Submission in response to the EIS published by Pro Ten in relation to:

Pro Ten Rushes Creek Poultry production unit Proposal for Rushes Creek.

September 2018..…… submitted 04/10/2018

I object to the proposal.

Referring to the stated requirements in Appendix B, Attachment 2, Attachment A

Referring then to the Appendix C Air Quality assessment.

The proponent appears to have ignored several requirements regarding Odour modelling.

They have not in any way considered the destination of odour laden air during cold air drainage events (calm cool nights)
They have not presented an assessment of the topography that affects the passage and accumulation of this air overnight.
It appears that they have only modelled odour dispersion during daytime convective periods.
It appears that they have only modelled for the condition of Lake Keepit being full.

We don't know that they have applied suitable settings to the CalPuff program in order to accurately model the movement of air over the glassy smooth lake surface. It appears that their modelling area has been deliberately trimmed to a very small locality, and any consideration outside this has not been made.

Their stated assumptions regarding the locality appear to be dismissive and ignorant.

The reality of nighttime cold air drainage, the accumulation of odour laden air in low lying volumes, the subsequent relocation of this air during the first 2 hours of daylight, cannot be dismissed. We have 8 years real valid experience of this in relation to the Moana poultry development.

I have personal experience of this on hundreds of occasions following the establishment of the Moana poultry production unit comprising 8 sheds.

I have studied the events in the lower part of the Peel valley (which forms a relatively closed basin), and concluded that it very closely matches the pattern that I predicted in my submissions in response to the EIS of the Moana development.

The general characteristics of the Keepit basin are very similar to those of the lower Peel basin, however it is approximately 8 times bigger.

At all lake levels air will accumulate overnight in the basin. Even under calm conditions, air movement of 0.4 m/s will carry the odour laden air more than 14 km during 10 hours.
At low lake levels there will be a very large volume of accumulation, and during morning warming this air will be carried to every lakeside location.
There will potentially be thousands of recipients.

At high lake levels large volumes of odour laden air will spill over the lowest containment of the basin, which is the Sub Wall resulting in cumulative effects in the Peel basin.

I will be significantly affected by this, yet I am not identified as a potential receptor of odour.

Anyone doubting this prediction should take a little time to interview Mr Geoff Sim, who has a residence very close to the Sub Wall adjacent to the Lake Keepit Soaring Club.
He reports frequent odour events in the first 2 hours of daylight, as a result of flows out of the Peel basin, up the southern slope that leads to the sub wall. This is as a result of odour from only 8 sheds approximately 5 km away.

The proponent asserts the conservative nature of their modelling. This should be tested. We have the opportunity to test their modelling by comparing the daily prediction of their model using real time met data from Moana with the actual odour impact at a nominated location in the Peel basin.

I strongly suggest that:

The proponent be required to comply with ALL issues raised in Appendix B, Attachment 2, Attachment A.

The proponent be required to model for a range of lake levels. It might be reasonable to expect models with the level at 5 meter increments.

That the proponent be required to include the potential impact on a population of thousands of visitors to Lake Keepit.

That the proponent be required to participate in a 6 month testing of their odour modelling, as applied to the Moana situation.
It could go something like this:
Each day their model provides a forecast of odour impact due to cold air drainage, for the lower Peel Basin, for the following day, which is submitted to an independent entity. The forecast should predict the odour detectable at an agreed location, say, The Carroll Gap Bridge, and may be held by the independent entity undisclosed for 24 hours, then published within the next 24 hours.
The actual odour detected could be reported to the independent entity within the same time scale., and published at the same time.
If their model is good and conservative, they should be able to predict odour impact at the bridge with a measurable level of accuracy.
It it truly is conservative it should slightly overpredict detectable, distinct, strong or very strong odour.
I offer to be present myself, or provide an agent, and the proponent should do the same to assess the odour at the bridge at say within 30 minutes of sunrise, each day.

If the proponents model fails to predict odour it should be dismissed as not being conservative.

The model inputs should be monitored by an independent expert in the application of CalMet and CalPuff, to verify that it matches the settings used to their existing assessment.

After 6 months we would have a very good indication of their ability to model their predicted impacts.

I further suggest that, failing to agree to the above model test, a similar test should be run on the first stage of the proposed development (say 20 sheds) for a period of 1 year before a second stage is approved.
Each day, using actual met data from the site and normal met forecasting techniques, the operators be required to lodge a prediction for the following day…… which would be compared with actual odour detected at agreed locations.
The independent entity should be technically competent, audit-able and funded by the operators.

If they are confident of their ability to model compliance they should have no objection.
A plead against it on the grounds of cost should be dismissed, as the cost of offensive odour events after the development is operating would far exceed this.

The potential impacts on tourism for all the operators around the lake are huge.

The EPA should insist that the odour modelling is thorough, tested and accurate BEFORE granting further approval.

I expect to have further opportunity to respond to any further submissions made by the proponent in support of their application, as they respond to this round of assessment.

I expect to be advised and consulted by EPA staff in relation to the assessment, approval and conditions.

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