

Ms Liz Livingstone
Chief Executive Officer
IPART NSW
PO Box K35
HAYMARKET POST SHOP NSW 1240

Your ref D22/7702

Our ref M22/4428

Dear Ms Livingstone

I refer to your request for a submission on a new licence application by Kooragang Water Pty Ltd for a network operator's licence and a retail supplier's licence for the existing Kooragang Industrial Water Scheme in the Newcastle local government area. The new licence is to allow recycled water to be used for firefighting, and to expand the area of operations to another industrial site.

NSW Health's general advice is that all new uses of water from a recycled water scheme should be subject to risk assessment with relevant stakeholders to ensure the risks are appropriately managed. The risk assessment must be specific to the source, treatment processes and end uses for each scheme, considering the required log reduction values for each end use, associated risks and whether any additional controls are required.

NSW Health participated in a risk assessment workshop in December 2021, organised by the proponent of the licence. NSW Health identified issues regarding the proposed changes to operation and monitoring of critical control points for secondary treatment and Reverse Osmosis. The monitoring of critical control points and limits need to be appropriate to determine when performance is unstable or compromised, and to allow timely response to manage the risk by shutting off supply. Additionally, the Recycled Water Management Plan showed the critical control points for the microfiltration and reverse osmosis membranes are on the combined flows rather than individual trains/stages. The microfiltration membranes have a historical credit of 0.5 log for virus removal. The validation report indicates that this is based on a scheme installed overseas with comparable design parameters, however it is unclear if the critical control point monitoring is consistent for the age of the membranes at the time of the assessment.

As the new end use requires a higher level of treatment, NSW Health recommends that the scheme undergo an operational audit or technology assessment to consider the new end use and user, and critical control points including changes to monitoring points and frequency of monitoring. Changes to the incident protocols and scheme plans should also be considered to confirm that the scheme appropriately manages the risk.

NSW Health recommends that Kooragang Water should ensure that the users are aware of, and agree to, any requirements to manage the risk. For example, agreements should be in place with industrial users to detail handover points, maintenance and repairs. NSW Health notes that Kooragang Water has been in discussions with NSW Fire and Rural Fire around the proposed changes.

Kooragang Water has also applied for a retail supplier's licence for both drinking and recycled water. NSW Health understands that Kooragang Water will not operate any drinking water infrastructure and supply from Hunter Water Corporation will continue under the existing arrangements. The granting of a licence under the *Water Industry Competition Act 2006* does not automatically exempt the applicant from the requirement under the *Public Health Act 2010* and *Public Health Regulation 2012* to develop and adhere to a drinking water management system.

NSW Health requests that risk assessments, management plans and incident management protocols for drinking water, sewage and recycled water are updated in consultation with relevant stakeholders including NSW Health, IPART and EPA. NSW Health notes that the incident management protocols will need to be updated to reflect the new end user and use.

NSW Health's response should not be considered an approval or endorsement of the applicant's documentation. NSW Health's review has focused on potential public health issues. NSW Health expects that the audit process will confirm the adequacy of the drinking water, sewage and recycled water management plans and compliance with the *Australian Drinking Water Guidelines* and *Australian Guidelines for Water Recycling*.

Thank you for the opportunity to make a submission. Should officers of IPART require further information, please contact Dr Katrina Wall, A/Manager Water Unit on [REDACTED]. Should the applicant require further information they may contact the Hunter New England Local Health District Public Health Unit contact for the scheme.

Yours sincerely

[REDACTED]

Dr Richard Broome
Director Environmental Health Branch

25 July 2022