

**Objection to
Catherine Hill Bay Water Utility Pty Ltd - Network Operator Variation**

Currently Approved Licence 16_035

The Catherine Hill Bay Progress Association objects to the proposed licence variation on the following grounds:

- 1. The applicant, Solo Water Pty Ltd, does not give “sufficient information or demonstrate... the issues or impacts associated with these activities, and the processes required to address or manage these issues or impacts” (p1)**

The current licence states that “All wastewater produced in the scheme is managed onsite within the footprint of the approved residential subdivision by a combination of non-potable reuse at individual lots and via controlled irrigation of public space” (refer para.4.2.6, 4.3.6).

The public space that the operator is referring to is areas 6 & 7 of the residential subdivision owned by the developer Rose group. Now that Rose group wishes to begin preparing this land for the sale of residential lots the spraying needs to go elsewhere. The operator knew that this issue would arise when the initial application was sought.

The original application had no allowance for discharge of any liquid of any kind to the environment outside the residential development area. The licence was granted on this basis. Now the operator is seeking a variation which will allow them to discharge more than 162,000 litres a day into the environment **outside** of the development area. The discharge will be in a different catchment area to the process plant, into a “wetland” and stream that traverses a National Park and ends up on the beach at Catherine Hill Bay. And yet the applicant states that, “The additional flows due to SDRW release are unlikely to be significant under the proposed release management system.”

The assertion that “the excess water will flow through a coastal lagoon which has been estimated to be open to the ocean some 73% of the time is totally untrue. We live here, and we see it every day. The lagoon has not opened once this year.

Yet the operator ignores the request to provide a land capability assessment, with the answer N/A, and then makes the claim that an Environmental Impact Study (EIS) is not needed for this variation request. The application asserts “the proposed surplus recycled water release system will not result in significant impacts.”

How can they possibly say this when there has been no EIS. The original application did not address this issue as there was to be no discharge into the environment at

all. We are strongly of the view that a full EIS is required for this significant proposed change to operations to release treated effluent into a National Park waterway flowing onto a pristine beach.



Above is a photo of the beach lagoon where it is proposed to release the treated effluent, taken in April 2018.

Following is an excerpt from the application describing how this treated effluent will be “managed”.

“Dry release will be to the beach lagoon at a rate at which inflow of the SDRW matches the beach lagoon outflow. Dry release is proposed to ensure that there is minimal disturbance of good quality aquatic environment during periods of naturally low or no flow. Dry release will occur when SDRW storage limits are approached and there is insufficient flow in the catchment to provide adequate SDRW dilution. The purpose of dry releases is to protect the more sensitive aquatic and riparian environments in the conservation area during periods of low flow. The dry release is direct to the lagoon.”

We believe this is a distortion of reality, and it is highly cynical for the proponent to claim this and yet refuse to have an Environmental Impact Study.

The applicant claims that the initial WICA licence application envisaged 3 stages; the third being the “inclusion of the existing villages of Catherine Hill Bay and Middle Camp.” We could not find any reference to this in the original documents, and indeed we were informed by the developer that this would not be forthcoming. Is this proposed third stage now an attempt to cover up the fact that all of the treated effluent that is proposed to be discharged into the catchment of the heritage township of Catherine Hill Bay has been generated in the Beaches subdivision alone?

The application is also misleading in paragraph 4.2.4, where it 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 of the Beaches estate was based on connections with Swansea for water supply and sewerage. Once the developer Rose group achieved this Approval they 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 sewerage were part of the initial plan to link to Swansea and they cannot simply 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 meant to be for release of treated effluent, but only for 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 into a very small creek that becomes a lagoon on a pristine beach. Rarely does this lagoon break through into the sea. Children frequently play in this lagoon when the sea is too rough or dangerous.

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, as follows:

“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.” It also seems highly likely that the proposed release will result in an odour problem in residential areas adjacent to the creek and lagoon, as there is already a noticeable odour in the areas where Solo Water is currently spraying waste water onto the lands that will form the future stage 6 & 7 of the Beaches estate.

The applicant justifies 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.”

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.

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 162,000 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. We 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 tourism destination at local, regional, state and interstate level. It would be a terrible outcome for the heritage township if this variation were to be allowed.

Conclusion

There should be no discharge into the environment at all in Catherine Hill Bay and surrounding National Parks. 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.

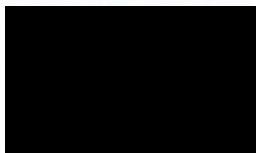
The potential impact on the environment of this proposal is very significant, and due diligence requires that a robust Environmental Impact Study should be mandatory, rather than a simple amendment to an existing Review of Environmental Factors (REF) document.

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 licence variation application is deeply flawed. It will result in unacceptable impacts outside of the catchment area of the residential estate that it services and should not be granted.

Yours faithfully



Suzanne Whyte
President
Catherine Hill Bay Progress Association