Objection to Catherine Hill Bay-Network Operator Variation.

Currently Approved Licence 16_035

I object on the following grounds:

1. This variation is so vastly different from the original application that it should be treated as a completely new application.

When Solo Water first applied for a licence it was supported by an Environmental Assessment prepared by Planit Consulting in July 2014.

Stage 2 of the **original** application would include a reject reverse osmosis unit,3 Reverse Osmosis (RO) reject evaporation ponds and would include onsite irrigation of treated waste water. Yet this variation application for Stage 2 is seeking to have discharge into the environment outside the boundaries examined in the original application. This variation is also seeking to downgrade the processes from a best practice reverse osmosis unit.

The original Environmental Assessment did foreshadow a further Stage 3 and stated that there would need to be offsite discharge in stage 3. They further stated (in bold) **Stage 3 of the proposal is not included or assessed as part of this REF. Stage 3 will be subject to a separate Approval.**

The Addendum to the REF prepared by Mr Mc Nichol is inadequate, misleading and false.

- Using rainfall records from Williamtown is as inappropriate as using rainfall records from Sydney, as both Williamstown and Sydney are equidistant from Catherine Hill Bay.
- It is untrue to state 'The excess water will flow through a coastal lagoon which has been estimated to be open to the ocean some 73% of the time'. I live in Catherine Hill Bay and the lagoon has not been open to the sea once this year.
- The hydrology report is inadequate as it is based on one day in the field and desktop modelling.
- It is misleading to claim that the lagoon receives unmanaged drainage directly from CHB village. They justify the dumping of 162,000 litres of treated effluent a day into "the lagoon (as it) already receives unmanaged drainage directly from CHB village, and the receiving waters were found to have likely adapted to the pollution loads"

I have a bio-cycle system that is checked every three months. The houses in the heritage village are either on pump out systems or Biocycle systems and undergo strict controls imposed by the Lake Macquarie City Council. There is no effluent getting into the creek system in the heritage township. LMCC make additional charges

to rate payers in CHB for mandatory pump-outs and cartage off site of the effluent from their septic systems.

An Addendum should be an addition to the original REF. However, this is an entirely new proposal and should have a full Environmental Impact Statement.

The application is also misleading. In para 4.2.4 states "All interconnections are as per existing licence 16_035". This is untrue as the existing licence is based on drawings showing no discharge into the environment (see process Flow diagrams H10052_PO4E and PO3E and P11A whereas the drawings attached to the revised applications show a discharge via a waterway and a wetland. Refer drawings 211688(13)-ESK-010 and 009.

Solo Water Pty Ltd does have a licence for a sewerage operation on the CHB Utility site however it does not have Approval for the release points under MP10_207 (Approval for Beaches Subdivision,) as claimed.

This Approval was based on connections with Swansea for water supply and sewerage. Once the developer Rose group achieved this Approval he entered into an agreement with Catherine Hill Bay Water Utilities Pty Ltd (Solo Water) to build an on- site sewerage system. This company achieved a WICA licence 16_035.

These release points for sewage were part of the initial plan to link to Swansea; they cannot just be transferred over to a different system just because it suits the applicant; the proposed release point and any associated works at the Lindsley Street culvert was never for release of treated effluent, only stormwater.

2. The variation Application fails the first IPART licensing principle:

 the protection of public health, the environment, public safety and consumers generally (p2).

The current licence 16_035 uses a reverse osmosis system in the treatment of sewage.

This variation application proposes to downgrade this process such that there will be faecal matter released into the environment; an environment that is outside the approved development area.

162,000 litres a day is proposed to be discharged (and this could be much greater depending on whatever the operator decides on any given day) into a very small creek that becomes a lagoon on a pristine beach. Rarely does this lagoon break through into the sea. When the sea is too rough or dangerous children frequently play in this lagoon.

Even if the processing of the effluent were at the highest level of treatment known as reverse osmosis there are many unknowns as to the potential impacts that this amended proposal could bring to our ecosystems. These would include the gradual accumulation of pharmaceuticals, plastics, hormones, minerals and heavy metals within the creek systems.

But in this application the operator is also requesting approval for a **downgrading** of its processes for treating sewage:

"Replacing existing approved RO Reject Evaporation Ponds with a constructed wetland." (there will be a)," controlled release of wetland polished recycled water to the environment" Supporting Documentation Appendix 4.

There will be faecal matter discharged into a creek where it will have a great impact on the environment, public health and public safety.

Appendix 4 states that mosquito growth is likely. This means that there will be an increased risk of mosquito borne diseases, such as Ross River Fever and Dengue Fever, which is no longer a tropical disease. Yet p.38 of the Addendum to a Review of Environmental Impacts (REF) states "the location of SDRW release points in the association with stormwater flow paths is unlikely to compromise residential zone amenity.

The odour from this treated effluent will have a great impact on the amenity of the area. Who would want to come to the only patrolled beach in the area to be confronted by the smell of treated effluent. Effluent that will contain faecal matter.

3. The Application for a variation of Licence 16_035 fails all principles of Ecologically Sustainable Development.

- The precautionary principle. There is a threat of serious and irreversible environmental damage with the discharge of 162,00 litres a day of treated effluent onto a pristine beach.
- Intergenerational equity. This beach is the only patrolled beach in the area. families come from Chain Valley Bay, Lake Munmorah, Gwandalan, Summerland Point, Nords Wharf, Murrays Beach, Catherine Hill Bay and more. Are these families to play and swim in water that has been polluted by treated effluent.
- The proposed effluent discharge will degrade rather than provide for enhancement of the aquatic environment.
- Conservation of biological diversity and ecological integrity will not be enhanced by this self- serving scheme.

4. Heritage Impact

Catherine Hill Bay is a State listed Heritage Township, one of only two such listed towns in NSW. I find it incomprehensible that any one would wish to dump treated effluent into the lagoon on the beach where this still body of water would in all likelihood become septic.

Catherine Hill Bay is a NSW Destination at local, regional, state and interstate level. There would be a terrible outcome for this heritage township if this variation were to be allowed.

Conclusion

There should be no discharge into the environment at all. All treated effluent that cannot be reused on the residential site should be trucked to Swansea/Belmont where it can be discharged into the deep-sea outlets or the owners of the sewerage plant could build a pipeline that discharges their excess effluent into an existing wastewater system connected to an ocean outfall discharge system.

The Applicant states that "Changes are proposed to the CHB Utility STP to improve the sustainability of operations and allow completion of the approved Beaches subdivision" (. p56 REF). That is their sole stated purpose, ignoring that the proposed variation would appear to be a cost-cutting downgrading of the current approved and self-contained sewerage system.

Such is the potential impact on the environment if this proposal were to proceed, that a robust Environmental Impact Statement should be mandatory.

All earthworks preparing the ground for sale of individual lots to the public, currently taking place in the spray area of areas 6 &7 of the residential development, should cease until Solo Water Pty Ltd develops an acceptable solution other than the cheap and nasty discharge into the environment proposed in this variation application.

The treated effluent generated by the new residential development should **never** be discharged into a totally different catchment area that is part of a State Heritage listed township, none of whose houses are connected to the water and sewerage system built and operated by Catherine Hill Bay Water Utilities Pty Ltd (Solo Water).

This variation application is deeply flawed and should not be granted.

A separate Approval is required.

As the plumber, who is presently at my home fixing a leak, says this is 2018 not 1967.

Yours faithfully, Suzanne Whyte

