

# Appendix B

## Approval conditions, actions, outcomes, management

EPBC 2007/3385 approval conditions addressed by this module, actions taken by Gunns to prepare management measures, action outcomes and resultant environmental management measures

Condition	Issue	Approval requirement addressed by this module	Actions taken to prepare management measures	Findings	Management measures adopted to ensure approval condition is met
14	Wedge-tailed eagle ( <i>Aquila audax fleayi</i> )	<p>To minimise impacts on the Wedge-tailed Eagle - Tasmanian (<i>Aquila audax fleayi</i>) Gunns Limited must put in place and implement, as part of the EIMP, measures including:</p> <p>a) Not carrying out construction during the breeding season within the exclusion buffers of 500 m or a 1 km line of sight from any active nest.</p> <p>b) If a new active nest is found within 500 m or a 1 km line of sight of clearing or construction activities, construction during the breeding season within the exclusion buffers must cease immediately. Gunns Limited must immediately notify the Department if a new active nest is found.</p> <p>c) The breeding season buffer must be applied from 1 August to 31 January inclusive.</p>	<p>In addition to the surveys undertaken by Gunns for the Draft Integrated Impact Statement (Weeding, S. (2005) <i>Eagle nest search proposed pulp mill and associated infrastructure survey report</i>), Mark Wapstra has also undertaken a detailed survey of the pulp mill footprint, looking for other wedge-tailed eagle or white-bellied sea eagle nests. The results are reported in: Environmental Consulting Options Tasmania (September 2007) <i>Assessment of proposed pulp mill footprint for nests of the wedge-tailed eagle and white-bellied sea-eagle</i>. A copy of that report was submitted with EIMP Module B (as Appendix I, report 1).</p> <p>No new nests of wedge-tailed eagles (or white-bellied sea-eagles) were located.</p>	<p>The only nest in the vicinity of the project footprint is the already known nest #130. This is 900 m from the closest disturbance area of the project as a whole but not in line of sight. For the project as a whole, it is therefore outside the relevant 500 m buffer distance specified by the approval condition. The water supply and effluent pipelines are outside both buffer distances specified by the approval condition.</p> <p>Nevertheless, this module includes measures to address this approval condition's requirements.</p>	<p><i>Eagles nests (condition 14(a))</i>: During the period between 1 August and 1 February construction activities must not occur within:</p> <ul style="list-style-type: none"> <li>• 1000 metres of an active Wedge-tailed Eagle nest if the construction activities are in line-of-sight of the nest site; or</li> <li>• 500 metres of an active Wedge-tailed Eagle nest site.</li> </ul> <p><i>Identify previously unknown eagle nest sites (condition 14(b))</i>: Previously unrecorded eagle nest sites, noted during clearing and/or construction activities will be reported to the Environmental Manager who will inform DEWHA and NPWS. If a new active nest is located within 500 m or 1 km line of site of clearing or construction activities during the breeding season (1 August to 31 January) work within that buffer must cease immediately and DEWHA will be notified.</p>

(Continued): EPBC 2007/3385 approval conditions addressed by this module, actions taken by Gunns to prepare management measures, action outcomes and resultant environmental management measures

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17	Protection of habitat for listed mammal species	<p>To protect potential habitat for the listed threatened species : Tasmanian Devil: Spot-tailed Quoll - Tasmanian population; Eastern Barred Bandicoot - Tasmanian and, as part of the EIMP, Gunns Limited must:</p> <p>a) Within 12 months of the date of this approval, develop in the EIMP management strategies to establish a network of reserves totalling at least 150 ha within the Bell Bay pulp mill site;</p> <p>b) The EIMP 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.</p>	<p>Condition 17 requires the establishment of a network of reserves totalling at least 150 ha within the pulp mill site within 12 months of the date of this approval. This will be done and included in EIMP Module O, which relates to habitat offsets and reserves.</p>	<p>Although not directly relevant to the current EIMP module, the establishment and ongoing protection of reserves have already been identified and committed to. No degradation of the reserves network will occur as a result of the mill construction.</p>	<p>During construction, the reserve areas will be delineated for protection. Construction area and sensitive areas will also be delineated and work will be restricted to within the construction area boundaries.</p> <p>The adopted management measures are:</p> <ul style="list-style-type: none"> <li>• Identify sensitive areas: Identify from available documentation and plans, all construction areas and their respective land use and significance (i.e. pasture or native vegetation, archaeological and cultural significance)</li> <li>• Delineate sensitive areas (condition 20(b)): Delineate all sensitive areas with proximity to construction areas with flagging tape (other flagging options will include delineator rope or electric fencing tape)</li> <li>• Remain within construction boundaries (condition 20): All construction activities and materials must remain within the construction boundaries.</li> <li>• Existing tracks (condition 20(c)): All vehicle access will be confined to existing roads and tracks that have been subject to flora and fauna surveys. Permanent access tracks located in native vegetation areas must be as narrow as practicable in order to minimise the clearance of native vegetation.</li> <li>• Minimise erosion and control stormwater (with particular emphasis on bare and disturbed areas) to ensure that accidental fuel spills are retained within bunds. These measures will ensure that sediment and spills do not impact on the reserve network.</li> <li>• Stormwater will be directed away from the reserves.</li> </ul>

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20	Vegetation disturbance	<p>Disturbance of vegetation at the site must be confined to the construction corridors of the pipelines and the pulp mill site and associated infrastructure and in accordance with the EIMP, including:</p> <p>a) No disturbance must occur until such time as the relevant pre-construction and construction requirements of the EIMP have been approved by the Minister;</p> <p>b) All areas to be cleared must be clearly marked to prevent damage to listed species outside the project area;</p> <p>c) 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 required in the EIMP and described in the preliminary documentation.</p>	Construction will only take place within the footprint presented in Figure 1 of this Module.	The vegetation disturbance will be limited to the construction footprint, which is shown in the Figure 1 of this Module.	<p>All construction areas, access tracks, car parks and other infrastructure will be identified and delineated with flagging tape (other flagging options will include delineator rope or electric fencing tape)</p> <p>All construction activities and materials will remain within the construction boundaries.</p> <p>All vehicle access will be confined to existing roads and tracks that have been subject to flora and fauna surveys. Permanent access tracks located in native vegetation areas must be as narrow as practicable in order to minimise the clearance of native vegetation.</p> <p>Regular monitoring inspections and audits will be undertaken to ensure that disturbance is confined to the delineated work areas. Inspection will involve daily checks, recording of any non-conformance by date.</p>
23	Burrowing crayfish <i>(Engaeus granulatus and Engaeus orramakunna)</i>	<p>To minimise impacts on, the Central North Burrowing Crayfish (<i>Engaeus granulatus</i>) and the Mt Arthur Burrowing Crayfish (<i>Engaeus orramakunna</i>) and as part of the EIMP, Gunns Limited must:</p> <p>a) Conduct surveys, using a suitably qualified person, agreed to by the Department, prior to commencement of construction of each relevant stage of works;</p> <p>b) If any of these species are identified during surveys, detailed management procedures must be included in the EIMP and approved prior to continuing relevant construction. Management procedures may include but not be limited to:</p> <p>i) Micro-siting of the pipeline alignment to avoid populations;</p> <p>ii) Exclusion zones around the pulp mill site as necessary; and</p> <p>iii) Translocation of individuals.</p>	DEWHA approved Mark Wapstra (ECOTas) to be a suitably qualified person on 23 October 2007. The area was assessed by Mark Wapstra (ECOTas) on 30th and 31st October 2007. The survey report was submitted with Module D in Appendix I (report 3). The findings of the survey work are summarised here.	<p>Five live specimens of <i>Engaeus</i> were collected from various sites, as follows:</p> <ul style="list-style-type: none"> <li>• Williams Creek (1 specimen from within the area designated as the solid waste disposal facility)</li> <li>• Williams Creek (1 specimen from within the area designated as the reservoir site)</li> <li>• Unnamed creek flowing into Big Bay under powerline easement (pulp mill site)</li> <li>• Poorly drained ground near Bell Bay Line (effluent pipeline route)</li> <li>• Macquarie Rivulet tributary/drain near Bullocks Head Road (water pipeline route).</li> </ul> <p>All specimens were identified as the non-threatened <i>Engaeus mairener</i>. No evidence of <i>E. granulatus</i> or <i>E. orramakunna</i> was found.</p>	Neither <i>Engaeus granulatus</i> nor <i>Engaeus orramakunna</i> occur within the project footprint. No management measures are necessary.

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Condition	Issue	Approval requirement addressed by this module	Actions taken to prepare management measures	Findings	Management measures adopted to ensure approval condition is met
25	<p>Northern leek orchid (<i>Prasophyllum secutum</i>)</p> <p>Tailed spider orchid (<i>Caladenia caudata</i>)</p> <p>South Esk heath (<i>Epacris exserta</i>)</p> <p>Clover glycine (<i>Glycine latrobeana</i>)</p>	<p>To minimise the risk of non-detection of listed flora, Gunns Limited must:</p> <p>a) Conduct pre-construction surveys for <i>Prasophyllum secutum</i>, <i>Caladenia caudata</i>, <i>Epacris exserta</i> and <i>Glycine latrobeana</i> within the area of potential habitat for these species at appropriate times.</p> <p>b) Conduct these surveys at all construction sites associated with the pulp mill and at 'comparative sites', where populations are known to occur.</p> <p>c) Record both positive and negative search outcomes. An estimate should then be provided of the confidence in detection of these species. Methods for this estimation should follow those described by Keith (2000)*.</p> <p>d) If populations are detected at construction sites associated with the action, then their population size and area of occupancy should be measured as described by Keith (2000)* and the management procedures included in the EIMP.</p> <p>e) 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 surveys.</p> <p>*Keith DA (2000). Sampling Designs, field techniques and analytical methods for systematic plant population surveys. Ecological Management and Restoration, 1, 125-139.</p>	<p>Mark Wapstra (ECOTas) has surveyed the solid waste disposal facility and local reservoir site for the listed species. The field work, analysis and conclusions are complete and two survey reports have been prepared:</p> <p><i>Environmental Consulting Options Tasmania (November 2007) Assessment of proposed pulp mill and associated infrastructure footprint for the presence of Caladenia caudata, Prasophyllum secutum, Glycine latrobeana and Epacris exserta (permit condition 25).</i></p> <p>This survey report is attached to Module B in Appendix I (report 2).</p> <p><i>Environmental Consulting Options Tasmania (July 2008) Assessment of proposed pulp mill and associated infrastructure footprint for the presence of Caladenia caudata, Prasophyllum secutum, Glycine latrobeana and Epacris exserta (permit condition 25).Part 2: Water pipeline and effluent pipeline routes.</i></p> <p>This survey report is attached to Module F-G-H-K as Appendix F. Areas with potential to contain the listed species but not surveyed in the spring 2007 survey are identified in the report.</p> <p>These surveys included a spring (November 2007) survey for <i>Prasophyllum secutum</i> and <i>Caladenia caudata</i> over the full construction footprint, apart from the proposed access road corridor where there have since been adjustments.</p> <p>The proposed access road route has been modified since the spring surveys were conducted in November 2007. The new access road route will be surveyed for <i>Prasophyllum secutum</i> and <i>Caladenia caudata</i> in October 2008 and a supplementary survey report will be submitted to DEWHA.</p>	<p><i>Prasophyllum secutum</i>: The species was not found within the solid waste disposal facility and local reservoir site.</p> <p><i>Caladenia caudata</i>: Only two individuals were recorded from within the project footprint, see Appendix C for more information regarding the conservation significance of these individuals.</p> <p><i>Epacris exserta</i>: The species was not found within the solid waste disposal facility and local reservoir site. A follow-up survey was undertaken in mid-November to coincide with the peak flowering time.</p> <p><i>Glycine latrobeana</i>: The species was not found within the solid waste disposal facility and local reservoir site. A follow-up survey was undertaken in mid-November to coincide with the peak flowering time.</p>	<p><i>Prasophyllum secutum</i>: The species was not found within the solid waste disposal facility and local reservoir site.</p> <p><i>Caladenia caudata</i>: These management procedures have been developed for protection of <i>Caladenia caudata</i> in consultation with Mark Wapstra (EcoTas).</p> <ol style="list-style-type: none"> <li>1. A core zone of a 3 m minimum radius around the known sites will be marked using flagging tape.</li> <li>2. A buffer zone of a 10 m minimum radius around core zone will be marked using flagging tape.</li> <li>3. No vegetation will be disturbed from within the core and buffer zones.</li> <li>4. There will be no entry of machinery, vehicles and people into the core zone and buffer zone except for management purposes.</li> <li>5. Temporary physical barriers (e.g. construction bollards) will be installed during construction activities external to the edge of the buffer zone along areas of risk of physical incursions.</li> <li>6. Infrastructure such as roads will be located downslope of the buffer zone where possible. If this is not possible, infrastructure will be located as far upslope as practical (the buffer zone upslope of the core zone will be increased by a minimum of 10 m, i.e. extend at least 20 m across slope, upslope of the edge of the core zone). Additional physical barriers will be installed to minimise down slope movement of debris. Appropriate drainage features will be installed such that alteration to overground flow of water upslope of the population is minimised.</li> <li>7. These management procedures will be incorporated into the induction program for the pulp mill development such that people working in the vicinity of the population of <i>Caladenia caudata</i> are aware of the management requirements.</li> <li>8. The core and buffer zone will be monitored for weed establishment on a 6-monthly basis during construction activities. Weeds noted will be removed by hand.</li> </ol>

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25 (continued)	<p>Northern leek orchid <i>(Prasophyllum secutum)</i></p> <p>Tailed spider orchid <i>(Caladenia caudata)</i></p> <p>South Esk heath <i>(Epacris exserta)</i></p> <p>Clover glycine <i>(Glycine latrobeana)</i></p>				<p>9. A permanent photo-point will be established on one side of the buffer zone and images taken on a 6-monthly frequency during construction activities showing character of understorey vegetation, especially in the core zone.</p> <p>10. An annual assessment of site for presence/abundance of <i>Caladenia caudata</i> will be undertaken within the buffer zone and immediate surrounds.</p> <p>11. The monitoring checklist (Appendix D) will be incorporated into the annual report provided to the DEWHA.</p> <p>12. If any additional specimens of the species are subsequently discovered within the construction footprint outside of the established buffer zone Gunns will:</p> <ul style="list-style-type: none"> <li>• Stop work in the immediate vicinity (100 m) of the plants;</li> <li>• Notify DEWHA and await an agreed course of action before recommencing the construction activity.</li> </ul> <p><i>Epacris exserta</i>: The species was not found within the solid waste disposal facility and local reservoir site.</p> <p><i>Glycine latrobeana</i>: The species was not found within the solid waste disposal facility and local reservoir site.</p> <p>In areas that have not already been subject to a spring survey for listed species (for example the access road to the solid waste disposal facility), construction will not commence until those surveys have been completed in October 2008. If the spring survey for new areas identifies the presence of any listed species, then those areas will be avoided to all practical extents and management measures will be prepared and submitted for DEWHA approval. For those plants that cannot be avoided or adequately managed, a loss assessment report will be prepared and submitted to DEWHA with a request to proceed with the works.</p>

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Condition	Issue	Approval requirement addressed by this module	Actions taken to prepare management measures	Findings	Management measures adopted to ensure approval condition is met
26	Roadkill	<p>To manage the risks to listed threatened species associated with roadkill, Gunns Limited must, in accordance with the EIMP:</p> <p>a) Immediately following the date of this approval, establish baseline monitoring of roadkill along the East Tamar highway and other major access routes for construction.</p> <p>b) Monitor roadkill and implement response strategies, as necessary, in accordance with the EIMP if the number of road killed mammals exceeds the trigger levels in the EIMP.</p>	<p>A consulting firm, Genames, was commissioned to undertake a 3-month baseline survey of roadkill on the East Tamar Highway.</p>	<p>A report (Genames (February 2008) <i>Baseline Roadkill Monitoring Programme for Bell Bay Alliance. Report prepared for Gunns Ltd</i>) has been provided to DEWHA and is attached to this module as Appendix F.</p> <p>Rather than delay the implementation of strategies until a statistical trigger level might be available, Gunns has developed and will implement response strategies as if there were a zero trigger level for road killed mammals.</p> <p>Gunns will implement those strategies for the full duration of the project's construction activities, including the yet to be commenced vegetation clearing of the mill site (but not including the preliminary activity of constructing the property perimeter fence, which will not cause any appreciable increase in traffic).</p>	<p>The roadkill management measures described in Module C that are relevant to the solid waste disposal facility (with quarry) and reservoir access road will apply:</p> <p>Speed restrictions will be imposed (Commitment 1)</p> <p>The access road will be monitored for roadkill and carcasses will be removed (Commitment 2)</p> <p>Worker traffic minimisation measures will apply (Commitment 3)</p> <p>Bus transport measures will apply (Commitment 4)</p> <p>Heavy vehicle construction traffic will avoid crepuscular hours (Commitment 5)</p> <p>Site inductions will inform workers of roadkill risks (Commitment 7)</p> <p>A traffic counter will be installed on the access road (additional to Commitment 8).</p> <p>In addition the following management measure specific to the solid waste disposal facility access road will be implemented:</p> <p>Operation waste deliveries to the solid waste disposal facility will also be outside crepuscular hours.</p>