#### Information request from Hamish McTaggart 28/2/2019

"Over the past few weeks I've followed up the majority of outstanding DA referrals for this development application. I've now received comments from all Council Sections and Government Agencies referred the application, with the exception of comments from Council's Roads and Drainage Team – I'll continue to follow up the referral with that team and will hopefully be able to let you know of any outcomes in the near future.

The majority of referral responses received are satisfied with the information submitted and recommend standard conditions to be imposed on any DA approval.

The only referral respondents who have raised issues that require further consideration/information are Council's Environmental Health and Liquid Trade Waste Officer and I've listed there concerns/the information required below.

- 1. **Sewage Management** The statement of Environmental Effects indicates that an on-site sewage tratement facility would be used to store/treat waste prior to it entering Council's sewage. Further information is required about the type of system intended to be installed to confirm whether the device proposed is a sewage holding system/on-site sewage management system for the purpose of the Local Government Act 1993 or the or a component of a Liquid Trade Waste System.
- 2. Waste products pg 18 of the SoEE mentions lignin and yeast as the only solid waste products from the process and mentions that these products can be added to compost material. To inform the assessment of the development application and the adequacy or otherwise of this method of disposing waste by-products Council requires further information regarding:
  - The expected quantities of these waste by-products, this should be provided on a perannum basis
  - Further details of where/how the materials are intended to be disposed of ie. Are they to be applied to compost mixes at the site, disposed of as green waste at Council's Waste Facility or provided/sold to a second party for application to land and/or inclusion in a compost mix. Depending on the method of disposal and the amount of by-product produced further information may be required about the material composition ect. or licensing required through the NSW EPA.

In addition to the above a discrepancy has been noticed to the proposed plans which requires correction. It appears that this may have been an administrative type error, but it should be corrected and an updated set of plans provided as Appendix B to the SoEE. The architectural plan set provided referral to proposed new buildings that would house the bulk of the plant and equipment as 'existing buildings'. It is my recollection that the only permanent structure approved at the site is the awning located to the rear of the main building. The plans will need to be amended to make clear the new buildings that are being proposed as part of this application."



## **Clarifications on Hunter Pilot Biorefinery Project Proposal SoEE**

#### 1. Sewage Management

A consultant report by Pitt&Sherry was provided with the SoEE in appendix C. The system to be installed is proposed to be a trade waste system and will not receive human waste. The purpose of the trade waste treatment system is to adjust and control all components of the trade liquid wastes to acceptable constituent levels, prior to collection in a discharge tank(s).

An operating procedure for the trade waste system will be produced before commissioning.

Key elements of this procedure will include;

- a. The discharge tank will have sampling access for laboratory staff (and random council inspections) to monitor the effluent. A sample (100ml) of each effluent batch will be stored in the on-site laboratory for 6 months for reference.
- b. Manual discharge operation only. Reduces possibility of errors from automatic control. Once on-site laboratory analysis confirms the effluent batch is suitable for discharge, the discharge tank can be drained at an agreeable and recorded rate by an operator.

Due to the site ground levels and depth of council's sewer main running along the front boundary, gravity drainage will not be achievable. A pump station tank will be required to transfer all liquid wastes to the sewer main.

It is proposed that the discharge tank(s) from the trade waste system will be drained by gravity to the on-site pump station tank. The pump station tank, proposed to be located at a suitable level at the rear of the facility, separately receives human waste from on-site toilets and amenities.

It is proposed that the pump station tank is an appropriate device to blend these two waste streams, and in turn transfer to council's sewer main. The pump station tank is sized appropriately to minimise the occurrence of the contents turning septic due to extended stagnation.

There are no on-site sewage treatment systems for human waste proposed.



## 2. Waste Products

Page 42 of the SoEE indicates up to 26 tonnes per year of solid waste in form of lignin.

The bio solids component is very low due to proposed internal process recycling, but could be estimated to be in the range of 2-3 tonnes dry per year.

While these components have potential for composting, and research groups have expressed interest in experimenting once the facility is able to produce these, it is not proposed the solids will be disposed of by composting.

It is proposed these solids will be disposed of to land-fill by licensed contractors. This proposal was developed in consultation with EPA NSW.

Below are the points listed by Dr Ingrid Errington from EPA NSW (emailed dated 16/4/18) with respect to the solid waste licensing;

- A. With a maximum annual processing capacity of approximately 209 tonnes per year, Ethtec's undertaking is not considered 'Waste processing (non-thermal treatment)' under clause 41 of Schedule 1 of the POEO Act. The need for an Environment Protection License would, however, be triggered if the operational capacity increased to the volumes listed under clause 41 (i.e. 1000t at any one time or 6000t per year, among other conditions).
- B. In future, Ethtec may review the possibility of recovering the waste lignin cake as a resource (e.g. as a component of compost). At this stage, however, Ethtec has expressed that lignin cake will be disposed of at a waste facility. As such, no resource recovery exemption is required under clause 39 of Schedule 1 of the POEO Act. If Ethtec do wish to pursue this in future, the <u>Guidelines on resource recovery Orders and Exemptions for the land application of waste materials</u> will be of assistance.

# **Dr Ingrid Errington**

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## 3. Architectural Drawings

Please see attached amended architectural drawing set.

The drawing set also proposes the following changes circled in red balloon;

- 1. External cladding is by way of three colour tones to break up Surfmist wall to reduce reflection.
- 2. Use of ramp to NCC and Australian Standards for access to facility. Upon review of access designs and floor height, it was considered a ramp was a more appropriate and reliable solution to access/emergency exit over a lift. Primary considerations were;
  - A. In event of fire, a lift could not be used.
  - B. Industrial facility, likely infrequent use of the lift, increases chances of malfunction.
  - C. Increase overall facility maintenance cost for proposed lifetime.
- 3. Access door locations changes in-line with NCC review.
- 4. Amenities layout on ground floor changes in-line with NCC.

