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14th December 2024
Ref. No. 240905A

Mr. J. Wish
PO Box 164
CHURCH POINT NSW 2105

RE: ON-SITE EFFLUENT MANAGEMENT AT LOT 108 DP 12749, No. 11 FLORENCE TERRACE, SCOTLAND ISLAND – NORTHERN BEACHES COUNCIL DA2024/1552

Dear James,

Further to our recent liaison and mine with Mr. Gary Hobart of Wastewater Management, I am pleased to provide this submission to address the points raised in regards to on-site effluent management for the development proposal submitted to Northern Beaches Council which involves the existing dwelling to be renovated and extended (or 'alterations and additions'). Reference is made to the following:

1. The report for on-site effluent management by the undersigned from September 2024 (Ref. No. 240905) that was submitted to Council.
2. The 'Environmental Health Response – unsewered land' by Anaiis Sarkissian of Council dated 20/11/24. Six points were detailed in this letter which are addressed in this submission.

Point 1 – Distance of Tanks from the Dwelling

In the Figure 1 plan that accompanied the effluent management report, the location of the existing pump well and septic tank were plotted within 1.5m from the dwelling. At the time of

our meeting on the property on 13/9/24, the tanks under the deck were not actually observed beneath the two hatches built into the deck. Therefore, the location of both tanks in Figure 1 were estimated and approximate. Subsequent to the Council letter, your opening of both hatches and inspection of the tanks shows that they are in fact 1.5m or more from the dwelling which satisfies the requirement of Council.

In addition to what is noted above and conformance with the requirement of Council, the following points are made:

- It is understood that the tanks were approved by Council at the current locations when they were installed approximately six years ago.
- In the experience of the undersigned in almost 25 years doing reports for on-site effluent management reports in Scotland Island and other offshore parts of Pittwater, many wastewater tanks have been approved at a distance of less than 1.5m from dwellings due to the small size of properties and associated limitations – i.e. accept variations to the document sited under this point. Furthermore, there would also be multiple other examples of wastewater tanks being within 1.5m of dwellings within Pittwater on properties I have not been directly involved with, but where it is assumed they were approved by Council.

The relocation of the tanks are therefore not considered to be necessary. This would also not be something that is viable on the property due to the position and extent of the existing and proposed features of development, as well as the location of the foreshore building line restriction. Furthermore, all the current plumbing from the dwelling is directed to the existing septic tank and a change to this situation is not considered to be a feasible or viable option.

Point 2 – Deck Covering Existing Tanks

Whilst it is noted in this point about the Council records in regards to the deck and what are two hatches (i.e. one over each wastewater tank), it is understood that these were inspected and approved by Council. Whilst it is considered that there is enough space in the hatches to offer appropriate access to both tanks, they will however be made larger if required as part of the conversion/retro-fitting to an aerated wastewater treatment system **(AWTS)**. This matter will be properly addressed and the hatches made larger if required at the time of the conversion. It is clearly not in your best interests to keep the hatches at the same size if it is determined they

are not large enough for the conversion and continued servicing/maintenance into the future. Therefore, it is considered that the scenario with the deck and hatches should not hold up the approval and requirements can be conditioned on the consent to carry out the action required by Council if it is actually required.

Point 3 – Details of AWTS system

Further to my liaison with Mr. Hobart, the following pertinent points are made by way of clarification and explanation:

- The septic tank and pump well are each Everhard polyethylene tanks with a capacity of 3000 litres.
- The two current tanks will be utilised and retrofitted where necessary to become what is akin to an Econocycle ENP 10-2 AWTS which uses the two Everhard tanks as noted above – i.e. one as a septic tank whereby the primary treated liquid effluent is discharged to the second treatment tank. In this regard, at the subject site the current septic tank will remain as the septic tank, whilst the current pump well will be converted to the secondary treatment, clarification and aeration tank. Note that as with all dual tank systems, both tanks constitute the proposed AWTS as a whole.
- The NSW Health accreditation for the ENP 10-2 AWTS model lapsed about two years ago when Econocycle replaced/superseded this with the Eco-Septic Eco Pro model comprising both single concrete tank and single polyethylene tank versions.
- The Econocycle manufacturer is in the process of currently accrediting (or 're-accrediting') with NSW Health the retro-fitting/conversion of pump wells to the secondary treatment tank of the ENP 10-2 AWTS model. Mr. Hobart contacted the Econocycle company owner on 12/12/24 and confirmed that this accreditation, which is relevant to the scenario at the subject site, is anticipated to be done by the end of February 2025.

Based on the points above, Mr. Hobart has indicated that it is not possible at this point in time to address the requirements of Council under point 3 in their letter until the NSW Health accreditation process is completed. When the process is completed, the required action of Council will be addressed and relevant details provided.

As noted under point 2, it is considered that this scenario should not hold up the approval of the Development Application relating to the works on the dwelling currently within Council. Approval can be granted by Council for the Development Application at this point in time and requirements relating to point 3 will be addressed when possible and prior to commencement of dwellings works. This is also pertinent as you have conveyed that effluent system works in relation to conversion to an AWTS will occur before works on the dwelling commence.

Point 4 – Impact of New Works on the Water Side

The boat shed is fitted with a toilet, hand-basin, shower and kitchenette sink. It is also understood that the boat shed is not utilised for overnight habitation and that this is not permitted by Council – i.e. cannot have two structures for overnight habitation on a single property.

In light of the scenario described above and as akin with rural sheds for example, usage of the features of wastewater generation in the boat shed is at the expense of the same not being utilised in the dwelling. Therefore, the boat shed does not add to the maximum design effluent volume applied to both the current dwelling and also when the dwelling is renovated and extended.

As confirmed with yourself and Mr. Hobart, the new proposed construction on the water side will not impact on the holding tank and land application area system servicing the boat shed due to the following reasons:

- The construction works are well upslope of the boat shed, whereby gravity feed is required for the features of plumbing to what is referred to as its holding tank by Council. This precludes the possibility of the holding tank being anywhere near the proposed construction works.
- The boat shed has a small holding tank adjacent to its western side with a macerator and pump within it – i.e. pump well with macerator. This is conveniently positioned to accept effluent by gravity feed from the boat shed.
- The pump well with macerator for the boat shed transfers effluent to the initial septic tank servicing the dwelling and which will remain in place as is when the dwelling is renovated and extended.

- Primary treated liquid effluent from the septic tank that is transferred to the 3000 litre pump well is applied to the existing land application arrangement upslope of the dwelling and boat shed to the south, which is outlined in the effluent management report and shown in the Figure 1 plan that accompanies it. This means that the boat shed does not have its own separate effluent land application area. Therefore, it is considered that plans do not need to be revised as there is no potential for these areas referred to in the Council letter to become inaccessible or be built over.

It is also considered that Council records and past approval(s) in regards to on-site effluent management would testify to the scenario described to address point 4.

Point 5 – Registration of Onsite Wastewater Management Systems

Based on the points above relating to point 4, the site does not have two onsite wastewater management systems which is also something that would be testified to by Council records. One system is only registered because that is all there is – i.e. one effluent management system as a whole that caters for treatment and land application from the dwelling and boat shed. Therefore, no action is required in this regard.

Point 6 – Approval to Operate

Without you being notified by Council, there is no known way for you to be aware as the new owner of the property that the approval to operate the onsite wastewater management system has expired. In addition, this is considered to be akin to Service NSW for example requiring people to upgrade their car registration or drivers licences in that they issue people with appropriate notices to ensure these things are done. It is also Councils responsibility within their system to initiate the on-going approval to operate process, provide staff to actually do this and notify landholders of this and issue the findings of inspections in writing.

Therefore, the responsibility for this scenario described by Council under point 6 is considered in no way to possibly be yours. Even if it happened to be, in light of the proposed works on the dwelling incorporating an upgrade from primary treatment to secondary treatment with provision of an AWTS as outlined and the substantial beneficial effects this offers from both public health and environmental perspectives, it is considered that upgrading the lapsed approval to operate at this point prior to the approval of the Development Application is

superfluous and unnecessary. Hence, it is considered that approval for the proposal for effluent management encompassing the conversion of the existing pump well and septic tank to an AWTS can incorporate a new approval to operate when the works are done.

Do not hesitate to contact me if I can be of further assistance.

Yours faithfully,

GRANT AUSTIN
Engineering Geologist
Member Australian Institute of Geoscientists
Affiliate Institution of Engineers Australia