



**Environment,
Climate Change
& Water**

Your reference: 10/98-3
Our reference: MD10/1668
Contact: Tom Celebrezze 9995 6800

15 JUL 2010

Mr James Cox
Acting Chairman and Chief Executive Office
Independent Pricing and Regulatory Tribunal NSW
PO Box Q290
QVB Post Office NSW 1230
Attention: Gary Drysdale, Program Manager, Compliance

Dear Mr Cox

I refer to your letter of 10 May 2010 inviting the Minister for Climate Change and the Environment, The Hon Frank Sartor, MP, to make a submission regarding an application made by Pitt Town Water Factory Company Pty Ltd under the *Water Industry Competition Act 2006* for a network operator's and retail supplier's licence to supply recycled water to a residential development at Pitt Town in the Hawkesbury City Council local government area.

The Minister apologises for the delay in responding to your invitation and has asked me to provide the attached advice in relation to the environment protection licensing and ecological issues relevant to the operation and development of the proposed facility.

In relation to the environment protection licence (EPL) requirements under the *Protection of the Environment Operations Act 1997* (POEO Act), I note that the information provided with the application to IPART is insufficient to determine whether an EPL will be required prior to construction and commissioning of the facility.

The Department of Environment, Climate Change and Water (DECCW) has, however, recently received verbal advice from representatives of Water Factory Company that an EPL application will be made to DECCW. Johnson Property Group (the developer) provided additional written information on 8 July 2010 stating that the sewage treatment and recycling system will now be required to discharge to waters (the Hawkesbury River) during the cooler months and periods of extended wet weather. DECCW has provided advice to Water Factory Company that a licence to regulate the pollution of waters in accordance with s43(d) of the POEO Act will be required. This advice is provided in the attachment.

The advice provided regarding ecological issues are matters of clarification for IPART's consideration. They should not be interpreted as an objection from DECCW to the development of the facility.

If you have any queries on this matter, please contact Tom Celebrezze, A/Director Metropolitan Branch on 9995 6800.

Yours sincerely

GREG SULLIVAN
Deputy Director General
Environment Protection and Regulation

DEPARTMENT OF ENVIRONMENT, CLIMATE CHANGE AND WATER

Comments on Pitt Town Water Factory Pty Ltd application under the *Water Industry Competition Act 2006*

Environment Protection Licence and water treatment related issues

DECCW regulates sewage treatment systems through the *Protection of the Environment Operations Act 1997* (POEO Act). Schedule 1 of the Act requires that sewage treatment systems, including the treatment plant and reticulation system, with a processing capacity of 750KL/day or 2500 equivalent persons be licensed, whichever is the greater.

The Pitt Town Water Factory Pty Ltd has applied for a network operator's and retail supplier's licence under the *Water Industry Competition Act 2006* (WICA) for a water recycling facility to service 943 lots in an approved residential development at Pitt Town. The information in the application is not conclusive about the plant throughput but if the final capacity of the development triggers Schedule 1 of the POEO Act the operator will need to apply to DECCW for an environment protection licence prior to construction and commissioning of the facility.

In its latest correspondence to DECCW of 8 July 2010, the Johnson Property Group has advised that the design capacity of the system is 300KL/day, to ultimately be expanded to 700KL/day.

Based on this information, and the lack of other information on equivalent persons, the treatment system will not require an environment protection licence for *sewage treatment systems*.

From this recent advice, DECCW notes that it is anticipated that the system will now discharge to waters (i.e. the Hawkesbury River) during cooler months and during extended periods of wet weather, instead of discharging to the Hawkesbury City Council's sewage treatment system. The discharge point is yet to be confirmed, but is expected to be into the Hawkesbury River.

Given this latest information, it is likely that the treatment and recycling system will require a licence for discharge to waters, in accordance with s43(d) of the POEO Act (i.e. for the purpose of regulating water pollution resulting from a non-scheduled activity).

A 'water pollution licence' will be required if the discharge to the Hawkesbury River should result in pollution of waters. Water pollution is defined in the POEO Act as the placing in or on, or otherwise introducing into or onto, the waters (whether through an act or omission) any matter, whether solid, liquid or gaseous, that is of a prescribed nature, description or class or that does not comply with any standard prescribed in respect of that matter.

Schedule 5 of the *Protection of the Environment Operations (General) Regulation 2009* lists 'prescribed matter' as including –

- (f) *excreta, manure or urine, or any waste from an on-site human waste storage facility or treatment device or any matter that contains faecal coliform or faecal streptococci,*
- (g) *matter of an infectious nature,*
- (i) *oil, grease or flammable liquid of any description,*
- (k) *matter that causes biochemical or chemical oxygen demand,*
- (l) *liquid that contains suspended or dissolved solids,*
- (o) *matter that has a pH value of less than 6.5 or more than 8.5,*
- (u) *chemical toxicants for which guidelines are prescribed by the publication entitled Australian and New Zealand Guidelines for Fresh and Marine Water Quality published in October 2000 by the Australian and New Zealand Environment and Conservation Council and the Agriculture and Resource Management Council of Australia and New Zealand,*
- (v) *arsenic, barium, boron, cadmium, chloride, chromium (hexavalent), copper, cyanide, fluoride, iron (dissolved), lead, manganese (dissolved), mercury, selenium, silver, uranyl ion or zinc,*
- (w) *matter that contains any nitrogen, sulphur, phenolic or phosphorus compound.*

Whether 'water pollution' is likely to occur will depend on the level of treatment achieved by the treatment plant.

The Review of Environmental Factors provided by the Water Factory Company in its application for a *Water Industry Competition Act 2007* licence did not include detailed information on the level of treatment and effluent quality to be achieved by the treatment system.

Unless an advanced level of treatment is to be employed (eg. reverse osmosis), DECCW considers that water pollution, as defined by the POEO Act, is likely to occur and a therefore 'water pollution' licence will be required for the system.

The IPART application form indicates that water quality issues are addressed in Section D of the application however, as this section was not included on the CD provided by IPART, DECCW has not been able to review the applicant's assessment of water quality impacts. It should be noted however that the ecology and local waterways would be susceptible to impacts from nutrient rich land application or discharge.

It is noted the proposed facility will be located adjacent to approved future residential areas. While the impact of odour has been assessed by the proponent, DECCW has not reviewed this assessment and IPART should satisfy itself that odour will not adversely impact future residential areas nearby.

Ecological impacts

DECCW provides the following advice regarding the potential ecological impacts of the proposed facility which it is recommended be considered by IPART in assessing the WICA licences.

The land proposed for the water recycling facility was highly recommended for environmental protection in a Local Environmental Study prepared by Council in 2003 for the proposed Pitt Town Urban Investigation Area.

The Local Environmental Study mapped the vegetation on the site as the endangered ecological community Shale Gravel Transition Forest. It also identified the area proposed for the facility as known habitat for two threatened species; the Eastern False Pipistrelle and the Cumberland Land Snail. The majority of the site identified as the conservation area was mapped as having high ecological value and high recovery potential (see attached maps). *Acacia pubescens* also occurs nearby to the proposed site for the facility and the site is likely to contain potential habitat for it.

Much of the Pitt Town Urban Investigation Area was rezoned for residential uses in a subsequent amendment to the Hawkesbury Local Environmental Plan 1989. However, the area proposed for the water facility was not included in the rezoning and retained its zoning as Environment Protection – Agricultural Protection. It is understood this zoning will be translated to a Rural Landscape (RU2) zone under Hawkesbury's revised draft Local Environmental Plan 2009.

Although the above zones generally enable agricultural land uses, the Hawkesbury Development Control Plan 2002 recognised the conservation significance of the area by mapping it as "protected area". The Development Control Plan includes the aim that "*areas of recognised environmental significance are protected from further development*".

The area proposed for the water facility was also not included in the Concept Plan application made under Part 3A of the *Environmental Planning & Assessment Act 1979* (EP&A Act) which resulted in increased residential development of the adjoining area (ie Bona Vista estate) and other lands in Pitt Town.

It is understood, however, that on the 28 May 2010 and 17 June 2010 respectively, Hawkesbury City Council and the Department of Planning approved the subdivision of the area into two lots to enable the water facility to be built in order to service the Pitt Town residential development.

Ecological assessment

In DECCW's view there is a potential for the loss of endangered ecological communities as a result of the proposed water facility. DECCW has some concerns with the adequacy of the Ecology Assessment as part of the Review of Environmental Factors. These concerns are detailed as follows:

- The Ecology Assessment describes three vegetation condition types on site. Of these, the Ecology Assessment states that Types 1 and 2 include native overstorey species and a few scattered understorey species. The Ecology Assessment also states that these types do not meet the definition of any listed community because of the level of disturbance. However, DECCW considers that from the information provided, it appears Types 1 and 2 would meet the definition of a listed community (most likely Shale Gravel Transition Forest), albeit in a degraded state. This is supported by the NSW Scientific Committee's determination for Shale Gravel Transition Forest, which states that examples of Shale Gravel Transition Forest in a disturbed state still meet the definition of the endangered ecological community.
- It is assumed that these disturbed remnants may, under appropriate conditions, be able to regenerate to remnants of better condition with higher species diversity. Although the Ecology Assessment states that these areas are 'unlikely to contain a substantial native seedbank', there is no explanation provided for this viewpoint. Despite this, it is not essential that a 'substantial' seedbank is required; modest regeneration can occur at sites that have been subject to disturbance for many years.
- The Ecology Assessment states that the proposal will lead to the loss of 0.03 ha of an Endangered Ecological Community. However, given the above, DECCW estimates the proposal will lead to the loss of up to 0.28 ha of endangered ecological community, based on the assumption that the Endangered Ecological Community (Shale Gravel Transition Forest) covers the entire site.
- A number of threatened fauna species have been recently recorded from the locality, including the Cumberland Land Snail, a number of bird species (Turquoise Parrot, Varied Sittella and Gang-Gang Cockatoo) and two bat species (Eastern False Pipistrelle and Eastern Freetail Bat). The site is likely to provide habitat (albeit marginal) for these and possibly other threatened fauna species.

There is also the potential for the circumstances of the site to require the involvement of the Commonwealth under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The Ecology Assessment states that only Vegetation Condition Type 3 on site meets the definition of Cumberland Plain Shale Woodlands and Shale-Gravel Transition Forest, which is listed as a critically endangered ecological community under the EPBC Act. As the entire vegetated patch appears to be over 5 ha, and all vegetation condition types have over 30% native understorey, DECCW considers that all areas to be impacted may meet the definition of Cumberland Plain Shale Woodlands and Shale Gravel Transition Forest, according to the criteria listed under the EPBC Act for this community. If this is correct, then the assessment under the Commonwealth assessment of significance criteria will need to be revisited, and the proposal may require referral to the Commonwealth as a controlled action.

This advice regarding ecological issues are matters of clarification for IPART's consideration. They should not be interpreted as an objection from DECCW to the development of the facility.