

Our ref:

Contact: David Sheehan 0417 376 685

Your ref:

22 March 2021

Mr Paul Ratajczyk
Team Leader - Compliance & Enforcement
North West Region
Environment Protection Authority Victoria
North West Office
BENDIGO VIC 3550

Sent via email: paul.ratajczyk@epa.vic.gov.au

Dear Mr Ratajczyk

Kyneton Water Reclamation Plant - water quality parameters that can be consistently met

In your correspondence, titled Kyneton Flow Meter and Offsets, and dated 2 October 2020, one of the requested pieces of information was in relation to the *water quality parameters that can be consistently met* as part of any discharge from the Kyneton Water Reclamation Plant (WRP) to the Campaspe River.

It is our understanding that the submission of these water quality parameters to EPA does not constitute the parameters that will be included in any amended licence, but represent an input into further discussions about the form and content of any amended licence.

As noted in email correspondence to you earlier this year, because of the significance of these parameters to future potential capital and operational expenditure at the Kyneton WRP, the parameters being put forward were submitted to the Board of Coliban Water for their review and sign-off, prior to being submitted to EPA.

I am pleased to advise that the Board of Coliban Water considered this matter at their February 2021 meeting and approved for submission to EPA the values detailed in the table in the accompanying attachment to this letter.

The majority of the parameters detailed in the attachment are the same as what appear in the current discharge licence for the Kyneton WRP. The reason for this is that, in line with commitments that Coliban Water have made, post the completion of the Kyneton Solutions Project, any discharges from Kyneton WRP to the Campaspe River will only consist of tertiary treated water, and all assessments to date indicate that if this is the case, the current licence parameters are protective of both downstream river health and associated beneficial uses.

The parameters also include a couple of adaptations, modifications and additions in relation to nutrient concentrations (i.e. nitrogen and phosphorous). Whilst ever blended discharges have occurred to the river, those discharges have been a source of nitrogen and phosphorous to the river. The plan to manage the nutrient issue is by only discharging tertiary treated water to the river and by the upstream river improvement works that underpin the Kyneton Environmental Offsets Project. Therefore, we believe the overall net effect will be a decrease in nutrient concentrations in the river.

With respect to modifications, we are aiming at an improved *Escherichia coli* (*E. coli*) licence limit, that is reflective of the need to protect downstream beneficial uses. We believe the proposed revised target can be achieved by the installation of a new ultraviolet (UV) treatment unit. The installation and commissioning of this unit is nearing completion.

The addition for consideration is the inclusion of a target for the specific helminth that is responsible for cysticercus bovis, or beef measles, in cattle, *Taenia saginata*. The proposal is based on risk assessment work undertaken on discharges from the Castlemaine WRP to Campbells Creek, where this value is protective of the health of downstream livestock, but also to better understand the real quantum of any identified risk.

As part of the discussion on any amended licence, we would like to examine how the proposed target for *Taenia saginata* could be recognised within the licence as a temporary, research-focussed target, that is being included to help inform policy with respect to the management of helminth risk.

On the matter related to the interpretation of the mean daily flow requirement. It is our position that for compliance purposes the mean daily flow is calculated as the average of all daily flows over the preceding twelve months. In order to provide clarity, we suggest that the measurement requirement be further described as an annual mean.

Finally, I look forward to continuing our discussions on the licence amendment process for the Kyneton WRP.

If you require further information with respect to the water quality parameters detailed in the attachment to this letter, please contact David Sheehan, Coliban Water's Senior Water Quality and Regulatory Advisor.

Yours faithfully



Danny McLean
Executive General Manager Service Delivery

Att: *Proposed water quality parameters that can be consistently met under a future updated discharge licence for the Kyneton WRP*

ATTACHMENT

Proposed water quality parameters that can be consistently met under a future updated discharge licence for the Kyneton WRP

Parameter	Measurement	Licence Value
BOD ₅	Annual Median	5 mg/L
Total Suspended Solids	Annual Median	10 mg/L
Total Dissolved Solids	Annual Median	1000 mg/L
pH	Annual Median	Within the range pH 6 to 9
Ammonia	Annual Median	2.0 mg/L
Total Phosphorous	Annual Median	0.5 mg/L
Total Nitrogen	Annual Median	10 mg/L
<i>E. coli</i>	Maximum	500 orgs/100mL
	Annual Median	100 orgs/100mL
Helminths	Maximum	1 taenia egg/L
Flow	Annual Mean	2.7 ML/Day