

THE HILLS SHIRE COUNCIL

3 Columbia Court, Baulkham Hills NSW 2153
PO Box 7064, Baulkham Hills BC NSW 2153

Telephone +61 2 9843 0555
Facsimile +61 2 9843 0409

DX 9966 Norwest

Email council@thehills.nsw.gov.au
www.thehills.nsw.gov.au

ABN No. 25 034 494 656

28 October 2015

Mr Rob O'Neill
General Manager, Water Licensing and Compliance
PO Box K35
HAYMARKET POST SHOP NSW 1240

Dear Mr O'Neill

Invitation to make submission in regard to licence applications under the water industry competition Act 2006 (NSW)

I refer to your letter dated 23 September 2015 advising of the application made by Flow Systems Operations Pty Ltd (FSO) and Flow Systems Pty Lt (FS) under the Water Industry Competition Act 2006 (NSW) (The WIC Act).

I note that it is your understanding that The Hills Shire Council would be the Appropriate Regulatory Authority (ARA) under the Protection of the Environment Operation Act 1997 (POEO Act). This is based on the applicants' submission. Council staff assessment of the proposal and discussions with staff at the NSW EPA indicate that the system will require an Environmental Protection Licence under item 36 of Schedule 1 of the POEO due to the capacity of the system proposed. Accordingly the EPA would be the ARA for the activity. Council staff object to the issue of a licence for a system of this capacity if it is intended that Council be the ARA.

In regard to the questions posed in your letter I provide the following advice;

- 1. Is our understanding of the approvals that have been and/or are required to be obtained under the EP&A Act correct (as outlined in Attachment A) for the activities the licence would authorise, if granted? If not, what approvals are required to be obtained?*

The information in Attachment A appears correct. The applicant is seeking approval for a masterplan for the development. Rezoning of the site proposed for the treatment plant is also required and is the subject of a current application.

Further construction approvals for the installation of services within Councils' road reserve will also be required.

The serviceable width requirements per lot are unknown. Concern is raised that the additional infrastructure required for the system and the supply of grey water to each property will take up additional areas in the front or rear of properties and the public roadways. Each lot will need to provide an area for an on-site underground grey water tank which will be located within the typical setback areas (i.e. 4.5m). It is unclear how this additional infrastructure will be situated on lots comprising a 240m² area.

It is also unclear as to whether the additional infrastructure associated with the system necessitates the widening of public roads to accommodate additional service. Accordingly amendments may be required to any subdivision application and/or the master plan to accommodate any additional infrastructure associated with the system.

As part of the precinct planning phases of the Box Hill North precinct Council's Officers assessed and considered a comprehensive, precinct wide stormwater strategy which relied mainly upon the installation of rainwater tanks for storage and reuse. The inclusion of the local water centre, associated reticulated re-use water supply in conjunction with a recent tendency to increase the capacity and sizing of road side swales goes against the originally supported stormwater strategy for the precinct. We have some concerns that rainwater tanks will not be appropriately installed as per the original strategy. Further approvals for amendments to the Stormwater strategy may be required and may not be supportable.

The proposal does not include all properties within the area. The system does not make allowance for the future connection of properties currently outside the applicant's control. This may lead to unnecessary duplication of sewerage infrastructure to accommodate future connection of these sites or the retention of on-site sewerage systems within the area. The proposal in its current form does not demonstrate orderly development.

The Hills Shire Council is not the plumbing and drainage regulator. Certification would also be required from NSW Fair Trading as the Plumbing and Drainage Regulator for the Shire.

2. Does the Council consider that the proposed activities to be licensed (if granted) pose any unacceptable risks to the environment? If so, what are these risks?

The proposal is considered to be an unacceptable risk when compared to a conventional sewerage system.

The treatment facility is proposed to be constructed on land immediately adjacent to Medium Density Residential zoned land. There is a significant potential for the proposal to impact upon the residents in terms of noise and odour.

An odour assessment has been submitted. The modelling within the assessment indicates that odour emissions from the system would be below the criteria of 2.0 OU however the system is reliant upon active filtration units with mechanical ventilation which would require maintenance and is at risk of periodic failure.

The system comprises of a network of holding tanks (pots) and pumps with a pressurised main leading to a centralised treatment plant with a recycled water distribution network. The proposed system includes a number of inherent risks that are not found in a conventional gravity sewerage system. I raise the following concerns;

- i. The system includes thousands of small pumps with small diameter pipe work. The likelihood and frequency of failures of these elements is therefore increased;
- ii. There is potential for odour in residential properties due to detention within the property, failure of the treatment plant or failure of the filtration of the vent pipes;
- iii. Small pumps are more prone to blockages and premature wear and require the residents to actively manage the system;
- iv. The applicant claims the pots will hold 48 hours of storage of wastewater in the event of a failure. The capacity of proposed holding tanks is inconsistent with two days storage when compared to the design requirements for on-site sewage management solutions and are deemed to be significantly undersized;
- v. The system will have excessive energy requirements due to the number of pumps and equipment proposed and is therefore not consistent with the principles of Ecologically Sustainable Development; and
- vi. A conventional sewerage system with disposal at a licenced sewerage treatment plant would be preferred.

An acoustic report has been presented in the planning proposal. The report has identified that the noise from the treatment plant is likely to exceed acceptable criteria at night.

3. If granted, should the network operator's licence contain any specific conditions in relation to protection of the environment? If so, what should these conditions be?

An Environment Protection Licence is obtained from the NSW Environmental Protection Authority for the operation of the system.

Additional environmental protection conditions relating to potential impacts on; noise, water, odour, chemical storage, system maintenance, contingencies in the event of power failure or the like would also be required however inadequate information relating to the proposal has been provided to allow for specific conditions to be provided.

Yours faithfully

A large black rectangular redaction box covering the signature area.

Mark Colburt

MANAGER - ENVIRONMENT AND HEALTH