



## **THE FACTORS THAT INFORMED THE PROPOSED PULP MILL DECISION AND DRAFT CONDITIONS**

*Please note this is a summary only of the findings and factors contributing to the proposed decision and conditions. A complete report and proposed decision can be accessed at [www.environment.gov.au/epbc/pulpmill](http://www.environment.gov.au/epbc/pulpmill).*

### ***Development of conditions***

- The proposed conditions, which have been released for public comment from 20 – 31 August 2007, have been developed through a combination of advice from the Department of the Environment and Water Resources, technical experts and formalising undertakings made by the proponent in its assessment documentation.
- The proponent, Gunns Limited, has been provided with the same 10 business day period, as the public, in which to comment on the proposed decision and draft conditions.
- The Minister for the Environment and Water Resources, Malcolm Turnbull, will take account of all relevant comments received, during this 10 days of comment, before making a final decision on whether or not to approve the proposal and, if so, under what conditions.

### ***Threatened and migratory species***

- There is one known Tasmanian Wedge-tailed Eagle nesting site 900 metres from the proposed pulp mill site. The proponent has given an undertaking to maintain the breeding season buffer zone of 500 m, or 1 km if the activity is in line of site of known nests.
- Surveys have been conducted on the mill site and there was no evidence of Tasmanian Devils, Eastern, Barred Bandicoots or Spotted Quolls on site however suitable habitat exists along the pipeline routes. The proponent has given an undertaking to offset the loss of 200 ha of potential habitat for listed threatened species at the pulp mill site by rehabilitating an equivalent area of habitat.
- The Swift Parrot was not recorded during field surveys. The proponent has proposed to avoid clearing approximately 34.2 ha of potential suitable habitat within the pulp mill site that will form part of an on-site reserve network.
- The Southern Bell Frog was also not recorded in the project area. The proponent has proposed to mitigate potential impacts on potential habitat by siting the effluent pipeline to avoid vegetated wetlands and watercourses and by the implementation of a hygiene protocol for the control of the Chytrid fungus.
- The nearest seal colony is about 15km from the planned outfall site.
- Public comments were made about the potential for increased log truck traffic to service the pulp mill. In noting that 85% of the pulp mill supply will come from the existing woodchip facility the Department is of the view that a 15% increase in transport activities associated with the mill are not unacceptable.
- Construction of the water supply pipeline and the wharf in the Tamar River may potentially impact on the Australian Grayling species via the physical change of

fish habitats from sediment deposition, loss or degradation of fish inter tidal habitat, changes in water quality, indirect impacts on fish food resources, and construction-generated underwater noise. Given the temporary nature of the works, the Department is of the view that the impact on the population of the Australian Grayling would not be unacceptable.

- The nearest known locality of the Central North Burrowing Crayfish from the site is approximately 14 km from the pipeline at George Town and 17 km from the pulp mill site. The nearest site for the Mt Arthur Burrowing Crayfish is 10km to the east of the site. However, the Department considers that surveys should be conducted prior to construction to manage any potential impacts.
- The proponent has committed to mitigation measures to reduce impacts on listed migratory bird species during the breeding season.
- Direct impacts on the threatened Grasstree through destruction of individual plants and erosion of sand dunes will be mitigated by tunnelling underneath a section of dunes and by confining disturbance to the construction corridor. The potential introduction of disease impacting on the Grasstree will also be mitigated.
- Nationally threatened orchid species were not recorded in the project area. The proponent will mitigate potential impacts on these species through construction procedures to limit accidental loss or damage to vegetation outside the construction corridor.
- The proponent has proposed to visually monitor marine animals near the construction area. A 2 km radius alert zone for whales (1 km for seals and dolphins) will be implemented with a 1 km radius safety zone (0.5 km for seals and dolphins), within which noise-generating activities will cease if a whale approaches.

#### ***Commonwealth marine area***

- The marine outfall of the pulp mill would be situated 2.7 km offshore from Five Mile Bluff, 2.9 km from the boundary of Commonwealth marine waters, itself 3 nm (5.6 km) offshore.
- Based on the available evidence, the Department has not identified any likely significant impacts on the marine environment in Commonwealth waters from the proposed pulp mill.
- However there are indications that levels of pollutants that may accumulate in Tasmanian waters may be of concern. Given the absence of a reliable model for predicting possible sediment and biota concentrations, the lack of effluent and sediment field data from comparable “green field” ECF mills and the different possible interpretations of the hydrodynamic model, it is essential that competent monitoring programs are in place to provide early warning of any unexpected trends and adequate opportunity to correct them.

#### ***Effluent***

- The proposed mill would use elemental chlorine-free (ECF) technology. This type of technology has improved over recent years. Overseas experience demonstrates that conversion from the existing old elemental chlorine processes to ECF pulp mills has resulted in a dramatic reduction of dioxins and furans levels in sediment and animals including fish.

- It has been found universally that bleaching with ozone for the TCF process, is harder to control and gives pulps of inferior strength and brightness to those produced with ACF processes that use chlorine dioxide, hydrogen peroxide and oxygen. For this reason only 5 to 6% of the Kraft pulp produced in the world is produced by TCF processes and 75% is produced by ECF processes.
- More trees are required to make paper with TCF compared to ECF. With TCF, 3-4% less paper is produced from the same amount of wood compared to ECF.
- According to the proponent, the effluent would be approximately 64 000 tonnes/day and would comprise a solution of a large number of salts and compounds.
- If the mill is approved, the maximum level of dioxins in the effluent from the plant must be no higher than 3.4 picogrammes per litre of effluent (3.4 pg TEQ/L). This is less than a third of the level allowed under the limit imposed by the Tasmanian pulp mill effluent guidelines. These guidelines represent world's best practice for an ECF pulp mill.
- In the absence of a reliable model, field data from a new ECF mill in a “green fields” site might have allowed direct comparison of effluent and sediment levels over time. No such data from a “green fields” site are yet available. However, overseas experience demonstrates that conversion from elemental chlorine to ECF pulp mills, as is the proposed Bell Bay mill, with non-measurable dioxin effluents has resulted in dramatically reduced levels of dioxins and furans in sediment and biota, rather than producing environmental or health problems caused by dioxins. As a result, regulators have endorsed the ECF process and PCDD/PCDF effluent guidelines. The RPDC limit of 10pg/L for 2,3,7,8-TCCD and 30pg/L for 2,3,7,8-TCDF (equivalent to 13pg/L) is equal to or improves upon the levels set by the US EPA, Environment Canada, and the European Commission amongst others. It also meets the UNEP Stockholm Convention Best Available Techniques (BAT) and Best Environmental Practices (BEP) guidelines.
- Given the current state of technology, there would be very limited scope for additional in-process recycling in the Bell Bay pulp mill and that land-based disposal of effluent is possible, but varying in practicability and cost.
- No EPBC-listed species have been identified as being present in the vicinity of the effluent outfall.

### ***Water use***

- The mill, if it proceeds, would use 26 GL of water per year which equates to approximately 1% of the monthly flow into the Tamar Estuary or at most 4% in a dry month.

### ***Location of the proposal***

- Industries currently operating in the vicinity of the site include an aluminum smelter, a metallurgical plant, a gas-fired power station and a sawmilling and wood chipping facility. The area has been zoned Heavy Industrial under the local government planning scheme for at least the last 25 years.

### ***Greenhouse Gas emissions***

- Energy and steam for mill operations will be derived from the burning of approx. 500,000 green tonnes per annum of wood residues such as bark, wood waste and other forest residues. Using biomass would have less greenhouse impacts than if the proposed operations were to use electricity generated from the use of coal or oil. It is likely that there will be a negligible contribution to Australia's total greenhouse gas emissions.

### ***Forestry***

- Until at least 2017 wood chips required as feed for the proposed Gunns pulp mill will be sourced from forestry operations undertaken in accordance with the Tasmanian Regional Forest Agreement (TRFA). When the time comes to negotiate a future TRFA, it would be reasonable to expect the Australian Government will not accept a reduction in the level of protection for Tasmanian Forests.
- Gunns has made commitments in writing that no timber from old growth forests will be cleared to feed the planned pulp mill. All woodchips will be sourced from a combination of regrowth native forests and pine and eucalypt plantations. Gunns have said that within 5 years, 80% of the woodchip supply to the mill will come from plantations.

### ***Tasmanian Government environment issues***

- In the recent Federal Court decision, the Judge made it clear that Environmental matters which extend beyond the controlling provisions, such as noise and air pollution, are matters for Tasmania.