in which I have observed dissolved oxygen levels of more than 130% in bottom waters in shallow near natural estuaries. Note, for lakes the upper objective has been set as 120%, I assume based on data.

**Urban areas:** It would have been good to include major regional cities in the urban segment. The objectives for the segment the cities are in will otherwise apply however this will not reflect expectations of these waterbodies.

**Water toxicants:** SEPP (Waters) use of 95% species protection from ANZECC & ARMCANZ for all inland and estuarine segments except, logically, the urban segments (90%), however, the higher value marine segments and Gippsland lakes get a 99% species protection level. This is inconsistent and suggests that marine environments are more highly values or required higher levels of protection. ANZECC & ARMCANS (2000) state that 95% species protection applies to ecosystems that are slightly to moderately modified (Paper 4, section 3.4.2.4). This would imply that the highlands and upland segments should be included in a high level of protection. In addition, ANZECC & ARMCANZ (2000) suggest that for a few chemicals a higher level of protection is recommended. This was, in part, recognised in SEPP (WoV) but has been omitted from SEPP (Waters) and should be reconsidered.

**Estuary bottom waters.** There are no objectives for estuary bottom waters even though they were developed for the estuary guidelines. They are important as

the bottom waters drive water quality in the surface and are a major issue in many estuaries where fish kills and artificial opens occur. The need for bottom water objectives in marine and estuarine environments can be seen in the fact that they are included in the Gippsland Lakes and Port Phillip Bay

A minor issue is that in tables 3 and 4 the asterisks are not explained. I assume it should refer to table 5.

### Implementation

MER: as already stated, a clear and objective MER program is required which includes the monitoring and evaluation of clause implementation and meeting objectives or targets.

While the need for interim regional targets are addressed in clause 18 the process or guidance is not clearly and objectively tackled in the PIA or Implementation plan. Clear guidance will be required for the implementation of this clause to be effective.

Clauses 36, 37, 39 and 40 relates to irrigation and agricultural runoff and the need to manage it, however, the PIA and implementation plan do not address this direction. For example, who is responsible and how is it to be assessed? The basic tenants of these causes were also in SEPP (WoV) however they we never addressed assessed or reported. The MER plan should also address this issue.

Thanks you for the opportunity to comment on the draft Policy. All the best to the team with finalising and implementing it.

David Tiller