Objection Letter

Catherine Hill Bay-Network Operator Variation application Currently approved licence 16_035 I object on the following grounds

1. The variation proposes an entirely new waste water processing solution to the original approved licence. This should be assessed an approved accordingly as a brand new application for waste water management for the Beaches development.

The application for variation proposes to discharge more than 162, 000 litres a day of treated effluent into a coastal lagoon area on the south side of the pristine Catherine Hill Bay beach. The <u>original application showed no discharge</u> of any liquid of any kind to the environment outside the residential development area. The licence was granted on this basis.

The variation proposal claims the "*REF* and risk assessments have demonstrated the proposed surplus recycled water release system will not result in significant impacts, and is lower in risk than the existing approved licence, hence an EIS is not required for the Part 5 approval'. This is completely misleading and inadequate.

Supportive documentation provided by the applicant was based on desktop analysis and provides no relevant data to assess the impact of additional wastewater into the Middle camp lagoon in the heritage township of Catherine Hill Bay. The Coastal Hydrology Impact Assessment for example compares two entirely different catchment systems (that of Moonee Beach and that of Catherine Hill Bay) and two entirely different wastewater management systems (the existing 'approved' licence with the 'proposed variation'), then surmises the increase in flow is "minimal" and insignificant (Section 4.1 - 'Coastal Hydrology Impact Assessment'). This completely defies logic!

To claim this level of waste water treatment is of a quality suitable for a wellused public waterway is misleading and insulting to the community. The application for variation is a cheap solution that prefers to pollute a sensitive coastal environment, outside of the Beaches development area, without proper assessment or local approval, in place of building the necessary infrastructure to suitably manage the waste water treatment of the beaches development.

2. The variation fails IPARTS first key licencing principle to "protect the public health, environment, public safety and consumers in general"

This proposal will have significant impacts to the **air and water quality** and the natural ecosystem of the Catherine Hill Bay heritage township – a well-recognised destination for NSW - and the public health of the wider community who frequent the beach.

The proposed site is situated approx. 100 meters north of the well patronised Catherine Hill Bay Surf Club and public amenities including a very well used BBQ and picnic area - directly above the lagoon on the southern side. The beach directly in contact with the proposed release site is well used by surfers, fishermen, and beach goers alike from Catherine Hill Bay and surrounding suburbs (Nords Wharf, Murrays Beach, Swansea, Gwandalan, Summerland Point, Chain Valley Bay, Lake Munmorah etc.). The surplus recycled water proposed to be released directly into this site is claimed to be treated to a level suitable for "*dual reticulation, toilet flushing, laundry washing machines, firefighting and outdoor cleaning*" (3.7.1, pg 16). This is not a level suitable for an open waterway! The proposed variation <u>will most certainly pollute the clean waters of the only patrolled beach in the area and create an unpleasant odour for residents and visitors alike</u>.

The current pump out/ biocycle systems in place for the surrounding housing in the 'Main camp' village of southern Catherine Hill Bay heritage precinct maintain a delicate and sustainable ecosystem. Outflow of these systems is mostly absorbed into the ground prior to reaching the creek/ lagoon system. The capacity for the lagoon to hold additional effluent discharge therefore, which originates from outside of this sustainable catchment area, is completely inappropriate and will significantly impact on the sensitive coastal environment

and the public health of local residents and the wider community who access the beach.

The field inspection in Aug 2016 witnessed the creek quite full, yet the inlet to the sea still "heavily shoaled" (pg 3 2.2). Break out to the sea from the lagoon is in fact very rare and would match the behaviour of the majority of coastal waterways, as is described in the overview "*The majority of coastal waterways that exhibit intermittently closed and intermittently open entrance conditions are closed most of the time*" (Section 2.5 Entrance Conditions and Dynamics – pg 11)

This means that the majority of the time the discharge will be into a body of water with <u>very low catchment flow</u>, which will create a myriad of potential impacts in regards to increased air (odour) pollution, increased water borne diseases, impacts on water quality and safety for swimmers, fishermen, surfers, as well as impacts on fish, bird and plant life, cleanliness of dunes etc etc. **And none of this impact has been assessed!**

Having grown up in Catherine Hill Bay I can claim with certainty that the lagoon is almost always dry or at best a small pool of still water, very sensitive to storm water pollution. On the rare occasion the stream enters the sea, usually only after weeks of heavy rain, the lagoon becomes a popular swimming area for children when stormy seas have become too dangerous for swimming. <u>A</u> proposal to release treated effluent into a public waterway where children will be swimming shows complete disregard for conservation of the coastal environment and the public health and safety of the community.

Surely the operator should have to arrive at a solution that maintains a sustainable environmental outcome for waste water management *within* the development zone, or otherwise build the necessary infrastructure to transport the surplus to a suitable centralised treatment area. This is simply an attempt for the operator to 'save costs' and impose a significant and lasting cost to the coastal environment and to public health of the community.

3. The application makes ungrounded assumptions about the coastal environment of the Catherine Hill Bay heritage precinct without having any evidence from approved sources (such as an Environmental Impact Study – EIS).

The assessments provided in supporting documents are totally inadequate, making erroneous statistical claims regarding the nature of the coastal waterway, without providing any rigorous data. For example, the entirely desktop 'Coastal Hydrology Impact Assessment', provided by ADW Johnson, with only one field inspection on 23rd Aug 2016 forms the basis for the applicant's summary of environmental impact of the proposed discharge of treated effluent on the lagoon creek system. While admitting that "no water level records are available for the small coastal creek at Catherine Hill Bay" (2.5, pg11), it goes on to claim "satellite imagery and [handpicked] aerial photography shows the creek maintains some hydrological connection to the ocean more often than not". More often than not then somehow becomes "73% of the time" – without any proper field assessments having been conducted!

The obvious impact of liquid effluent discharge into the creek lagoon system is, as the applicant concedes, an "increased flow" or the "likelihood of increase in artificial breakouts to the sea and 'scouring' due to larger additional discharges" (pgs 27, 29-30). The modelling provided to assess the flow - as somehow insignificant! - was a prospective comparison of the 'approved' development scenario with the 'proposed' development scenario (4.1 pg 21). This is completing misleading. The approved development scenario, as they explain, refers to Stages 6 and 7 of the 'Beaches' development which is land bordering the Pacific Highway and North side of Montifiore Street, land over the ridgeline, several hundred meters away from the 'proposed' site for waste water discharge. The current approved licence is for an entirely different development area and an entirely different method of wastewater management. How can the operator justify a comparison of runoff from rainwater tanks in a different water catchment area to direct discharge of recycled water into Middle Camp lagoon? The actual impact for release of treated effluent into the lagoon is rather entirely new and unprecedented. This impact must be assessed accordingly.

4. Heritage impact on Catherine Hill Bay heritage precinct

Catherine Hill Bay is a State listed Heritage Township, one of only two such listed towns in NSW. Catherine Hill Bay is a NSW Destination at local, regional, state and interstate level. I find it incomprehensible that anyone would wish to dump treated effluent into the lagoon on the beach where this still body of water would in all likelihood become septic. The houses in the heritage listed village are not connected to the water and sewerage system built and operated by Catherine Hill Bay Water Utilities Pty Ltd (Solo Water). Each house manages their own individual systems which maintain a delicate and sustainable ecosystem that includes a wide variety of native flora and fauna. To allow an additional discharge to occur within this delicate beach lagoon in 'main camp' village, would significantly impact the experience of the pristine coastal township for local residents, holiday rentals and visitors alike and thus be a terrible outcome for this heritage township.

Approval of the variation would be an approval to pollute a pristine coastal environment within a heritage precinct. Please consider these significant impacts in objection to approval of this variation.