Submission on the referral

Department of Infrastructure, Planning and Logistics - Wurrumiyanga Residential Subdivision

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

Government authority: NT Health - Medical Entomology division

Summary: There is no requirement for any additional biting insect information. The wet season overflows from the Wurrumiyanga sewerage ponds into adjacent bushland should be rectified as soon as possible, to remove a potential mosquito hazard. The development site should be maintained free from mosquito breeding during the construction phase, with all areas of temporary ponding rectified upon completion of development. The nearby man-made swamp should be removed as a potential nearby source of mosquitoes.

Section of Referral	Theme or issue	Comment
Main report – section 1.3 Regulatory Content	Applicable legislation	• The Public and Environmental Health Act 2011, and associated Public and Environmental Regulations 2014, are applicable to the proposed residential subdivision.
Figure 2.1 Map of Proposal Components & Figure 2.2 Wurrumiyanga area plan	Man-made swamp (swimming hole)	The area of seasonal ponding, referred to as a man-made swimming swamp on Page 8 of the referral, has been surveyed by Medical Entomology and found to be of low mosquito productivity. However, it should still be rectified as part of the development, to remove the site as a potential nearby source of mosquitoes.
Table 2.4 Key Proposal features	Sewerage ponds	 It is mentioned that no upgrades are required to the existing Wurrumiyanga wastewater facility. Medical Entomology has observed wet season overflows from either the primary wastewater pond (2022 & 2023) or the tertiary wastewater pond (2024). Effluent overflowed into adjacent bushland, with localised mosquito breeding detected in the pooling effluent. The overflow was occurring after monsoonal rainfall, despite the presence of a discharge pipe from the tertiary pond to the nearby tidal mangrove creek.
		Medical Entomology understands there is a commitment to upgrade the discharge pipe from the Wurrumiyanga wastewater ponds, to prevent any future overflows into the bushland. This upgrade should occur as soon as possible, to mitigate the potential public health risk associated with effluent overflows. The following condition should be included in

		a draft environmental approval: "The wastewater ponds should be assessed during the first wet season after the discharge pipe has been upgraded, to ensure the upgraded pipe is preventing overflows".
	Construction phase sediment control	• The development site should be maintained free from residual surface ponding during the construction phase, to prevent potential mosquito breeding. Temporary sediment control structures would be the likely areas of residual ponding, along with vehicles ruts and water holding containers. If temporary areas of wet season ponding cannot be avoided, methoprene 30 day pellets should be applied until the ponding is rectified. The following condition should be included in a draft environmental approval: "The development site should be maintained free from residual surface ponding. If temporary areas of ponding cannot be avoided, they should be treated with methoprene 30 day pellets until the ponding is rectified."
	Stormwater drains	 Stormwater drains should be constructed to the standards outlined in the NT Subdivision Development Guidelines, to ensure they are free from ponding and potential mosquito breeding.
Table 4.1 Environmental Factors not assessed and brief justification	People – Human Health	 It is mentioned "Wurrumiyanga township is included in the standard Medical Entomology part of Centre for Disease Control (NT Health), annual monitoring program undertaken throughout the NT". The mosquito monitoring program has now ceased after four wet seasons. However, Medical Entomology is still available to provide advice to residents and other stakeholders when required.
		In general, Wurrumiyanga is subject to seasonal pest biting midge problems due to the nearby tidal mangrove creeks. Occasional seasonal mosquito problems also affect the community, primarily caused by salt marsh mosquitoes. There are no routine biting insect control programs carried out on the Tiwi Islands, therefore residents would need to mitigate biting insect problems via personal protection and avoidance.