

Our ref: Thrumster Wastewater Scheme (SSI-56980459)

Attachment A: Request for further information

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The Department requests further information on the following:

## Hazards

1. As described in Hazardous Industry Planning Advisory Paper No. 6, the Department requires further justification of the selection of liquified chlorine where technically feasible solutions using less hazardous process materials could be made, considering the consequences of hazardous events for liquefied chlorine. Please examine other alternatives to liquified chlorine and provide detailed justification of the chemical selected for disinfection.
2. Provide further details of how the risk of storage and handling of all chemicals on-site will be managed, including consideration of separation distances, containment, and incompatibilities of the chemicals.
3. Noting that further justification is required for the selection of liquefied chlorine, if liquefied chlorine is still proposed for the disinfection, then further information on the following items is requested.
  - a. A detailed description of the proposed operation of the chlorine dosing, including pressure or vacuum operation, automatic shutdown devices, and handling of vented or relief gases. This information is to verify the modelled consequence distances are conservatively realistic.
  - b. Provide details of the chlorine release scenarios being considered, including and not limited to state of material released, indoor versus outdoor, and release hole size justification (e.g. valves or plugs release on a chlorine drum).
  - c. Please provide justification that the probabilities of a wind direction (IDs N, P, R, T, V, X) used are equal to or more conservative than the actual wind data as provided in Section 4.4.2.
  - d. The likelihood analysis in the Preliminary Hazard Analysis (PHA) - Appendix C uses presence factors to calculate cumulative risks (IDs M, O, Q). However, the individual risk criteria in HIPAP No. 4 already account for variations in exposure duration for any individual at a given point. Therefore, please revise the likelihood analysis without using presence factors.

- e. The likelihood analysis in PHA - Appendix C describes 20 drums delivered per year, however on 10 are entered in the calculation. Please clarify or update the analysis and provide justification of the usage rate.
- f. The cumulative risk assessment in PHA Table C.8 does not include consideration of the toxic exposure criteria (50 x 10<sup>-6</sup> per year, Section 2.4.2.2 HIPAP No.4). Please include consideration of this criteria in the cumulative risk assessment.

We request the Proponent to provide specific responses to the items above in the response with clear references to any sections in an updated PHA.

### **Flooding context**

Provide advice on the context of the site of the proposed Thrumster Wastewater Treatment plant and the recent flood event at Port Macquarie (May 2025 event).

This should include:

1. any information that the Proponent is aware of around the scale of the flood event
2. the extent and depth of inundation at and around the site,
3. an estimate of how the wastewater treatment plant would have performed in that event, inclusive of:
  - a. potential inundation of the site
  - b. modelled treatment plant performance with regards to potential plant throughput
  - c. exceedances of holding capacity and discharges from the storm storage ponds.

### **Power supply installation changes**

Provide information relating to any changes to the proposed power supply alignments or changing from underground to overhead supply, etc.

This should include any updated information required for assessment, including additional, or reduced, potential impacts on biodiversity values, visual impacts or other issues that may potentially be altered from a change of supply methodology or alignment.

### **Agency advice**

Please address all issues raised in agency advice, noting that agencies can have multiple responses from different parts of an agency.