

Submission on the referral

Groote Holdings Aboriginal Corporation - Little Paradise Development

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

Government authority: Department of Health – Public Health Division, Medical Entomology

Summary: The proponent has provided a comprehensive Biting Insect Management Plan, as well as a baseline biting insect report. No further information is required. Some minor editing should be carried out to ensure the information in the BIMP matches the baseline report, and to include further mitigation measures.

Section of Referral	Theme or issue	Comment
Main referral report Table 4.1 NT Legislation.	Applicable Legislation	<ul style="list-style-type: none"> The Public and Environmental Health Act 2011 and associated Public and Environmental Health Regulations 2014 are applicable to the proposed development.
Main referral report Page 29. Aquaculture	Stage 3 environmental release	<ul style="list-style-type: none"> The described Stage 3 aquaculture discharge has the potential to increase mosquito breeding in the receiving upper tidal area. A change in water regimes could alter the vegetation type in saltmarsh and upper tidal mangrove and cause residual ponding and increased mosquito breeding. Mosquito mitigation measures would be required to minimise the potential for aquaculture release to increase mosquito breeding. This could include. <ul style="list-style-type: none"> Pulse release of the aquaculture water. e.g. on a week on-week off cycle, or on one or two days per week The discharge should be released directly to a daily flushed tidal area below 3m AHD.
Biting Insect Management Plan	Sections 1.2 to 1.4, & 1.7 Plan	<ul style="list-style-type: none"> These sections seem to be relevant to a different management plan.
Biting Insect Management Plan	Section 4.1 Biting midges	<ul style="list-style-type: none"> Paragraph 3 appears to be quoting Darwin Harbour biting midge abundance, which can be high to extremely high. The baseline biting insect report only mentioned the potential for low to moderate biting midge pest problems in the Little Paradise area. The BIMP should be updated to reflect the potential for only low to moderate pest biting midge problems.
Biting Insect Management Plan	Table 4.2 Mosquitoes	<ul style="list-style-type: none"> This table seems to be overstating the mosquito borne disease risk posed by the mosquito species <i>Culex annulirostris</i> and <i>Aedes vigilax</i>. The potential virus risk posed by <i>Cx. annulirostris</i> is likely to be low to moderate, and low to relatively high for <i>Ae. vigilax</i>.

Biting Insect Management Plan	Table 6.1. Biting Insects objectives and management measures	<ul style="list-style-type: none">• This section of the BIMP lists numerous management activities, although not all appear applicable to the proposed Little Paradise development. Two applicable management measures that should be added are outlined below.<ul style="list-style-type: none">○ The aquaculture discharge area should be inspected monthly in the dry season to determine the presence of residual ponding and mosquito larvae. Potential mitigation measures are described in the second dot point.○ Septic tanks, or any other wastewater treatment device, should be appropriately maintained to prevent mosquito breeding.