13/2/20 Northern Territory Environment Protection Authority GPO Box 3675 Darwin

Dear Sir/madam

My name is Elizabeth Moore, and I am a resident of Alice Springs – having lived in the Northern Territory for over 15 years. I love the beautiful environment here and really appreciate living in a region with such strong Indigenous culture

I am writing to request that the Singleton Horticultural project undergoes the highest level of environmental impact assessment which is a tier 3 assessment. This is a very large project which (if approved) will be granted the largest water licence (by a very long way) in the NT despite being located in an arid zone. The Western Davenport region (where the project is located) has erratic rainfall, with episodic (and infrequent) peak rainfall years contributing to most of the discharge whereas in most years, there is very little rainfall. There have only been 3 significant recharge events in one hundred years. The project expects that ground water levels will drop significantly as a result of the water licence. The environmental impact of the large water licence and the substantial land clearing that will occur are likely to be substantial.

The arid regions of Central Australia/Barkly are highly at risk from ecological collapse due to climate change as the weather becomes more unpredictable. Already, the ecosystems in the arid zones are seriously compromised including through climate change, invasive species and clearing/development. Granting of such a large water licence at this precarious time is rash and not in line with the precautionary principle of decision making that should inform environmental decisions. A decision on this development should only be taken after much more field work has been undertaken. The proponents plan to use adaptive management to mitigate risks to the environment. However, adaptive management relies on in depth knowledge of the environmental impact of what is being managed – this requires a full EPA assessment.

Other key concerns.

- 1) The impact on ground water ecosystems is uncertain but likely to be very significant. The area contains many significant trees which will be impacted once the ground water significantly drops. This may not be apparent until it is to late- once the roots of the trees can no longer reliably reach the water table. There has been a lack of field work to assess the impact on ground water ecosystems despite the size and significance of the project.
- 2) The potential impact on threatened species including the greater bilby (a disused burrow was located close to the site) and the grey falcon. The loss of trees will further impact on habitat for threatened species. Other potential threatened species include the black footed grey wallaby, the red goshawk, the night parrot, the princess parrot, the painted honeyeater and the Australian painted snipe. There has been very limited field work to

assess these impacts and the field work that did occur was in 2019 – a very dry and atypical year.

- 3) There has been no study to assess the presence of stygofauna in the impacted aquifers. However a review found that it was likely that there was some stygofauna in bores around and in the area of the project. Stygofauna are critical to maintaining water quality and are likely to be badly impacted if there are significant changes to ground water heights.
- 4) The impact on salinity of this development. This has already been assessed through a report by Cook and Keane – they found that there was a very high risk of salinity impacting horticulture after 30 years if this development was to proceed. Salinity could also impact on quality of drinking water for nearby Aboriginal communities.
- 5) The impact on sacred sites and local Aboriginal people's cultural values- noting that local Traditional owners are strongly opposed to the development. The local Aboriginal people are concerned both for their sacred sites but also for the impact on the overall environment including the many wonderful trees and other fauna that grow in this region. Aboriginal people have such a strong understanding of the biodiversity and richness of this region and they are very worried about this development. There are up to 40 sacred sites I the region and they must all be closely reviewed , working with the Central Land Council and Local Aboriginal leaders.
- 6) A non evidence based guideline which states that 30% of ground water dependant ecosystems in the project catchment can be damaged and that this is acceptable. This guideline was not open to public consultation and was not in line with the water allocation plan.
- 7) There will be climate change impacts from the extensive land clearing.
- 8) Cumulative impacts of all the projects in the surrounding Barkly region need to be assessed particularly to review the impact on water and ecosystems.
- 9) The benefits of the project are reasonably marginal (up to 30 full time jobs), and they do not stack up against the risks. Importantly, local Aboriginal people do not see the economic benefits as being worth the damage to the environment.

In summary, I am requesting that this proposal be subject to a Tier 3 environmental impact assessment for all the reasons outlined in this brief submission

Yours sincerely

Liz Moore Sadadeen 0870