Environmental Health Referral Response - unsewered land

Application Number:	DA2018/0865

Responsible Officer	Phil Lane
Land to be developed (Address):	Lot 1039 DP 752038 , 1039 / 0 Oxford Falls Road OXFORD FALLS NSW 2100

Reasons for referral

This application seeks consent for development upon unsewered land.

And as such, Council's Environmental Health and Protection officers are required to consider the likely impacts.

Officer comments
General Comments
This referral has been reopened following submission of additional information, following recommended refusal which is EH's standard response where information is lacking .

This site is classified as high risk for purposes of on-site waste water management (applies even for a domestic system and especially for a commercial system).

The applicant has clarified and corrected some matters including; that the existing system, which had not be inspected by Council and did not have a current Council approval to operate, now has an approval to operate (this is not a certification but a visual assessment of no obvious failure/overflow , damage to visible components and verification of routine quarterly service by a contractor) - all based on the current operation at the time of inspection (60 children, 10 staff).

However it is proposed to considerably increase the number of children and staff and hence potential design load needs to be adequate and compliant .
Using the current water usage on site not a determining factor by Council and standards in calculations for approvals.
Councils assessment in summary considers ; existing conditions (adequate for current numbers) tank size/treatment process and especially on this site disposal area (LAA) capability.

The applicant refers to a waste report by Martins and Associated dated 2009 and subsequent confirmation of "correct installation" of the AWTS by Simmat and associates November 2011 (accepted) .
However the original Martens report advised of Land Application Area (LAA)of 1614 sqm
The Simmat Certification refers to an area "in excess of 1235 sqm " but not a definitive area to base a considerable additional load on .
The Simmat report does not refer to the "recommended" provision of a 34.6 kl back up storage facility located adjacent to the STP (Sewage Treatment Plant) ; and the irrigation area varies from the minimum irrigation area of 1577sqm as per the Martens report.
Further, a reserve LAA is not addressed.(The minimum effluent application area should include a sufficient reserve to
allow rotation of the dosing area to help recovery of soils and vegetation and to provide an alternative application area in case of system failure)

Not withstanding the above Council does not know exactly what the LAA size currently is, if there is

reserve capacity and especially the ability to cope with a sizable increase from 60 to 108 (children) and 10 to 15 (staff) plus additional loading if a dishwasher exists or is proposed.

Normally all these issues would be addressed in the DA.

If the applicant can submit detail on how this proposal will be compliant, in a high risk situation this would assist a positive outcome.

It is assumed the additional report will show detail not only the existing tank size/treatment system but just importantly the size of the land application area for the given number of proposed occupants and if there is any over design capacity from the original system.

In summary it is our concern that the disposal area (LAA) may not be of sufficient size/design to accommodate the proposed increase in water load in a high risk site without failure/ nuisance and therefore approval cannot be recommended.

Recommendation

REFUSAL due to inadequate information until assessment can be made

REVIEW 19 .21.2018 new information supplied :

The applicant has submitted additional information, lacking in the previous correspondence -now including comments below :

Adequate “resting” of an irrigation field will be assured by sequentially dosing each separate irrigation field using a manual or automatic index valve. Resting would also occur over the night period when the site is essentially vacant.
It is appreciated, however, that the Martens Report included a requirement for 35 kL of wet-weather storage, which was not installed. Therefore, the proponent agrees to install 35 kL of wet-weather storage which would be used in particularly wet periods if necessary to avoid irrigation onto saturated ground. Wastewater would be stored until better weather conditions prevail and irrigation may resume.
In summary:
Appendix 3 shows the wastewater treatment and disposal system was correctly installed to handle a design load of 3,500L/day, seven days a week.
Appendices 1 and 2 show that, even after the proposed increase in attendance numbers, the design wastewater load will be approximately 42% less than the original design load assumed in the Martens report.
35 kL of wet weather storage will be provided.

On this basis conditioned approval can be recommended.

Recommended Environmental Health and Protection Conditions:

CONDITIONS WHICH MUST BE COMPLIED WITH PRIOR TO THE ISSUE OF THE OCCUPATION CERTIFICATE

Prior to the increase in day care children numbers
Prior to the increase in day care children numbers it is critical that a qualified water water consultant certify (copy to Council and waste water service company contractor) that the waste water system has been upgraded and is now compliant with the reports by Martens and Associates Pty Ltd(original design) , Simmat and Associates (for previous installation with modifications) and current SEEC (Strategic Environmental & Engineering Consulting) dated 12 December.
The report shall include reference to the satisfactory installation of the 35kL wet weather storage and owner/occupier management and electronic automatic(preferred) or manual systems to ensure appropriate wet weather storage and sequential dosing of each irrigation field as determined by prevailing weather conditions ongoing.

Reason: To ensure health standards are maintained for the operation of the waste water treatment system in a high risk environment (DACHPFPOC3)