

To:  
Resource Planning and Development Commission  
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Tasmanian Conservation Trust Submission on Marine Issues  
Relating to the RPDC's publication: Proposed bleached kraft pulp  
mill in Northern Tasmania by Gunns Limited Report on Gunns'  
Revised Project Scope and the Draft Scope Guidelines for the  
Integrated Impact Statement (IIS)

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## **Introduction**

This submission from the Tasmanian Conservation Trust focuses primarily on the marine related aspects of the Proposed bleached kraft pulp mill in Northern Tasmania by Gunns Limited Report on Gunns' Revised Project Scope and the Draft Scope Guidelines for the Integrated Impact Statement (IIS).

A separate submission on terrestrial aspects will be submitted by the Tasmanian Conservation Trust.

## **Process**

The normal Resource Planning and Development Commission (RPDC) process is generally considered to be orderly, transparent, accessible and free from the taint of external influence. Unfortunately, the review of the Gunns pulp mill proposal does not appear to meet these expectations for the following reasons:

Firstly, the use of the RPDC to develop guidelines for the pulp mill proposal, which it may later have to consider, introduces the unavoidable concern about conflict of interest. The RPDC should not be used to assess such a major project for which it has already helped to develop.

Secondly, this impression is not helped by the apparent willingness to accept repeated changes to the specification of the pulp mill proposal by the proponent, Gunns.

Thirdly, the repeated changes to the specification of the pulp mill complicate an already difficult process and makes it much less accessible.

Fourthly, after the proponent made the latest changes, the RPDC is inviting comment only on the changes. This is unreasonable. A proper integrated impact statement (IIS) should look at development components in a holistic way. Guidelines for an IIS should be developed in the same way, so the components of the final proposal need to be considered together. This would also help make the process more accessible.

While it may be too late to completely allay concern about conflict of interest, the other points could be addressed if the RPDC process was started again and based on a complete and finalised proposal from Gunns.

## Specific Comments

### Title Page:

"Resouce" should be spelt "Resource"

### Page 4:

2.2.3 Output of the mill

Should 1,100,00 ADt pulp per annum read 1,100,000 ADt pulp per annum or 110,000?  
This could make a big difference to an assessment of this proposal.

### Page 10:

2.2.12 Port facilities

The new port facilities may require considerable disturbance of bottom sediment. Research (Mondon et al. 2000; Mondon et al. 2001) on pollutants in sediment form nearby (Deceitful Cove) indicates that these sediments toxic. An investigation is required to determine whether the sediments in the area of the proposed wharf development are polluted to the same extent and if disturbing the sediment will result in risks to the environment or human health.

### Appendix 1 Page 1/11

1 INTRODUCTION

The statement was made that an "... *alternative site at Hampshire was originally considered, but Gunns has selected the Bell Bay location for the proposed mill. The Bell Bay Pulp Mill Project Site is depicted on the attached plan.*" (NB coloured highlights are from the RPDC document).

An explanation for this decision should be provided, particularly as environmental impacts (on air quality and sensitive marine life) appear to be more likely at the Bell Bay site.

### Appendix 1 Page 4/11

5.3 Effluent Processing and Disposal

Amount and type of permitted pollutants should be stated here. The suggestion that effluent is to be discharged "... *up to 4km offshore, near Five Mile Bluff*" limits options. This should be changed to "... far enough from sensitive habitats so that there will be no detectible level of pollution and located so that feeding grounds of Australian fur seals from Bass Strait colonies, and other marine mammals will not be polluted".

An explanatory note should also be added. For example "Important Australian Fur seal breeding colonies are located at in Bass Strait. The important colony at Tenth Island is located approximately 10 km from the proposed outfall. Rocks. The foraging range for Australian fur seals (Department of Primary Industries, Water and Environment, 2001) means that seals from all Tasmanian and Victorian colonies could be exposed to effluent from the proposed Gunns pulp mill in Commonwealth waters. The low rate of flushing in this part of Bass Strait (Sandery and Kämpf, 2005) makes it more likely that persistent toxins that bioaccumulate will cause health problems for these animals.

Baseline data on tissue contamination by dioxins, furans and other persistent toxins should be undertaken. There should be a commitment given to stop/close the mill if health concerns for marine mammals are identified."

This section also states that the "*... types and quantities of the mill emissions will depend on the final process design. However, they are likely to include the following:*

- *gaseous - oxides and other compounds of carbon, nitrogen and sulphur ...*"

The final process design should be finalised before it is considered by the RPDC so that impacts can actually be assessed.

#### **Appendix 1 Page 7/11**

##### 7.4 Transport-related impacts

This section should indicate that impacts of possibly increased shipping movements on other water users would also be assessed.

#### **Appendix 1 Page 9/11**

##### 8.4 Port Facilities

This section states that it "*... is expected that initially most of the pulp will be exported. Pulp will be shipped from a new berth facility to be constructed adjacent to the Bell Bay mill. The berth will have a depth of more than 12 metres. Piling will be necessary in the River Tamar for part of the wharf structure. The wharf facility will be designed to accommodate the full mill output as well as for the possible importation of raw materials. Dedicated pulp carrying ships will be used. These vessels are expected to have a capacity of up to 50,000 tonnes of pulp. A warehouse will be established at the port to store pulp awaiting shipment. This would be designed to store up to 100,000 tonnes of pulp.*"

This section should indicate that impacts of possibly increased shipping movements on other water users will also be assessed.

The new port facilities may require considerable disturbance of bottom sediment. Research (Mondon et al. 2000; Mondon et al. 2001) on pollutants in sediment from nearby (Deceitful Cove) indicates that sediments in this part of the river may be toxic. An investigation is required to determine whether the sediments in the area of the proposed wharf development are polluted to the same extent and if disturbing the sediment will result in risks to the environment or human health. If regular dredging is required to maintain the berth at the proposed wharf development it would create an ongoing environmental hazard that needs to be fully investigated.

#### **Appendix 1 Page 10/11**

##### 8.8 Effluent Disposal

This section states "*As explained at Part 5.3, substantial volumes of waste water will be reused in the bleaching process. Nevertheless, waste water is proposed to be transported through an effluent disposal pipeline that will follow an alignment from the pulp mill to an area near Five Mile Bluff, north of George Town, to deliver effluent to an*

*ocean outfall located up to 4km offshore. This effluent disposal pipeline will mostly be located in road reserves, but it will also traverse private freehold land and Crown land."*

It is not necessary to point out that waste water will be reused. Of much greater significance is the amount of effluent released and the types and concentrations of the pollutants that it will contain. This should be quantified at this stage.

A commitment to a particular process by Gunns would allow a better understanding and assessment of the risks arising from water pollution.

### **Appendix 1 Page 10/11**

#### **9. COMMUNITY CONSULTATION**

The proposals seem to be more an exercise in propaganda unless equal time is given to community groups conservation groups and alternative views, particularly on a television "Pulp Mill Report". There is no mechanism for "consultation" to impact on the development. There can be no justification for spending public money on this. There should be a mechanism that allows public concerns and comment to impact the development, to the point of stopping it altogether.

### **Appendix 1 Page 11/11**

#### **10. INTEGRATED ASSESSMENT PROCESS**

This section states that the "... *integrated assessment process prescribed by Part 3 of the State Policies and Projects Act should ensure that all of the social, environmental, economic and community benefits and impacts of the proposed mill are assessed in a thorough and transparent manner. Gunns believes this will be essential to ensure the community is given an opportunity to learn about and comment on our project.*"

It is worth pointing out that there is no indication by Gunns in this statement that it believes comment on the project will or should have any effect.

There should be a clear indication that public concerns about environmental and other impacts will be addressed.

### **Appendix 2 Page 32**

#### **1.1.4 Scope of the project;**

A statement about the project's approach to environmental impacts should be included. Environmental impacts should be planned to be both negligible and acceptable.

### **Appendix 2 Page 41**

Point 9 states that: "*All major sources of wastes ... must be identified and the wastes characterised and quantified ... For a complete list refer to Table 9, Indicative core chemical, biological and other parameters to be monitored, of the Tasmanian Government 2004, Environmental emission limit guidelines for any new bleached eucalypt kraft pulp mill in Tasmania ....*"

The actual list/Table 9 should be provided at this point. Also, the requirement, in Table 9, to monitor chlorinated dioxins and furans at three monthly and twice yearly

respectively, and the proposed variable monitoring program for 2,3,7,8-TCDD and 2,3,7,8-TCDF V, is totally inadequate, particularly when concerns about impacts of persistent toxins on marine mammals such as fur seals must be addressed. Monitoring should be daily, at least until it can be demonstrated during the actual operation of the mill that such levels of monitoring are unnecessary.

#### **Appendix 2 Page 45**

##### 4.5 Construction phase

As the new port facilities may require considerable disturbance of bottom sediment, an assessment of impacts from this construction should be made. Research (Mondon et al. 2000; Mondon et al. 2001) on pollutants in sediment form nearby (Deceitful Cove) indicates that these sediments toxic. An investigation is required to determine whether the sediments in the area of the proposed wharf development are polluted to the same extent and if disturbing the sediment will result in risks to the environment or human health. If regular dredging is required to maintain the berth at the proposed wharf development, this constitutes an ongoing environmental hazard that needs to be fully investigated.

#### **Appendix 2 Page 46**

This must include discussion of the following:

Point 5 of the site selection excludes important species and habitats. Australian fur seals and bottlenose dolphins feed in the vicinity of the effluent plume from the proposed pulp mill and are of particular concern. An important breeding colony of Australian fur seals is close to the effluent pipeline at Tenth Island. These species are protected and should be mentioned for discussion under point 5, or in an additional point.

#### **Appendix 2 Page 50**

##### 6.2 Details of existing environment

Marine mammals such as Australian fur seals and bottlenose dolphins should be listed at point 28 (as described above) or under a new point in this section.

Point 25 suggests that measurements should be made of "*background levels of naturally occurring organochlorines and chlorine compounds in the vicinity of the pipeline and outfall*". In addition, a baseline survey of current tissue loading of organochlorines and other persistent toxins for these marine mammals should be carried out using humane and non-lethal techniques. If contamination by products released in mill effluent is detected, there should be an explicit process that results in the closure of the mill.

#### **Appendix 2 Page 52**

Section 7.1.3 states that if "*... adverse residual effects from the project are considered unavoidable despite the adoption of best practice environmental management avoidance and mitigation measures, then where feasible proposals to offset such effects should be detailed. For example, if the loss of conservation values, community assets or amenities is considered unavoidable, measures to compensate for the conservation values to be lost, or the community assets or amenities to be affected should be proposed where feasible.*"

How is "where feasible" defined? Is this based on cost, and if so, who is to bear the cost?

What happens if there is no feasible solution? Is the construction or operation of the mill stopped?

This section should be replaced with a simple statement that indicates the mill will be closed down, or not built, if there is not a reasonable expectation that its emissions and other environmental impacts will meet agreed environmental standards, or if these standards are not met once it becomes operational.

Section 7.1.4 states that " ... *predictions of environmental and health impacts should be based on scientifically supportable data ...*". This is quite reasonable, however in situations where data is not available, then the precautionary principle should be used to make management decisions. The mill should not be permitted to proceed until adequate data is collected to ensure that impacts are acceptable.

In addition, if the mill proponent seriously expects the community to participate at this level of sophistication and with scientific rigour, then a mechanism that provides financial support must be provided by the Government and/or the proponent to groups and individuals in the community to allow them to get professional independent scientific advice and undertake professional scientific research.

A more practical approach would be for community concerns, whether based on science or perception, to be addressed in an open and objective way by the mill proponent and the RPDC.

## **Appendix 2 Page 52**

### 7.8.1 Wastewater emissions

In point -5, "such as bottlenose dolphins and Australian fur seals" should be added after "marine mammals".

After "fish", the parentheses and "including" should be removed. While marine reptiles, invertebrates and marine plants are all "fish" according to Tasmania's *Living Marine Resources Act 1995*, general usage of this terminology, and biologically, identifies these organisms as distinct forms of life that are not fish.

After the statement "*the potential for persistent organic pollutants<sup>2</sup> and any other pollutants to bioaccumulate and biomagnify in marine organisms, with specific reference to any threat to human health or the commercial acceptance of marine products*", add "or marine mammals such as bottlenose dolphins and Australian fur seals or other large predators."

## **Appendix 2 Page 74**

### 7.10.9 Marine environment

In point 4, the sentence "*This should be made in the context of the Tasmanian Marine Oil Pollution Contingency Plan*" should be replaced by "This should take into account the danger posed by the release of PCBs, heavy metals and other contaminants from bottom sediments as well as the threat of oil spills in the context of the Tasmanian Marine Oil Pollution Contingency Plan".

## **Appendix 2 Page 75 and 76**

### 7.11 Environmental management

There should be an explicit process by which the mill will be closed down if it does not meet environmental performance indicators.

## **Appendix 2 Page 81**

In the section "*8.6.8 Impact on transport, tourism, marine and freshwater fisheries (commercial and recreational), marine farming; environmental management and related industries*" the phrase "recreational users such as fishers, divers, sailors and other water users" should be added after "*marine farming*".

## **Appendix 2 Page 83**

The section 9.1.9 should state that mill will be closed down if response to complaints is inadequate and it does not meet environmental performance indicators.

## **Appendix 2 Page 84 and 85**

In section 10.1 Environmental effects, after "*benthic mapping and biological studies*" add studies of contamination by organochlorines and other persistent toxins such as dioxins, furans 2,3,7,8-TCDD and 2,3,7,8-TCDF V in the environment and in marine life, including marine mammals".

The monitoring process should also be outlined in much more detail, with information on who is to perform this task and where and when it is to occur.

Decision rules should be developed to change monitoring patterns according to circumstances and direct the operation of the mill if problems are identified.

Monitoring is worthless unless there are definite management outcomes to be achieved. It should be made clear that unacceptable emissions or would result in closure of the mill at least until they can be brought under control.

## **Appendix 2 Page 86**

### 11. Conclusion

In addition to the points outlined in this section, the conclusion must outline consequences if the mill operation does not meet emission guidelines or other expectations. Sanctions should be made explicit and extend to shutting the mill down.

## Discussion

The RPDC process has generally been held in high regard in the past, so the way the Gunns pulp mill proposal has been dealt with has been a great disappointment.

A clear impression of conflict of interest was created when the RPDC assisted in developing pulp mill emission guidelines for project that it would later assess.

The independence and objectivity of the RPDC has also been brought into question by the way it has allowed Gunns to include major changes to the project after the start of the assessment process.

Public accessibility and fairness has also been compromised by the more confusing documentation that resulted from the changes, and the artificial limitation of comments to changes in the project.

A simple solution to many of these concerns would be to start the assessment project again using a finalised proposal by Gunns, with details of the mill production process and realistic predictions of expected effluent flows and other pollutants.

One of the major concerns about any pulp mill is pollution caused by effluent dumped into the aquatic environment. Even freshwater, coloured water or non-toxic sediment can have a significant ecological impact.

Lack of mixing in the central part of Bass Strait is a problem. One study shows a flushing time of at least 160 days. In the meantime, the water body moves backwards and forwards leading to continual exposure of the environment and marine life to whatever is in the effluent, and the movement of pollutants into the coast and Tamar River.

Persistent toxins that bioaccumulate, those that enter ecosystems and become more concentrated as they move up the food chain, are of particular concern. Low emissions can still lead to big problems if toxins are persistent.

Recreational and commercial fishers, and others may also suffer due to the direct loss of biodiversity and fish stocks, or as a result of real or perceived contamination by toxins in seafood

There is potential for pulp mill effluent to damage other natural values, including water cleanliness and clarity, biodiversity and wildlife.

Persistent toxins are of particular concern to marine mammals such as bottlenose dolphins and Australian fur seals. These animals live and feed near the effluent outfall. They could easily bioaccumulate persistent chemicals as they are near the top of the food chain. An important colony of Australian fur seals is located on Tenth Island approximately 10 km from the proposed outfall. The foraging range of this species means that animals from all Tasmanian and Victorian breeding colonies could become exposed to pollution from the proposed pulp mill.

Allowing this mill to go ahead without preventing the release of persistent toxins that may accumulate and harm marine mammals will undermine the Australian Government's great record protecting these animals. It would be hard to maintain the ethical position against Japanese "scientific whaling" if Australia allows protected marine mammals, such as the fur seals in Bass Strait, to be poisoned by a new industrial activity such as the Gunns pulp mill.

Even if emission guidelines are set and found to be acceptable, there is no real commitment to adhere to these. For example, section 7.1.3 states that "*if adverse residual effects from the project are considered unavoidable despite the adoption of best practice environmental management avoidance and mitigation measures, then where feasible proposals to offset such effects should be detailed. For example, if the loss of conservation values, community assets or amenities is considered unavoidable, measures to compensate for the conservation values to be lost, or the community assets or amenities to be affected should be proposed where feasible.*"

This implies that even if effects are detected and found to be unavoidable, there is no commitment to stop the problem from getting worse even if no feasible mitigation measures exist.

If the mill is unable to comply with emission guidelines and causes damage to amenity of the environment, there must be a commitment to close the mill down. If unacceptable emission levels, impacts on the environment and amenity are predicted, then Gunns pulp mill should not even be built.

## References

Department of Primary Industries, Water and Environment (2001) *A Seal Fishery Interaction Management Strategy Background Report*, Department of Primary Industries, Water and Environment, Hobart

Mondon, JA; Duda, S; Nowak, BF (2000) Immune response of greenback flounder *Rhombosolea tapirina* after exposure to contaminated marine sediment and diet, MARINE ENVIRONMENTAL RESEARCH, 50 (1-5): 443-450

Mondon, JA; Duda, S; Nowak, BF (2001) Histological, growth and 7-ethoxyresorufin O-deethylase (EROD) activity responses of greenback flounder *Rhombosolea tapirina* to contaminated marine sediment and diet, AQUATIC TOXICOLOGY, 54 (3-4): 231-247

Sandery P. A. and Kämpf J. (2005), Winter-Spring Flushing of Bass Strait, South-Eastern Australia, A Numerical Modelling Study, ESTUARINE, COASTAL AND SHELF SCIENCE, 63: 23-31.