## Friends of the Tamar Valley Inc



# Outline of facts and impacts relating to the proposed Pulp Mill in the Tamar Valley, Tasmania

Friends of the Tamar Valley Inc is comprised of members of the Tamar Valley community and generally has as its purposes promotion, encouragement and education relating to the protection and enhancement of the natural environment, economic and social issues in the Tamar Valley, Tasmania. The public officer can be contacted on <a href="mailto:friendsofthetamarvalley@gmail.com">friendsofthetamarvalley@gmail.com</a>.

November 2010 (2<sup>nd</sup> edition)

#### A. INTRODUCTION

This document succinctly outlines facts and impacts relating to the proposed pulp mill in the Tamar Valley, Tasmania.

It does so by reference to many of the economic, social and environmental issues, and is designed to allow the reader to quickly understand or be reminded of those issues.

### B. ECONOMIC ISSUES

### 1. Impact on local economy

The Tamar Valley is a picturesque valley and a popular tourism destination, with more than 20 vineyards lining the shores of the Tamar River.<sup>1</sup> Tourism is worth about AUD\$465million annually to Launceston and the Tamar Valley.<sup>2</sup>

The pulp mill will cause the loss of well over 1000 jobs, with 1044 jobs lost from the tourism industry and at least 175 jobs from local fishing businesses.<sup>3</sup> Conversely, the pulp mill would create just 280 jobs.<sup>4</sup>

The economic report prepared for Gunns by Allens Consulting Group has failed to meet Australian Treasury guidelines for economic appraisal. It only addresses potential economic benefits of the proposed pulp mill. It ignores the economic costs of the proposed pulp mill. As a result, the report fails to identify whether the pulp mill will actually generate a net economic benefit for Tasmania.<sup>5</sup>

Since the pulp mill proposal was first mooted, there has been a massive reduction in promised employment numbers at the mill.<sup>6</sup>

### 2. Lack of economic benefits

The pulp mill would likely cost the Tasmanian economy AUD\$300million over its life or, at worst case scenario, AUD\$3billion.<sup>7</sup>

The pulp mill would not be able to match the costs of new low-cost producers in South America that can produce pulp at almost half the price it would cost the proposed pulp mill owner.<sup>8</sup>

1

http://maps.google.com.au/maps/ms?hl=en&ie=UTF8&t=h&msa=0&msid=103455232846024107012.0004659d63be3d5b1818a&z=9

<sup>&</sup>lt;sup>2</sup> Australian Government, Department of Resources, Energy and Tourism, Tourism Research Australia, *Regional Tourism Profiles 2008/09, Tasmania, Launceston and Tamar Valley Region* (can be found at <a href="http://www.ret.gov.au/tourism/Documents/tra/Regional%20tourism%20profiles/TAS/Tas%20-%20Launceston%20-%20FINAL2.pdf">http://www.ret.gov.au/tourism/Documents/tra/Regional%20tourism%20profiles/TAS/Tas%20-%20Launceston%20-%20FINAL2.pdf</a>)

<sup>&</sup>lt;sup>3</sup> Launceston Environment Centre, *Tasmanian Round Table for Sustainable Industries Project*, August 2007 (can be found at <a href="http://www.lec.org.au/pdfs/TRSIPreport2(Aug07).pdf">http://www.lec.org.au/pdfs/TRSIPreport2(Aug07).pdf</a>)

<sup>&</sup>lt;sup>4</sup> ITS Global, Review of the Social and Economic Benefits of the Gunns Limited Pulp Mill Project, 26 June 2007 (can be found at <a href="http://www.justice.tas.gov.au/">http://www.justice.tas.gov.au/</a> data/assets/pdf file/0004/82282/Final ITS Global Report.pdf)

<sup>5</sup> Op cit n3

<sup>&</sup>lt;sup>6</sup> ABC news, *Lack of training stymies local pulp mill jobs: analyst*, 20 march 2008 (can be found at <a href="http://www.abc.net.au/news/stories/2008/03/20/2195328.htm">http://www.abc.net.au/news/stories/2008/03/20/2195328.htm</a>) and ABC News, *No surprises in downsized pulp mill work force*, 20 March 2008 (can be found at <a href="http://www.abc.net.au/news/stories/2008/03/20/2194968.htm">http://www.abc.net.au/news/stories/2008/03/20/2194968.htm</a>)

<sup>&</sup>lt;sup>7</sup> National Institute for Economic and Industry Research, *A comprehensive economic assessment for the Tasmanian economy of the direct benefits of the proposed Gunns Pulp mill*, January 2008 (can be found at <a href="http://www.wilderness.org.au/files/nieir-jan-08.pdf">http://www.wilderness.org.au/files/nieir-jan-08.pdf</a>)

<sup>&</sup>lt;sup>8</sup> CommSec http://www.abc.net.au/news/stories/2007/09/21/2040325.htm

The government has already directed significant taxpayer subsidies to the proposed pulp mill. The government has not disclosed all subsidies. Currently known subsidies already outweigh any government income from the project. Based on, among other things, the long tradition of government subsidies to the Tasmanian logging industry, the regard in which the project is held in government and industry circles and the size of the investment, subsidies are likely to be ongoing.

### C. SOCIAL ISSUES

The Tamar Valley is home to about 100,000 people. 10

The pulp mill would be in the Tamar Valley air shed<sup>11</sup> with its inherent meteorological inversion layer.<sup>12</sup> An inversion layer is a layer within which an atmospheric property is inverted and leads to pollution being trapped close to the ground.<sup>13</sup>

### 1. Odour

Pulp mills are associated with odour problems<sup>14</sup> and are a cause of significant community concern internationally.<sup>15</sup> Odour is not only a nuisance factor. It can also adversely affect health.<sup>16</sup>

Odour through fugitive emissions from hundreds of sources within the pulp mill's complex would drift to homes, businesses, farms and wineries in the vicinity of the mill.<sup>17</sup> The fugitive odours will be detected in the air up to 55kms away.<sup>18</sup>

Bad smells and noxious odours from pulp mills cause nausea, headaches and difficulty with breathing. In high concentrations they are likely to result in eye and respiratory tract irritation that become more severe as the exposure time increases.<sup>19</sup>

Human senses can detect pulp mill odours when the odour-causing substances are at extremely low levels.  $^{20}$ 

The inversion layer in the Tamar Valley would exacerbate the impact of odour.<sup>21</sup>

<sup>&</sup>lt;sup>9</sup> Naomi Edwards, BSc (Hons) FIA FNZSA FIAA MAICD, *Too much risk for the reward – an analysis of the pulp mill returns to the people of Tasmania*, September 2006 (can be found at

http://www.twff.com.au/documents/research/nerpdc2006.pdf)

10 Launceston City Council website, home page, accessed on 18 October 2010 (can be found at http://www.launceston.tas.gov.au/lcc/index.php?c=283)

http://www.launceston.tas.gov.au/lcc/index.php?c=283)

11 Launceston City Council, Submission to the Resource Planning and Development Commission, 25 September 2006 (document available by email request to friendsofthetamarvalley@gmail.com)

<sup>&</sup>lt;sup>12</sup> The Australian Branch of the Australian Medical Association, *Position Statement, Proposed Tamar Valley Pulp Mill*, 25 September 2006 (can be found at

http://www.onlineopinion.com.au/documents/articles/473 Australian Medical Association-Tasmania.pdf)

<sup>&</sup>lt;sup>13</sup> Encyclopaedia Britannica, definition of inversion layer (can be found at <a href="http://www.britannica.com/EBchecked/topic/586707/temperature-inversion">http://www.britannica.com/EBchecked/topic/586707/temperature-inversion</a>)

<sup>&</sup>lt;sup>14</sup> Ministry of Agriculture and Finance, New Zealand, *Managing and measuring pulp mill odour emissions* (can be found at <a href="http://www.maf.govt.nz/mafnet/publications/rmupdate/rm7/rm0703.htm">http://www.maf.govt.nz/mafnet/publications/rmupdate/rm7/rm0703.htm</a>)

<sup>15</sup> *Op cit* n12

<sup>&</sup>lt;sup>16</sup> Jaakkola JJ et al, The South Karelia Air Pollution Study: changes in respiratory health in relation to emission reduction of malodorous sulphur compounds from pulp mills. Arch Environ Health. 1999 July-Aug;54(4):254-63

<sup>&</sup>lt;sup>17</sup> Dr Warwick Raverty (can be found at <a href="http://tapvision.info/node/117">http://tapvision.info/node/117</a>)

<sup>&</sup>lt;sup>18</sup> Dr Warwick Raverty (can be found at <a href="http://tapvision.info/node/573">http://tapvision.info/node/573</a>)

<sup>&</sup>lt;sup>19</sup> S R Young, Georgia-Pacific Consumer Products (Camas) LLC, Cams, Washington, *Questions and answers about kraft pulp mill odour*, June 2008 (can be found at <a href="http://www.gp.com/camas/enviro/MANUAL75.pdf">http://www.gp.com/camas/enviro/MANUAL75.pdf</a>)
<sup>20</sup> Op cit n12

### 2. Pollutants

The pulp mill will release pollutants into the air including small particles, sulphur dioxide and oxides of nitrogen.<sup>22</sup>

The Tamar Valley already has a significant problem with air quality and a pulp mill will only aggravate the issue particularly given the Tamar Valley inversion layer.<sup>23</sup> Tasmania has the highest rate of asthma in Australia which has been linked to poor air quality.<sup>24</sup>

Air containing particulate matter can trigger asthma attacks and chronic obstructive pulmonary disease lung attacks. <sup>25</sup>

There are already an estimated 8 additional deaths per year in the Launceston area as a result of air pollution.<sup>26</sup> The pulp mill could cause an increase in the already existing morbidity and mortality from atmospheric pollutants.<sup>27</sup>

### 3. Water vapour and road traffic

The issue of white-out fog has not been assessed in respect of the proposed pulp mill.

The proposed pulp mill's high output of water vapour at ground level could produce a whiteout fog on the East Tamar Highway, as was produced by the Bowater paper mill in Tennessee, which led to 12 people being killed and dozens more being seriously injured in a multi-car pileup on a neighbouring freeway.<sup>28</sup>

With the massive increase in log trucks forecast for all the major Tamar Valley carriageways including the East Tamar Highway which leads directly to the proposed pulp mill site, school buses and other local traffic will face a lethal hazard.<sup>29</sup>

### 4. Log truck traffic

If the pulp mill were to proceed, there would be a significant increase in log truck traffic.<sup>30</sup>

An increase in road traffic is likely to cause an increase in road fatalities, air emissions and noise.<sup>31</sup>

<sup>22</sup> Sweco Pic, Assessment of the Gunns Limited Bell Bay pulp mill against the environmental emission limit guidelines, 25 June 2007 (can be found at <a href="http://www.justice.tas.gov.au/">http://www.justice.tas.gov.au/</a> data/assets/pdf file/0003/82281/Final SWECO Report.pdf)
<a href="https://www.justice.tas.gov.au/">http://www.justice.tas.gov.au/</a> data/assets/pdf file/0003/82281/Final SWECO Report.pdf)
<a href="https://www.justice.tas.gov.au/">23 Op cit n 21</a>

<sup>&</sup>lt;sup>21</sup> Op cit n11

<sup>&</sup>lt;sup>24</sup> News Limited, *Tassie's asthma rate alarm*, 30 July 2008 (can be found at <a href="http://search.news.com.au/related/id%3Astory%7C24105655/0/Tassies-asthma-rate-alarm/?us=ndmnews&sid=5012677&as=news&ac=travel&r=related">http://search.news.com.au/related/id%3Astory%7C24105655/0/Tassies-asthma-rate-alarm/?us=ndmnews&sid=5012677&as=news&ac=travel&r=related</a>)

alarm/?us=ndmnews&sid=5012672&as=news&ac=travel&r=related)

25 Op cit n19 and American Lung Association, Particulate matter, April 2000 (can be found at http://www.lbamspray.com/00 Health/Particulate%20Matter%20-%20American%20Lung%20Association%20site.htm)

26 Tasmanian Air Quality Strategy, June 2006, p80

<sup>&</sup>lt;sup>27</sup> Australian Medical Association Tasmania, position statements (can be found at <a href="http://www.amatas.com.au/issues/">http://www.amatas.com.au/issues/</a>)

<sup>&</sup>lt;sup>28</sup> ABC interactive business network, *Bowater's Calhourn mill at centre of fog-related highway pileup dispute* (can be found at <a href="http://findarticles.com/p/articles/miga3636/is">http://findarticles.com/p/articles/miga3636/is</a> 199408/ai n8710570/)

at <a href="http://findarticles.com/p/articles/mi\_qa3636/is\_199408/ai\_n8710570/">http://findarticles.com/p/articles/mi\_qa3636/is\_199408/ai\_n8710570/</a>)

Dr Warwick Raverty, *Mill disaster: the uncanny similarities (white out fogs)*, 1 December 2008, (can be found at www.tasmaniantimes.com)

www.tasmaniantimes.com)

30 GHD, Northern Tasmania pulp mill transport and traffic impact assessment report, March 2006 (can be found at <a href="http://www.gunnspulpmill.com.au/iis/V15/V15">http://www.gunnspulpmill.com.au/iis/V15/V15</a> A43.pdf)

31 Op cit n12

#### 5. Assessment

The proposed pulp mill was initially subjected to a proper assessment process by Tasmania's Resource Planning and Development Committee (*RPDC*).

Shortly after the RPDC said that the information Gunns had submitted was "critically noncompliant", Gunns announced that it was withdrawing its pulp mill proposal from the RPDC.<sup>32</sup>

Shortly thereafter, then-Premier of Tasmania, Paul Lennon, introduced a Bill in the Tasmanian Parliament which would fast track approval of the proposed pulp mill.<sup>33</sup> As a result, the Pulp Mill Assessment Act 2007 was enacted and the project approved.

This process resulted in a lack of proper assessment of the proposed pulp mill.<sup>34</sup>

#### D. **ENVIRONMENT & HERITAGE**

The proposal is to build a chlorine dioxide bleaching pulp mill in Tasmania's beautiful Tamar Valley.

#### 1. **Marine Environment**

The pulp mill will dump 64,000 tonnes of effluent into Bass Strait every day.<sup>35</sup>

The effluent will contain dioxins and furans, which are the most toxic chemicals known to science. The dioxins and furans build up in the food chain contaminating marine life which will have a flow on effect to Tasmania's fishing industry.<sup>36</sup> The impact of the effluent is exacerbated by the slow flushing Bass Strait, meaning much of the dioxin may settle in a small area surrounding the outfall and build to dangerous levels in a short period of time.<sup>37</sup>

The dioxin level that would trigger closure of the mill equals the amount of dioxins emitted in a year by the entire Swedish bleached pulp and paper industry, which produces about seven times more bleached pulp than the proposed pulp mill will produce.<sup>38</sup>

Effluent from a pulp mill would wash up on Tasmania's northern beaches within hours of being discharged, in the same manner that faecal matter washed up on Sydney's northern beaches. Easterly winds would be able to move an effluent plume into the mouth of the Tamar River in less than a day.<sup>39</sup>

*Op cit* n37

 $<sup>{}^{32}\,\</sup>underline{\text{http://www.wilderness.org.au/campaigns/gunns-pulp-mill-fast-track}}$ 

Hansard, Tasmanian Parliament, March 2007 (can be found at

http://www.parliament.tas.gov.au/HansardHouse/isysquery/bf05192c-87c5-4f17-ac9d-c477f388598b/3/doc/)

<sup>&</sup>lt;sup>34</sup> The Australian, *PM's pal dams pulp mill proposal*, 15 August 2007 (can be found at http://www.theaustralian.com.au/news/pms-pal-damns-pulp-mill-proposal/story-e6frg6ox-1111114186180)

<sup>&</sup>lt;sup>15</sup> Gunns' referral under the EPBC Act (April 2007) (can be found at http://www.environment.gov.au/cgibin/epbc/epbc ap.pl?name=referral detail&proposal id=3385)

Environment Australia, Air toxics and indoor air quality in Australia, 2001 (can be found at

http://www.environment.gov.au/atmosphere/airquality/publications/sok/chapter1.html)

37 Dr Stuart Godfrey, *Inadequacies in the hydrodynamic modelling performed for Gunns IIS*, 2007 (can be found at http://www.environment.gov.au/epbc/notices/assessments/2007/3385/pubs/att-b7-3.pdf)

The Age, Swedes cast doubt on mill standards, 15 October 2007 (can be found at http://www.theage.com.au/news/climate-watch/swedes-cast-doubt-on-mill-standards/2007/10/14/1192300601241.html)

#### 2. **Threatened Species**

The proposed pulp mill will have a significant impact on threatened species. For example, any pollutants carried by the Australian Grayling (such as dioxins from the pulp mill consumed by the fish) would be ingested by its predators, such as the White-bellied Sea Eagle and the Tasmanian Wedge-tailed Eagle, which are listed threatened species. No work has been done or is intended to be done on the food chain issue.<sup>40</sup>

#### **3. Forests**

The pulp mill's surplus electricity will be sourced from biomass, 41 which means that native forest may be burnt to power the pulp mill.

Research from leading scientists at the Australian National University has found that Australia has some of the most carbon-dense forests in the world, with the potential to sequester carbon equivalent to 25% of our current annual emissions over a 100 year time frame. <sup>42</sup> When burned, forest biomass emits more greenhouse gases per unit of energy than fossil fuels. <sup>43</sup>

#### 4. Water

The pulp mill will consume 26 to 40 billion litres of fresh water each year.<sup>44</sup> This is almost as much as the combined use of all water users in Northern Tasmania.<sup>45</sup> Research shows that plantations can reduce stream flow by over 50%.<sup>46</sup> Meanwhile, north-east Tasmania can expect a forecast reduction in rainfall of 8% over 30 years due to climate change.<sup>47</sup> This means that public water supply will be put under enormous pressure by the proposed pulp mill.

#### 5. Culture and heritage

The Tasmanian Aboriginal Land and Sea Council<sup>48</sup> officially opposes the proposed pulp mill because of its impacts on Aboriginal culture and heritage. These impacts to important heritage sites will occur at both the proposed pulp mill site and in the forests that will be logged to feed or power the mill.

 $<sup>^{40}</sup>$  Report of Dr Charles Meredith filed in Federal Court proceeding Lawyers for Forests Inc v Minister for Environment & Gunns Limited

<sup>&</sup>lt;sup>41</sup> Gunns Limited, *The facts*, undated (can be found at <a href="http://www.gunnspulpmill.com.au/factsheets/The\_Facts.pdf">http://www.gunnspulpmill.com.au/factsheets/The\_Facts.pdf</a>)

<sup>&</sup>lt;sup>42</sup> Brendan G Mackey, Heather Keith, Sandra L Berry and David B Lindenmayer, Green Carbon: the role of natural forests *in carbon storage*, 2008 (can be found at <a href="http://www.wilderness.org.au/files/GreenCarbonReport-synopsis.pdf">http://www.wilderness.org.au/files/GreenCarbonReport-synopsis.pdf</a>)

43 Cnet news, *Study finds biomass power not carbon neutral*, 11 June 2010 (can be found at <a href="http://news.cnet.com/8301-">http://news.cnet.com/8301-</a>

<sup>11128 3-20007484-54.</sup>html)

44 Gunns Ltd, *Bell Bay Pulp Mill Draft Integrated Impact Statement* (can be found at <a href="http://www.gunnspulpmill.com.au">http://www.gunnspulpmill.com.au</a>).

<sup>&</sup>lt;sup>45</sup> Annual Reports, Esk Water and Cradle Coast Water

<sup>&</sup>lt;sup>46</sup> Jackson et al, *Trading water for carbon with biological carbon sequestration*, 23 December 2005 Vol 310 Science

<sup>&</sup>lt;sup>47</sup> Tasmanian Government, *Draft Climate Change Strategy*, October 2006 (can be found at http://www.dpiw.tas.gov.au/inter.nsf/Attachments/PMAS-6UF3SU/\$FILE/TasClimateChangeStrategy-DraftOct06.pdf) <sup>8</sup> Tasmanian Aboriginal Land and Sea Council submission to the RPDC