

09 December 2024

Attn: Dr Clive Jenkins  
Water Quality Policy Review  
Environment Protection Authority GPO Box 2607  
ADELAIDE SA 5001

Via email: [epainfo@sa.gov.au](mailto:epainfo@sa.gov.au)

### **Submission to the Environment Protection (Water Quality) Policy 2015 Review**

The South Australian Chamber of Mines and Energy (SACOME) is the leading industry association representing the South Australian resource and energy sector, a powerhouse of the State's economy.

SACOME welcomes the opportunity to make this submission and thanks the Environment Protection Authority (EPA) for its ongoing consultation with SACOME and its member companies as part of the Review process.

SACOME notes that the Water Quality Policy protects underground water quality through application of the 'general environmental duty', which operates as a legislative obligation under section 25 of the Environment Protection Act.

SACOME acknowledges that the EPA uses the Environment Protection (Water Quality) Policy 2015 as the primary policy to regulate water quality, recognising that it provides the most specific and detailed protection of the South Australia's surface, marine and underground waters.

Water is a critical input to resources sector operations and SACOME's member companies recognise their obligation to manage it in strict accordance with regulatory requirements and the environmental, social and governance (ESG) responsibilities that attach to its use.

SACOME's responses to relevant questions posed in the Discussion Paper are provided below.

## **1. General Comment - Improved protection of all underground (including saline) waters for future use.**

SACOME members have specifically identified the issue of 'future use' as one requiring greater clarification.

SACOME notes that the term 'future use' is presently undefined, creating uncertainty for operators on how to meet this proposed and presently conceptual regulatory requirements. Operators have specifically queried how an unknown future use can be assessed and regulated for impact, and whether this is practicable.

Moving to protecting saline water for future use means that all underground saline waters require assessment and management irrespective of the current beneficial use.

If future uses are undefined and the potential impact cannot be defined or measured, then it would stand that saline water must remain unaffected or unimpacted from its baseline under the proposed EPA policy changes.

An outcome where no impacts are tolerated or defined raising significant operational concerns and is at variance with the operation of South Australian mining legislation.

Operators have noted that under the existing regulatory framework, impacts are defined and measurable. Further, management and mitigation of impacts are based on agreed and acceptable impacts and outcomes derived via 'reasonably practicable' methods.

### **1.1 Regulation of water under the current Mining Act 1971 framework**

The regulations and guidelines supporting the Mining Act consider a source-pathway-receptor principle (SPR). Under the SPR principle it is common to consider groundwater as a pathway only and the receptor being the users or beneficiaries of this water (e.g. ecology, third-party users).

Pathways are considered from how they are *affected*, and Receptors are assessed on how they are *impacted*.

It is possible to have a material adverse change on a pathway without having impacts on a receptor. For groundwater, this may present as a change in quantity or quality without having impacts on receptors if there are no users or linkages.

The regulations and guidelines provide for the approval of predicted changes to pathways and approval/non-approval of the predicted impact to receptors, as defined by Environmental Outcomes. It is possible to be approved to change the quality and

quantity of water but not be approved to impact receptors, or be approved to impact certain receptors.

Future users can be accommodated using this framework, and in some cases, currently are.

Operators suggest that this can occur by considering future users as a receptor; or by considering groundwater as pathway and a receptor.

## **1.2 Regulation of water under proposed changes to the Environment Protection (Water Quality) Policy 2015**

The proposed changes seek to protect saline water for future use, however, definitions of 'users' and 'uses' are not defined, nor is the term 'future' relative to an indicative timeline.

Operators have observed that the protection of groundwater for future use does not contemplate how that will be balanced with current or proposed uses.

A key concern is whether consideration of future use may unreasonably prevent current or proposed use, noting that this may render current or proposed activities unviable.

If both groundwater and future users are to be defined as a receptor, then there needs to be clarity on how this is to be approved and regulated, and, from an operational perspective, how this will be measured, monitored and reported.

Operators have also posed the question of how an environmental outcome can or will be set for a future user that does not yet exist.

## **2. Do you think it is problematic that environmental value(s) are not attached to underground waters with salinity levels greater than 13,000mg/L?**

This is not seen as problematic by operators, noting that there are cases where underground water with salinity levels greater than 13,000mg/L can have either direct or indirect environmental value (EV).

Operators further advise that processes under the Mining Act 1971 already deal with environmental values of saline water independent of the Environment Protection (Water Quality) Policy 2015.

Proponents are presently able to declare that saline water has no EV, therefore changing it does not cause impact other users or ecological communities.

Operators submit that the EV of saline water should be considered within the context of impacts to potential (possible/probable) future uses as this is consistent with current practice.

By way of contrast, operators advise that applying an approach that does not allow any change from baseline is viewed as highly problematic.

### **3. What is your view on declaring the environmental value 'future use' to all underground waters?**

**In considering this question, note the implication that such a declaration would require 'reasonable and practicable measures' to prevent or minimise harm. How would the proposed amendment impact you?**

Operators advise that this proposed change is likely to unfavourably impact their activities.

As such, greater clarity is sought on how 'reasonable and practicable measures' will be assessed and regulated.

It is suggested that the 'reasonable and practicable' approach should consider:

- Limiting the extent of changes to quality (i.e. a reasonable footprint in terms of distance from source and % of water resource);
- Limiting the magnitude of the change to quality and;
- Defining the types of future uses considered to be reasonable; and defining how they would be reasonably affected by changes to saline water quality.

Operators advise that it is possible to approve changes to groundwater quality that can be reasonable and practicable both via regulation and by measures enacted by proponents.

They further advise that the proposed wording and approach is likely to result in increased cost and complexity to industry while delivering no tangible value to current or future users.

#### **4. Do you have any further comments about the potential for improving the protection of high salinity underground water in the Water Quality Policy?**

Operators have advised that existing 'resources regulatory frameworks' have effective mechanisms to protect saline water and future users. They suggest that the Policy should make explicit how the protection of future users of saline water will be assessed in a reasonable and practicable way.

It is suggested that applying a blanket 'no change to baseline water quality' methodology is at considerable variance with current practice. Further, operators suggest that the extent and reasonableness of future water uses; and the technical and financial aspects of protecting saline water should be key policy considerations, particularly given that saline water is likely to be only suitable for industrial use in the future.

Operators have questioned the rationale of this proposed change on the grounds of efficacy and additional operational cost, particularly in circumstances where the impact to saline water is not extensive; the saline water resource locally abundant; and future use is not sensitive to quality.

#### **5. Cultural and Spiritual Values - ANZG 2018 Guidelines**

SACOME and its member companies are broadly supportive of the inclusion of cultural and spiritual values with respect to water, however, the following considerations have been raised:

- No definition of 'cultural and spiritual values' has been provided, nor has any clarity been provided on how those values will be measured or reported on. Operators have raised the practical/operational difficulty of meeting proposed requirements in the absence of this important detail.
- Noting that the ANZG 2018 Guideline can be updated at any time, greater clarity is sought around process and consultation vis a vis future change. Operators have raised concerns about the possibility of updates to the Guideline that result in quantitative/qualitative measures for cultural and spiritual values and stress that consultation on changes that impact operations should be built into any prospective framework.
- Cultural and traditional owner values of water per ANZG 2018 guidelines are also considered and regulated under the Mining Act 1971, noting that this is the primary regulation pathway for mining activity in South Australia. SACOME

submits that consistency between the Mining Act and the amended Water Quality Policy is a desirable outcome.

## **6. Implications for In Situ Recovery (ISR) Uranium Mining**

SACOME notes that member companies Heathgate Resources, Boss Energy and Alligator Energy have made a separate submission to the Review process, with SACOME supporting the positions expressed in this submission paper.

As a statement of principle, these operators have expressed that the proposed regulatory changes introduce new layers of complexity and uncertainty to ISR projects, without a clearly substantiated evidentiary foundation.

SACOME notes that this submission identifies:

- The lack of defined standards for 'future use' which risks imposing potentially impractical and costly restoration obligations on aquifers with constrained future utility and associated increases to operational and closure costs for ISR mining operations. The absence of clear, evidence-based criteria for determining 'future use' environmental values could lead to inconsistent regulatory outcomes and increased uncertainty for operators
- Approval delays and uncertainties due to the proposed changes may unnecessarily increase the complexity of groundwater impact assessments, leading to further potential delays, investor uncertainty, and complications in securing project financing.
- A lack of clarity regarding potential retrospective application of the proposed changes to existing licences, noting that this could require costly amendments to approved rehabilitation plans and lead to operational uncertainty for ongoing projects. Such an approach risks undermining investments made under the existing regulatory framework

## Conclusion

SACOME recognises that the EPA will continue to undertake consultation on the Environment Protection (Water Quality) Policy 2015 Review into 2025 and that stakeholders will have further opportunity to provide feedback.

We note that a consistent theme across all feedback sourced by SACOME is that greater clarity with regard to operational matters such as terminology, definitions, reporting obligations and operational impacts is needed.

SACOME and its member companies remain committed to constructive engagement with the EPA throughout the Review process.

Yours sincerely



**Rebecca Knol**

Chief Executive Officer

South Australian Chamber of Mines & Energy