# GHD

# Memorandum

# 29 May 2018

То	Department of the Environment		
Copy to	Pamela Morales		
From	Chrisjan Joubert	Tel	
Subject	Comments on NBP reply	Job no.	2316318

### Item

- 1D Storage of treated wastewater considered negative. However storage of untreated wastewater proposed. Insufficient storage capacity. Proposed dry composting system is much more labour intensive than small-scale automated proper treatment system.
- Proposed system compose high risk / likelihood of inefficiently treated wastewater discharged to environment. Insufficient wastewater storage. Analogue of dairy treatment and cane farming not applicable: EPA require sufficient treatment levels, wet weather storage. No potential of human waste / human contact in these instances.
- 2G Not resolved
- 3G Not resolved
- 4G Not resolved. Not explained or quantified where more than 50% of water consumption is applied. No records of dust suppression. Historical table is circular reasoning, not providing facts but assumptions only.
- 5G Accepted
- Response implies that dust suppression requires approximately 50% of water consumption. Any records to substantiate? Why not use dam water or drainage channel water for this non-potable application? Water savings claimed however sullage water require to be 100% diluted off-site by contractors. Argument not consistent for simplicity and water efficiency.
- 7G Not accepted.
- 8G W&A's modelling seems incorrect
- 9G Limited detention time and treatment capacity as proposed. High risk of environmental contamination
- Proposed design does not allow for wet weather storage, hold/test/quality control of treated effluent prior to discharge.
- 12G No further comments
- 13G Disparity between demand and discharge not reconciled.



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Risks: under treatment, inadequate storage capacity, increased environmental footprint require din sensitive habitat.

The control measures proposed by GHD will, when properly implemented, reduce overall risk. These are not addressed by the applicant.

- 15G Noted
- 16G Noted
- 17G Adopted waste water volumes are still not substantiated.
- 18G Gap in value adopted for demand and discharge are still not quantified from on- or off-site data.
- 19G Noted
- 1T Measurement and controls are required.
- 1B Disparity between proposed demand and discharge not explained properly nor quantified / substantiated with records. (Avoid circular reasoning by presenting historical assumptions to support current assumption)

# Summary of key issues:

- Low waste water treatment level proposed;
- · Risk of environmental contamination
- Undersized treatment system proposed. Footprint likely to increase for treatment and storage. Impact on sensitive high-lying environmental habitat.
- High risk of environmental contamination by waste water discharge into flood-prone, high water table irrigation area connected to waterway by means of surface drains.

# Regards

# **Chrisjan Joubert**

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