Submission on the referral

KTT Investment Pty Ltd - North One Hotel and Apartments

This submission is made under regulation 53 of the Environment Protection Regulations 2020

Government authority: Department of Health. Centre for Disease Control. Medical Entomology unit.

Summary: Medical Entomology has no objections to the proposal, and no biting insect investigations are recommended. The location is in urban Darwin, which is serviced by a routine mosquito monitoring and control program. The proposed project is located in one of the least affected coastal areas of Darwin for biting insects. The Biting Insect Management plan is also very thorough for a small development site. Medical Entomology comments on this proposed project relate to information in the management plan that requires clarification/modification to ensure the correctness of the information.

Section of Referral	Theme or issue	Comment
Appendix 21. Biting Insects Management Plan	Clarification/modification of some statements in the management plan	 The Biting Insects Management Plan is very thorough for a small development site, and is commended. There are no knowledge gaps from a biting insect perspective. There are some details in the Biting Insects Management Plan that appear inaccurate or could be misinterpreted. Medical Entomology comments are provided below; Section 2.1 Biting Midges. It is mentioned in this section 'Culicoides ornatus is expected to occur in very high seasonal numbers as follows: • Extremely high seasonal numbers from August to November (late dry season); • Very high numbers from April to July (early to mid-dry season); and • High numbers December to March (wet season)'. This statement would be incorrect for the Mindil Beach area. The Mindil Beach area only experiences low biting midge problems throughout the year, when compared to other Darwin suburbs such as Bayview, Stuart Park, Fannie Bay and Rapid Creek. Table 4.1: Potential Impacts. Biting midges. The first and third sentences are somewhat overstating the potential impact of the low biting midge populations in the Mindil Beach area on the workforce. Medical Entomology is yet to receive a biting midge complaint from the adjacent Casino or nearby sporting facilities, therefore the use of the words 'severe and unbearable' and 'disruption' seems to infer that high biting midge issues could occur. For the first sentence, a word such as 'annoyance' may be more applicable than 'disruption'. For the third sentence, it might be more appropriate to remove the words 'Severe and unbearable' and replace them with the word 'uncomfortable'.

Mosquitoes.
Last paragraph in table. It would be more accurate to state there is a low to moderate risk of Ross River virus (RRV) and Barmah Forest virus (BFV) transmission at the site, very low risk of Murray Valley encephalitis virus (MVEV) and Kunjin virus (KUNV) transmission, and unlikely risk of malaria transmission. RRV and BFV transmission can occur year round, but is most prevalent from December to June, while March to June are the peak risk months for MVEV and KUNV.
Section 5.4 Chemical Control. Is it mentioned 'Where larvae or adult insects are identified within the site or in high numbers in Little Mindil Creek, chemical control measures may be employed. Advice must be sought from the NT Medical Entomology Branch in regards to choosing a suitable method of control for the eradication of biting insects, prior to proceeding with chemical eradication options'. With regards to Little Mindil creek, once it has been excised from the current lot, it would be expected that the relevant authority that owns the creek would be responsible for mosquito control and not the resort owner.
 Overall, the development is anticipated to remove the existing wet season salt marsh mosquito breeding sites that are currently present in the mown grassy area, and therefore the development should reduce the amount of seasonal mosquito breeding that can occur in the Mindil Beach area.
 No Medical Entomology development conditions are recommended as the proponent has a detailed biting insect management plan.