Submission on the draft Environmental Impact Statement

Winchelsea Mining Pty Ltd – Winchelsea Island Manganese Mine Project

This submission is made under Regulation 134 of the Environment Protection Regulations 2020
NT EPA reference number: EP 2021/004

Government authority: NT Health–Public Health Division – Medical Entomology
Summary: There is a detailed Biting Insects Management Plan and Biting Insects Report that accompanies the Draft EIS. Therefore, there are no major Medical Entomology comments, only scientific comments regarding some information provided in the Biting Insects Management Plan.

Section of Referral	Theme or issue	Comment
Biting Insects Management Plan (BIMP)	Biting Insect management	• BIMP Section 3.1. Biting Insects. First paragraph. It is mentioned '*Biting insects in the region consist of biting mosquitos and midges. Mosquitoes are potential transmitters of disease to humans. Distribution and abundance of the biting insects vary according to seasonal and other changes in habitat and food availability. The risk of being bitten and/or transmission of disease to humans varies in relation to species, breeding cycles and abundance. Different species of biting insects have differing patterns of distribution and seasonal changes in abundance. Greatest effects are encountered for a period of 6 days around a full and new moon, during the two hours around sunset and sunrise. Night time effects may also be encountered. The dry season poses a greater risk than wet season effects'.* The third last sentence in this paragraph '*Greatest effects are encountered for a period of 6 days around a full and new moon, during the two hours around sunset and sunrise'* refers to mangrove biting midges only, as the seasonal abundance for most mosquito species is generally related to rainfall and high tides rather than moon phase. The last sentence '*The dry season poses a greater risk than wet season effects'* is also only applicable to mangrove biting midges. The paragraph in Section 3.1 of the BIMP should be reworded to reflect this. • BIMP Table 3-2. Characteristics of the mosquito borne diseases • In the Description of the Diseases column of this table, some changes are recommended to accurately reflect the information provided in the Biting Insects report. Suggestions are mentioned below o Mosquito borne disease-Ross River virus. It is mentioned 'Based on the likely abundance of the vector mosquitoes, Aedes vigilax will pose a very high risk of transmission in December and January. This species may also pose an appreciable risk in other months such as October and November depending on seasonal rainfall, or high tides. Culex annulirostris will pose a moderate to very high risk during the wet season months of January to April.' The biting insects report suggests the risk posed by *Culex annulirostris* is low to moderate, and the risk posed by *Aedes vigilax* is moderate to relatively high. This section of the BIMP should be updated to reflect this. o Mosquito borne disease – Murray Valley encephalitis. It is mentioned 'Based on the likely abundance of Culex annulirostris, the risk of MVEV transmission for an unprotected person is likely to be moderate to very high during January to

		March'. The biting insect report suggests the risk posed by *Culex annulirostris* is low to moderate, therefore this section of the BIMP should be reworded to reflect this.