

13 March 2015

Independent Pricing and Regulatory Tribunal NSW  
PO Box K35  
Haymarket Post Shop NSW 1240

**Attention: Gary Drysdale, Program Manager, Compliance**

Dear Sir,

**Subject: Sewage System and Water Supply System**

**Catherine Hill Bay Water Utility Pty Ltd**

**Council comments on Approval Process, REF and Licence Application**

Thank you for your letter of 9 February 2015 seeking comments from Lake Macquarie City Council on the Licence Application (WICA) and Review of Environmental Factors for CHBWU (your reference D15/2157).

The proposal is for a *Sewage System* comprising:

- *Sewage Treatment Plant;*
- *Sewage Reticulation System;* and
- *Water Recycling Facility.*

### **Assessment Process**

#### *Sewage Treatment Plant and Sewage Reticulation System*

The SEPP provides that a sewage treatment plant and a sewage reticulation system may be carried out on the land by any person licensed under the WICA, without consent.

If CHBWU obtains a WICA licence, no development consent is required under Part 4 of the EPA Act for a sewage treatment plant or a sewage reticulation system.

#### *Water Recycling Facility*

The proposal includes the irrigation of treated effluent on land zoned R2, as part of the water recycling facility.

The SEPP provides that on land zoned R2, a 'water recycling facility' may only be carried out with consent if it is ancillary to an existing land use. As there is no relevant existing land use where the irrigation scheme is proposed, this aspect of the proposal does not appear to benefit from the SEPP.

#### *Water Supply*

Although not part of the application to IPART, you indicate that the applicant proposes a water supply system comprising a water storage facility and a water reticulation system.

#### *Water Storage Facility and Water Reticulation System*

The SEPP provides that a water storage facility and a water reticulation system may be undertaken without consent on the land, but only if it is by or on behalf of a public authority.

If CHBWU is not undertaking the works by or on behalf a public authority, development consent is required under Part 4 of the EPA Act. However in this regard water supply systems are prohibited uses in the SP2 and R2 zones.

### **Part 5 and REF**

For the purposes of Section 112 of the EPA Act and Clause 228 of the EPA Reg, it is considered appropriate that reference be made to the provisions of Schedule 3 of the EPA Reg - Designated Development:

#### *29 Sewerage systems and sewer mining systems*

- (1) *Sewerage systems or works ... :*
  - (b) *that have an intended processing capacity of more than 20 persons equivalent capacity or 6 kilolitres per day and are located:*
    - (iv) *within 100 metres of a natural waterbody or wetland*

The NSW Government's Hydro-line mapping information shows a watercourse crossing the site, and that the site is within close proximity to a coastal wetland.

Where a proposal is designated development, an EIS is required under Part 4 of the EPA Act. It is considered appropriate that this level of assessment be undertaken under Part 5, and it is suggested that IPART request an EIS of the applicant.

### **Environmental Assessment**

#### **Air quality - Odour**

The Odour Impact Assessment has been assessed with reference to Council's DCP 2014, the EPA Approved Methods for the Modelling and Assessment of Air Pollutants in NSW (Approved Methods), the National Environment Protection (Ambient Air Quality) Measure, and the National Pollution Inventory Emissions Estimation Technique Manual for Sewage and Wastewater Treatment.

Odour impact on sensitive receptors was assessed using methodology that was broadly consistent with that described in the Approved Methods. The impact assessment indicated that sensitive receptors are not likely to be impacted by odour emanating from the development.

It is noted that control factors were excluded in the odour impact model, and control factors (such as watering, engineering controls, etc.) are often used to reduce the predicted impact of pollutants. Given that control factors will be implemented during operation of the facility, the predicted odour impacts were likely artificially high. It is also noteworthy that the most stringent odour impact criteria of 2 odour units (OU's) was used.

A concern is raised regarding the odour emissions factors that were extracted from a paper published by Frechen (2002). This publication was not available for review, and it's citation is suspected to be incorrect. Considering the emission rates underpin the assessment, a review of the source of these rates is recommended. The proponent should confirm the citation, and more importantly, the validity of the emissions rates for the location under investigation, and to ensure that the emissions rates are still considered appropriate given that the study as cited is 13 years old.

Additionally, the application is specific to Stages 1 and 2 (servicing a maximum of 470 residences), and that the third stage (servicing a total of 556 residences) is the subject of a separate assessment and has not been addressed from an odour perspective.

### **Effluent Irrigation**

The proposal to irrigate treated effluent over future residential land (Stages 6 and 7) is not a desirable outcome as there is the potential for public health and safety to be compromised by irrigating the treated effluent over land that will subsequently be developed for residential use.

In addition Council raises concern regarding the transfer of the reserves and natural areas surrounding Stages 6 and 7 of the subdivision. The 'vegetated buffers' are key inclusions in the control of any risk associated with the treated effluent irrigation areas and are proposed to be transferred to Council at some stage in the future. The proponent should be aware that Council will not accept these areas until they are no longer part of any waste irrigation plan and that they have been fully remediated.

### **Stage 3**

The exclusion of Stage 3 from the current assessment is not supported. Stage 3 will involve the activation of Stages 6 and 7 of the subdivision, which is likely to require additional treated effluent irrigation area (unidentified at this stage). By excluding Stage 3 assessment, the proponent is unable to demonstrate that the utility can effectively function in the longer term. Council's concern is that the water balances for Stage 3 will result in a surplus treated effluent with no available mechanism for disposal.

Should you require further information, please contact the undersigned on 4921 0311 or by e-mail on [cbdwyer@lakemac.nsw.gov.au](mailto:cbdwyer@lakemac.nsw.gov.au).

Yours faithfully

Chris Dwyer  
**Principal Development Planner**  
**Development Assessment and Compliance**

\* The following terms and definitions are used in this letter:

WICA	-	Water Industry Competition Act 2006
CHBWU	-	Catherine Hill Bay Water Utility Pty Ltd
SEPP	-	State Environmental Planning Policy (Infrastructure) 2007
EPA Act	-	Environmental Planning and Assessment Act 1979
EPA Reg	-	Environmental Planning and Assessment Regulation 2000
EIS	-	Environmental Impact Statement
DCP	-	Development Control Plan