Environmental Impact Statement
Project Specific Guidelines
For
Tassal Operations Pty Ltd
Fish Processing Factory Intensification
Dover, Tasmania

February 2021

Contents

1. Information for the Proponent

Purpose

The *Environmental Management and Pollution Control Act 1994* (the EMPC Act) requires the Board of the Environment Protection Authority (the Board) to provide guidance to the proponent about what should be included in the case for assessment.

The Board assesses the environmental aspects of the proposal, while the relevant Planning Authority (Council) assesses planning aspects. The Board has authorised EPA Tasmania to undertake administrative tasks and establish the information base to inform decision making on its behalf.

These project specific guidelines have been prepared based on a Notice of Intent for the proposed Fish Processing Factory Intensification at Dover by Tassal Operations Pty Ltd.

Instructions

- This document must be read in conjunction with the *General Guidelines for the preparation of an Environmental Impact Statement* (the General Guidelines).
- The General Guidelines provide detailed instructions on preparing the Environmental Impact Statement (EIS) as well as other information to be provided to the Board for its assessment. These Guidelines are available on the EPA website at http://epa.tas.gov.au/assessment/assessment-process/guidance-documents.
- Please ensure you refer to the latest version of the General Guidelines by downloading them directly from the EPA website link above.
- This project specific guidelines document:
    - identifies the key issues which must be addressed in the EIS;
    - the minimum survey requirements and studies required as part of the EIS for key issues; and
    - other information to be supplied for the purpose of the Board's assessment, in addition to that required by the General Guidelines, for both key issues and other issues.

The EIS should be prepared using a risk-based approach. Not all issues nominated in the guidelines will have the same degree of relevance to all proposed activities. Depending on the nature of the proposed activity and its location, some issues may be more relevant than others. **The level of detail provided on each issue should be appropriate to the level of significance of that environmental issue to the proposal.** Refer to the General Guidelines for further instructions on preparing the EIS.

The issue of guidelines should not be interpreted as excluding other matters that emerge as significant from environmental studies, public comments or otherwise during preparation of the EIS. The assessment process may also change the level of risk associated with some of the issues. The level of detail provided in the EIS may therefore change to reflect the level of significance of that environmental issue to the proposal.

NOTE: An assessment cannot proceed to public consultation until the Board has received an EIS that meets the requirements of the General and Project Specific Guidelines, and provides sufficient information to assess the proposed activity (subject to any additional information required in response to public consultation).

Further information on the Environmental Impact Assessment (EIA) process is provided in the *Guide to EIA* available on the EPA website at http://epa.tas.gov.au/assessment/assessment-process/guidance-documents.

2. Key Issues

The key issues identified for this proposal, which should be the focus of the EIS, are:

Key Issues	
1	*Design and management of the wastewater treatment plant (WWTP).*
2	*Potential effects on water quality in Port Esperance from the discharge of treated effluent.*
3	*Odour.*
4	*Impact to threatened species and vegetation communities from land clearing.*

Please refer to the General Guidelines and Sections 3 and 4 below for the information requirements associated with these key issues.

3. Survey and Study Requirements for Key Issues

The following surveys and studies will be required as part of the EIS.

Key Issue	Surveys/studies required	Relevant Section(s) of General Guidelines
1 and 2 – wastewater treatment plant, and effects on water quality	• Stormwater minimisation strategy. • Wastewater characterisation. • Dilution/dispersion modelling. This must consider initial mixing/near-field (e.g. toxicants including disinfection products) and secondary mixing to potential fair-field impacts (e.g. nutrient enrichment). • Baseline benthic biological survey at the existing (or new) diffuser structure location and along the outfall pipeline corridor (if altered from existing corridor).	6.2
3 - odour	• Identification of all sensitive receivers in the vicinity of the facility. • Assessment of the impact of air emissions in relation to the relevant EPP (Air) criteria with the help of a desktop screening study.	6.1
4 – impacts on flora/fauna	• Threatened flora and fauna survey of area(s) of land to be cleared.	6.7

4. Detailed Information Requirements

The following information is required in addition to the requirements of the General Guidelines. Some of these requirements will support completion of the surveys and studies as detailed above.

The section numbers correspond to the relevant section of the General Guidelines.

2.1 General

- Description and map of boundary of The Land on which the activity will take place, including proposed works on Crown Land, Forestry Tasmania land, and any land seaward of Crown Land. The map should show relevant land titles. Where the boundary of The Land does not

correspond with land title boundaries, grid reference coordinates should be shown to delineate the boundary of The Land.

- A description of the existing site infrastructure and any proposed changes to enable the production increase, including changes to storage areas/tanks etc, drainage and stormwater infrastructure, site access and internal roads, building facilities, parking areas, jetty, and wastewater treatment facilities.
- A description of current and proposed changes to site-wide operational procedures, including receival, storage and processing of fish harvest, washing, solid waste production, sludge management, biosecurity management, stormwater management, wastewater management, and operating hours.
- Discussion of seasonal variation in production rates and waste production (liquid effluent and solid waste).
- Description of the staged approach to site intensification, and any incremental increases in production and waste generation (liquid effluent, and solid waste).
- The current and proposed number of daily traffic movements to and from the site.
- An overview of the proposed wastewater treatment system, using appropriate schematics.
- Details of the proposed new outfall pipeline including any changes to the pipeline capacity, corridor and diffuser structure and location.

2.2 Construction

- Measures to prevent or mitigate impacts from erosion and transport of sediments resulting from removal of vegetation, excavation , and/or other works.
- Measures designed to prevent the introduction or spread of introduced plant species, weeds, pests and diseases (e.g. *Phytophthora cinnamomi*) during construction works.
- Details of construction works for the removal of existing outfall pipeline and installation of replacement outfall and diffuser (as relevant), including measures to mitigate the generation of sediment plumes and impacts to benthic ecosystems.
- Management action if the existing plant is taken offline to accommodate changes in the treatment train.

3 Project alternatives

- Discussion of the alternatives considered for the upgrade of the wastewater treatment plant.

5.2 The existing environment – Environmental aspects

- Results and discussion of ambient water quality, biological surveys, marine natural values, protected environmental values, and sediment surveys in the vicinity of the WWTP outfall.
- Results and discussion of existing effluent plume dynamics and dilution at the outfall.
- Results of the baseline benthic biological survey. The survey should target the pipeline corridor (if corridor is to change) and the location of the outfall diffuser (either existing or new location). Radial transects from the diffuser location should include sediment and biological sampling to provide a baseline assessment sufficient to determine any potential zone of impact.

6.1 Air emissions

- Description and map showing the location of all potential sources of emissions (point source or fugitive odour) to the atmosphere from the existing and proposed upgraded facility, including the likely composition (i.e. types of constituents), quantities and rates of emissions.
    - The description must include the potential for emissions to air from the different stages of the production process, including general and fish waste handling and removal, wastewater treatment and desludging and cover a variety of conditions including 'worst

case' scenarios and 'upset' conditions. It should also contain information about time (of day), duration, and frequency to establish suitable parameters for a desktop study of air dispersion (see next dot point).

- An assessment of potential impacts of air emissions (odour) based on estimates obtained from a desktop study of air dispersion of emissions using a simple screening model (e.g. *SCREEN View* (free)) and conservative emission rates. Available Bureau of Meteorology data could be used to establish prevailing local meteorological conditions in the vicinity of the site.
- An assessment of the potential for air emissions (odour) from the activity to cause environmental nuisance or environmental harm.
- Discussion of measures to mitigate any potential impacts that may cause environmental nuisance or environmental harm, including potential impacts associated with the handling of odorous material and malfunction of equipment/infrastructure used on the site, including the WWTP. Consideration should also be given to the management of waste generated by the facility. Application of accepted modern technology for reduction of unavoidable emissions to the greatest extent practicable should be demonstrated.
- A discussion demonstrating that consideration has been given to the requirements of the Tasmanian *Environment Protection Policy (Air Quality) 2004*.

6.2 Water quality (surface and discharge)

- Wastewater characterisation (flow and quality):
    - Description of existing and proposed wastewater sources (factory wastewater streams, harvest vessel wastewater, contaminated stormwater, etc), including their volumes, concentrations, and loads.
        - Specifically, identify potential contaminants of concern (PCoC) in the proposed discharge, and their concentrations, including processing plant cleaning agents, collected stormwater contaminants and disinfection by-products if chlorination is part of the process.
- Effluent management:
    - A review of the performance of the existing WWTP and identification of the causes of any past poor performance. Include previous monitoring results to support the review.
    - Design details of the existing and proposed WWTP, including hydraulic capacity, and an analysis of its expected performance under normal (include seasonal/operation effects) and 'worst-case' operating conditions.
    - Description of how variability in harvest volumes, timing, processes and rainfall/stormwater events may affect WWTP operability and efficacy, and the measures that will be implemented to reduce these effects (e.g. mitigating for short term hydraulic spikes).
- Proposed discharge practices:
    - Proposed maximum effluent discharge volume and quality limits (median, 90th percentile, and maximum). The proposed limits must be justified in accordance with clauses 16 and 17 of the *State Policy on Water Quality Management* (1997). It must be demonstrated that the hierarchy of waste management has been applied and that the limits are equivalent to those which can be achieved using accepted modern technology and will not prejudice the achievement of any potential water quality objectives for the receiving environment.
    - Contingency plans for unplanned events such as power failures, malfunctions, and other incidents that may result in the discharge of poorly treated effluent.
- Predicted impacts:

- Results of dilution/dispersion modelling, considering initial mixing/near-field (e.g. toxicants including disinfection products) and secondary mixing to potential far-field impacts (e.g. nutrient enrichment).
- On the basis of design effluent quality and volumes in conjunction with receiving environment conditions, evaluate the potential impacts to the marine environment (water quality) and identified protected environmental values, including waters used for recreational use, from the proposed effluent discharge. This assessment should include seasonal variations with respect to effluent and receiving environment water quality and take into account any changes in the diffuser location (as relevant) and effluent plume dynamics and dilution.
- Detail mitigation measures for identified risks associated with wastewater discharge during the proposal construction and commissioning phase.

- Stormwater:
  - Description (using plans and diagrams as necessary) of the current and proposed site wide stormwater management system, showing separation from the WWTP input streams, as relevant. The plan must include a strategy to separate 'clean' from contaminated stormwater for the minimisation of stormwater input into the wastewater treatment system.

6.5 Waste management (solid waste)

- Description, including origin, nature, management and volume of all solid wastes currently and proposed to be produced at the facility.
- Description of the storage and removal frequency (as relevant) of all solid waste.
- Management mitigation measures for potential biosecurity issues.
- Identification of the transport and receiving facilities (e.g. Triabunna rendering facility) for all solid waste transported from the site, including the ongoing ability of the facilities to receive the increased waste volumes.
- Contingency plans should receiving facilities not be able to accept solid wastes.
- Update (as relevant) to the Biosolids Management Plan as submitted to the EPA in March 2018.

6.7 Biodiversity and natural values

- The following threatened flora species listed under the *Threatened Species Protection Act 1995* (TSPA) and *Environment Protection and Biodiversity Conservation Act 1999* (EPBCA) have been recorded in the area – *Caladenia caudate* (tailed Spider-orchid), *Cyathea cunninghamii* (slender treefern) and *Thismia rodwayi* (fairy lanterns).
- There are also records for Swift parrots (*Lathamus discolor*) in the area, listed as endangered under the TSPA and critically endangered under the EPBCA, and the site is mapped as containing potential foraging habitat (*Eucalyptus ovata* dry forest and woodland DOV) listed as a threatened vegetation community under the *Nature Conservation Act 2002*, with *Eucalyptus globulus* occurring nearby. There is also potential habitat for the Tasmanian devil (*Sarcophilus harrisii*), listed as endangered under both the TSPA and EPBCA.
- It is recommended that a natural values survey of the property be undertaken by a suitably qualified person in accordance with the Guidelines for Natural Values Surveys. The guidelines can be found at https://dpipwe.tas.gov.au/conservation/development-planning-conservation-assessment/survey-guidelines-for-development-assessments .
- If the proposal will generate an increase of night-time traffic on Narrows Road and/or other connecting roads of more than 10%; this is considered significant regarding the potential for roadkill impacts on the Tasmanian devil. If this is the case, it is recommended that roadkill mitigation measures be implemented in accordance with the *Tasmanian Devil Survey Guidelines and Management Advice*, available at the above link.

- Provide an assessment of the potential for impacts to marine natural values resulting from changes in effluent discharged from the WWTP outfall or changes in outfall corridor and diffuser location.
- Provide a review of biosecurity management for the site, taking into account the proposed intensification, and describe any changes that will be implemented as a result of the proposal.

7 Monitoring and review

- Influent characterisation monitoring program to confirm predicted quality to the treatment plant and to enable analysis of treatment performance.
- Effluent monitoring during commissioning and post commissioning.
- Ambient monitoring program to confirm dilution/dispersion modelling. This should include taking samples through the water column.


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