



## ANNEXURE 1

1. The proposed works shall be as per the site maps at Attachment 1.

### *Listed threatened species*

2. To minimise impacts on the Wedge-tailed Eagle – Tasmanian (*Aquila audax fleayi*) the person taking the action must not carry out works during the breeding season within the exclusion buffers of 500 m or a 1 km line of sight from any recorded nest. Work is to cease immediately if a new nest is found within 500 m or a 1 km line of sight of clearing or construction activities. The breeding season buffer must be applied from August to December inclusive. The person taking the action must put in place and implement a plan that guarantees all staff and contractors working on the pulp mill site and waste facility are made aware of and comply with this requirement.
3. The person taking the action must cause an ecologist nominated by the person taking the action and approved by the Department of the Environment and Water Resources (the Department) to conduct monitoring checks on the Wedge-tailed Eagle nest known as #130 ‘Tippogoree Hills’ in the second week of September and in the second week of November each year for five years, in accordance with the 'Forest Practices Authority, Fauna Technical Note Series – Eagle Nest Management'<sup>1</sup>. Results from the monitoring must be provided to the Department and to the Tasmanian Department of Primary Industries and Water.

Should nest #130 ‘Tippogoree Hills’ be abandoned in the first season after the commencement of construction, the person taking the action must, within 6 months of becoming aware of the abandonment, submit an offset plan to the Department for approval. The plan should provide for the protection of a minimum of 20 ha surrounding an eagle nest that is not protected in a ‘formal reserve’<sup>2</sup>. The plan must include a site description, connectivity with other habitats and mechanisms for long term protection, conservation and management. The Department may request that the plan be revised or amended before approval; any such request must be responded to promptly. The approved plan must be implemented.

4. Within 12 months of the date of this approval, the person taking the action must provide to the Department for approval, a plan to provide and rehabilitate an area of 200ha of potential habitat for the listed threatened species *Sarcophilus harrisii* (Tasmanian Devil); *Dasyurus maculatus maculatus* (Spot-tailed Quoll – Tasmanian population); *Perameles gunnii gunnii* (Eastern Barred Bandicoot – Tasmanian); *Lathamus discolor* (Swift Parrot); and *Litoria raniformis* (Southern Bell Frog) as an offset the loss of 200 ha of land at the pulp mill site.

The plan must include details of the 200 ha offset to be rehabilitated, including a map, site description, connectivity with other habitats, a rehabilitation program and mechanisms for long-term protection, conservation and management. The Department may request that the plan be revised or amended before approval; any such request must be responded to promptly. The approved plan must be implemented.

5. To protect potential habitat for the listed threatened species: *Sarcophilus harrisii* (Tasmanian Devil); *Dasyurus maculatus maculatus* (Spot-tailed Quoll – Tasmanian population); *Perameles gunnii gunnii* (Eastern Barred Bandicoot – Tasmanian); and *Lathamus discolor* (Swift Parrot). Within 12 months of the date of this approval, the person taking the action must provide to the Department for approval, a plan to establish a network of reserves totalling 150 ha within the Bell Bay pulp mill site. The plan must include details of the reserves at the site including a map, description of the flora and fauna, connectivity and mechanisms for long-term protection, conservation and management. The reserve network

must include a minimum area of 34 ha of *Eucalyptus ovata* to maintain foraging habitat for the Swift Parrot. The Department may request that the plan be revised or amended before approval; any such request must be responded to promptly. The approved plan must be implemented.

6. To minimise impacts on the Tasmanian Devil, Spot-tailed quoll and Eastern Barred Bandicoot, the person taking the action must:
  - install trench ramps and trench plugs in open trenches to enable fauna to escape; and
  - ensure that a qualified ecologist checks all open trenches for trapped fauna each morning. Surviving fauna are to be relocated to suitable habitat by an ecologist trained in fauna handling procedures. Records must be kept of all live and dead animals removed from the trench. These records must be provided to the Department within 3 months of commencement of trench construction.
7. Disturbance of vegetation at the site must be confined to the construction corridors of the pipelines and the pulp mill site and associated infrastructure. All areas to be cleared must be clearly marked to prevent damage to listed species outside the project area. Access to project areas must be via established roads or access tracks located on areas that have been subject to flora and fauna surveys as described in the preliminary documentation.
8. The person taking the action must cause an ecologist nominated by the person taking the action and approved by the Department to assess areas of potentially suitable habitat for the Green and Golden Bell Frog (*Litoria raniformis*) prior to construction of the pipeline. Areas of identified habitat must be avoided through micro-siting of the pipeline route. The NSW National Parks and Wildlife Service (2001) hygiene protocol<sup>3</sup> for the control of the Chytrid fungus is to be implemented on all areas of disturbance
9. All areas of the pipeline corridors, with the exception of access tracks and roads, are to be progressively rehabilitated as each 10 km of pipeline is constructed and revegetated with endemic species sourced from local seed stocks with the aim of providing habitat for listed threatened species in the area
10. The person taking the action must cause an ecologist nominated by the person taking the action and approved by the Department to conduct surveys for the Central North Burrowing Crayfish (*Engaeus granulatus*) and the Mt Arthur Burrowing Crayfish (*Engaeus orramakunna*) prior to commencement of construction. If, as a result of these surveys these species are found then a management plan must be provided to the Department for approval. This plan may include:
  - micro-siting of the pipeline alignment to avoid populations;
  - exclusion zones around the pulp mill site as necessary; and
  - translocation of individuals.

The plan must be approved by the Department prior to the commencement of construction. The Department may request that the plan be revised or amended before approval; any such request must be responded to promptly. The approved plan must be implemented.

11. To minimise impacts on the listed *Xanthorrhoea aff. bracteata* species the person taking the action must provide a plan to minimise the risk of spreading the fungus *Phytophthora cinnamomi*. The plan must be approved by the Department prior to the commencement of construction. The Department may request that the plan be revised or amended before approval; any such request must be responded to promptly. The approved plan must be implemented.

12. The following practices must be carried out to minimise impacts on the *Xanthorrhoea aff. bracteata* listed species.
- A qualified ecologist will mark out on the ground the location of the *X. aff. bracteata* on the effluent pipeline route. This site will be protected from disturbance, through micro-siting of the pipeline.
  - Boring will be undertaken under the dune where the *X. aff. bracteata* is located to completely prevent disturbance.

All access tracks to this site must be located to avoid all localities of *X. aff. bracteata* species.

13. The person taking the action is required to conduct a pre-construction survey for *Prasophyllum secutum* prior to works commencing. The pre-construction survey is to take place within the area of potential habitat for this species in dense coastal scrub within the construction corridor near Five Mile Beach. In the event that *Prasophyllum secutum* is recorded within the construction corridor, the person taking the action is required to submit a management plan for approval by the Department. The Department may request that the plan be revised or amended before approval; any such request must be responded to promptly. The approved plan must be implemented.

#### ***Listed migratory birds***

14. To minimise impacts on listed threatened and migratory birds, the person taking the action must:
- carry out a pre-construction check of the shoreline for breeding shorebirds for a distance of 200 m on either side of the construction zone. In the event that nests are located within this area, they will be clearly marked and construction activities kept on the other side of the pipeline alignment from the breeding birds; and
  - restore the beach profile to its original shape after construction.
15. To minimise impacts on the White-bellied Sea-eagle (*Haliaeetus leucogaster*), the person taking the action must not carry out works during the breeding season within the exclusion buffers of 500 m or a 1 km line of sight from any recorded nest. Work is to cease immediately if a new nest is found within 500 m or a 1 km line of sight of clearing or construction activities. The breeding season buffer must be applied from 1 August to 31 January inclusive. The person taking the action must put in place and implement a plan that guarantees all staff and contractors working on the pulp mill site and waste facility are made aware of and comply with this requirement.

#### ***Commonwealth marine environment and listed threatened and migratory marine species***

##### ***Construction Impacts***

16. To minimise impacts on listed threatened and migratory marine species during construction in the Tamar River and the ocean outfall, the person taking the action must visually monitor for marine mammals near the construction area and implement:
- a 2 km radius alert zone for whales, with a 1 km radius safety zone, within which noise-generating activities will be ceased if a whale approaches; and
  - a 1 km radius alert zone for seals and dolphins with a 0.5 km radius safety zone, within which noise-generating activities will cease if a seal or dolphin approaches.

### *Effluent Impacts*

17. The pulp mill must not operate if effluent from the pulp mill exceeds the discharge limits provided in the table below.

<b>Parameter</b>	<b>Monthly average effluent concentration</b>
Dioxins and furans	3.4 pg TEQ/L
Chlorate (ClO <sub>3</sub> <sup>-</sup> )	1.9 mg/L
Total chloroacetic acids	237 µg/L
Total nitrogen	2.5 mg/L
Total phosphorus	0.8 mg/L
Total suspended solids	20 mg/L
Biological oxygen demand	11 mg/L

18. The person taking the action must prepare an effluent monitoring program prior to the commencement of pulp mill operations. This program must include but not be limited to the parameters described in Condition 17 and must include a re-assessment of the Risk Quotients (RQs) for hydrophobic substances, in all media, being taken into account in the monitoring program.

The program must be approved by the Minister prior to the commencement of mill operations. The Minister may request that the program be revised or amended before approval; any such request must be responded to promptly. The approved program must be implemented.

19. The person taking the action must prepare a plan, prior to commencement of pulp mill operations, for monitoring the impacts of the mill effluent on the marine environment. The plan must include but not necessarily be limited to:

- dioxin and furan concentrations in the benthic sediments surrounding the marine outfall progressively towards and including Commonwealth marine waters;
- impacts of chlorate on the total area of brown algae adjacent to the marine outfall;
- pollutant levels in sentinel benthic and pelagic species;
- whole-effluent toxicity testing using species relevant to Commonwealth waters in Bass Strait; and
- a mechanism or mechanisms for tracing the actual movement of the effluent plume.

The plan must be approved by the Minister prior to the commencement of mill operations. The Minister may request that the plan be revised or amended before approval; any such request must be responded to promptly. The approved plan must be implemented.

20. Additional modelling must be carried out in relation to the fate of dioxins (and furans) and chlorates, prior to the commencement of operations, to the satisfaction of the Minister and the results of that modelling used to update the environmental monitoring program referred to in Condition 19. The modelling must be carried out by an independent expert approved by the Minister. The updated monitoring program must be approved by the Minister and implemented as provided for in Condition 19.

21. Concentration of dioxins and furans in the benthic sediments must not exceed a concentration of 850pg TEQ/kg in benthic sediment in Commonwealth marine waters. To ensure that concentrations do not reach this level, trends in concentrations of samples

collected in State and Commonwealth waters (in accordance with the plan provided under Condition 19), must be analysed and independently reviewed on a 6-monthly basis. The results must be provided to the Department within one month of each 6-monthly period.

Within 90 days of it being identified that the trends in the concentrations in benthic sediment indicate a level of 850 TEQ/kg is likely to be reached within a three-year period, at any time within the life of the mill, a response strategy must be provided to the Department for approval and implementation. The Department may request that the strategy be revised or amended before approval; any such request must be responded to promptly. The approved strategy must be implemented.

### *General*

22. If the Minister believes that it is necessary or desirable for the better protection of relevant listed threatened species and ecological communities, listed migratory species or the marine environment, the Minister may request that the person taking the action make specified revisions to any of plan, program or strategy approved pursuant to Conditions 3, 4, 5, 10, 11, 13, 18, 19 and 20. The person taking the action must comply with any such request. If the Minister approves a revised plan, program or strategy pursuant to this condition, the person taking the action must implement that plan, program or strategy instead of the plan, program or strategy as previously approved.
23. If, at any time after 5 years from the date of this approval, the Minister notifies the person taking the action in writing that the Minister is not satisfied that there has been commencement of construction of the pulp mill, then it must not thereafter be commenced.
24. Upon the direction of the Department, the person taking the action must ensure that an independent audit of compliance with the conditions of approval is conducted and a report submitted to the Department. The independent auditor must be approved by the Department prior to the commencement of the audit. Audit criteria must be agreed to by the Department and the audit report must address the criteria to the satisfaction of the Department.

<sup>1</sup>Refers to the 'Forest Practices Authority (2006) Fauna Technical Note Series: Technical Note 1: Eagle Nest Searching, Activity Checking and Management, (Ed. W.E. Brown) DPIW & Forest Practices Authority, Hobart'.

<sup>2</sup>'Formal reserve' means State Reserves, National Parks, Coastal Reserves, Regional Reserves, Conservation Areas, or as determined by the Department.

<sup>3</sup>NSW National Parks and Wildlife Service (2001). Hygiene protocol for the control of disease in frogs. Information Circular Number 6. NSW NPWS, Hurstville NSW.

### **Definitions**

Construction includes any preparatory works required to be undertaken including clearing vegetation, the disturbance of any soil, the erection of any temporary or permanent building, and the use of construction or excavation equipment on site for the purpose of breaking the ground.