



Mr Hugo Harmstorf
Chief Executive Officer
Independent Pricing and Regulatory Tribunal
PO Box K35
HAYMARKET POST SHOP NSW 1240

Dear Mr Harmstorf

I refer to your letter to the Minister for the Environment, the Hon Gabrielle Upton MP, inviting submissions on the proposed variation to the network operator's licence number 15_033 under the *Water Industry Competition Act 2006* (NSW) issued to Cooranbong Water Pty Ltd. Your letter has been referred to me and I have been asked to reply on the Minister's behalf. Please also accept this response on behalf of the Environment Protection Authority (EPA) to your questions, as follows:

1. In your view, has Cooranbong Water Pty Ltd and/ or Flow Systems Pty Ltd breached the POEO Act? If so, please provide details of any breaches.

The EPA has no records of Cooranbong Water Pty Ltd or Flow Systems Pty Ltd breaching the *Protection of the Environment Operations Act 1997* (POEO Act). However, the EPA recommends that you also consult with Lake Macquarie City Council for their advice.

2. We consider there are no approvals required to be obtained under the POEO Act for the activities the network operator's licence variation would authorise, if granted. Do you agree with our understanding? If not, in your opinion, what approvals have been or are required to be obtained?

An Environment Protection Licence under the POEO Act may be required for the sewage treatment system because:

- a. The sewage treatment system capacity is above the operational capacity threshold which triggers the need for an Environment Protection Licence as set out in Schedule 1 of the POEO Act; and
- b. The operator proposes the irrigation to land of treated effluent.

3. Are you aware of any unacceptable risks to the environment posed by the activities to be varied? If so, what are these risks?

The EPA has reviewed the application and understands that:

- a. The operator has a trade waste agreement with Hunter Water Corporation to discharge any out of specification effluent as part of the land and housing scheme;
- b. Delivery agreements between Cooranbong Water Pty Ltd and the developer require the developer to provide access to undeveloped land for irrigating surplus recycled water and/or the establishment of tank farms for storage of surplus recycled water which include facilitation of potential irrigation areas at Avondale School and Avondale College;

- c. Redundancy appears to be incorporated into the scheme through 48-hour storage capacity within each premises' wastewater collection tank, capacity within the network, storage tanks and a notification to water users within the scheme to limit water use if issues are identified and trucking of sewage offsite is required;
- d. Land capability assessments have identified that soil in the area has sodicity issues and subsequently irrigation must be managed to not exceed the soils capacity to sustainably assimilate surplus recycled water; and
- e. Cooranbong Water Pty Ltd has developed a range of soil, water and groundwater monitoring programs to check that environmental impacts are not occurring from their activities.

There are some risks of sewage overflows occurring that will need to be addressed by Cooranbong Water Pty Ltd during (for example) power outages and breaks/blockages of sewerage infrastructure. These risks will increase with infrastructure age, and as such an on-going maintenance schedule must be put in place.

4. If varied, should the network operator's licence contain any specific conditions in relation to protection of the environment? If so, what conditions do you recommend?

The EPA recommends that the following standard conditions be added to the network operator licence:

1. Irrigation of land must be undertaken in accordance with the EPA's *Environmental Guidelines: Use of Effluent by Irrigation*;
2. The proponent must consult with the EPA regarding the need for an Environment Protection Licence under the POEO Act;
3. Treated effluent must be irrigated at a rate that ensures that the capacity of the soil to assimilate the volume of effluent and its nutrients is sustainable. This should include irrigation scheduling and management, monitoring of volume irrigated, monitoring of soil moisture, establishing an appropriate rate of irrigation, regular soil testing, appropriate vegetation management and groundwater monitoring up and downgradient of irrigation areas;
4. A land capability assessment must be undertaken annually at each effluent utilisation area to ensure that the land remains capable of assimilating the water and nutrients being directed to it;
5. Areas that receive effluent by surface irrigation must be fenced to exclude public access and signposted "Recycled effluent reuse area keep out";
6. Effluent application must not cause ponding on the irrigation area;
7. Livestock must be excluded from the effluent irrigation area for 21 days after the last application of effluent; and
8. The proponent must minimise the emission of odours from the premises at all times.

If you have any further questions about this issue, please contact Mark Gifford, EPA [REDACTED]

Yours sincerely

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MARK GIFFORD PSM
Acting Chair and CEO
Environment Protection Authority

6/12/18