



9 June 2009

The Tasmanian Pulp Mill - A Mill for Our Times

Gunns has released its draft Pulp Mill Design Report for the proposed Tasmanian pulp mill. This report has been submitted to the Director, EPA for consideration; a decision on its appropriateness with regard to the requirements of the permit is pending. This document is freely available for all members of the community to view on Gunns' website (http://www.gunnspulpmill.com.au/permits/Pulp%20Mill%20Design%20Report_Draft%20090609.pdf).

Modern pulp mills have come a long way since they were first built in China and Egypt thousands of years ago. Wood pulping which began in the 1800s forms the basis for our modern pulp mills.

Today pulp mills are designed to operate within strict environmental controls to ensure our natural surroundings are protected. Modern pulp mills in South Africa, South America and Finland have been designed to ensure there are no adverse affects on the regions they are operating in.



These pulp mills have been designed by specialist engineers like Brian Greenwood and Kari Tuominen who are senior designers on the Tasmanian Pulp Mill Project. These engineers were 'pulp mill kids', growing up in pulp mill towns across the world where their fathers worked, much in the same way as Australia has 'mining kids'. Brian Greenwood remembers when pulp mills were operating with little consideration for their natural surroundings:

'Pulp mills had few environmental controls and had a huge impact on the rivers and the air. Many of these pulp mills are still operating, for example there are about 200 old pulp mills still operating in China. Building a modern facility in Tasmania gives us a good environmental outcome globally as the dirty plants will get taken out and state of the art technology will replace them.'

Pulp mill engineers like Brian and Kari have made it their mission to ensure their children and grandchildren grow up in towns very different to the ones they experienced. Their work has been focussed on continually developing and improving the pulp production technology so that pulp mills co-exist with other industries and tourism with a neutral impact on the environment, bringing sustainable benefits to the communities they operate in.

The Tasmanian pulp mill will be built in an industrial zone about 40kms from Launceston, and will showcase all the bells and whistles of the 'Accepted Modern Technology' and 'Best Available Techniques' concepts used in modern pulp mills.

The pulp mill designers have taken full advantage of the time available to them during the environmental approval process to re-design many aspects of the pulp mill as the technology continues to evolve.

The release of the draft Pulp Mill Design Report this week is the culmination of the extensive work undertaken in the last 2 years by Gunns and its specialist consultants to meet the requirements of the Tasmanian Pulp Mill Permit. The report contains a detailed outline of the technology, first introduced in the Integrated Impact Statement 2006, and how it will be applied in the pulp making process. It upgrades the environmental outcomes presented in the Integrated Impact Statement and confirms the mill will have a neutral impact on the environment.

In order for the pulp making process to take place, chemicals such as sodium chlorate and gases such as oxygen are used. The pulp mill will have its own plant to produce these chemicals and gases. Initially, the chemical plant was designed just to produce sodium chlorate for the Tasmanian based pulp mill, but now an opportunity to produce sodium chlorate for other Australian and international businesses can be realised.

The mill provides a further opportunity by outsourcing the production of oxygen. The oxygen plant will not only provide ample oxygen for the pulp mill but also for our hospitals and agricultural industries. Nitrogen and argon, both used by industry, will be produced by the oxygen plant, and will be sold to Tasmanian and mainland customers. The draft Pulp Mill Design Report shows that over 100 tonnes of oxygen can be produced per day ensuring a ready supply and reducing our reliance on imports from the mainland.

Both the chemical plant and the oxygen plant will require specialised skills, providing pathways to training and development for Tasmanians. The opportunities for scientists, engineers and technologists to work in Tasmania are scarce with many school leavers and graduates leaving the state disillusioned with the lack of choices available to them. Having the pulp mill, a chemical plant and an oxygen plant will encourage our young scientists, engineers and technologists to remain in Tasmania near family and friends.

Like most modern pulp mills the Tasmanian pulp mill will be self sufficient by producing its own energy from biofuels (wood waste and black liquor) used in the pulp making process. In fact, the efficiencies that have been made through the intricate design process will produce surplus energy that can be fed on to the grid. This provides a potential additional source of energy that could power a city the size of Launceston.

Innovation and downstream processing are very important for the future of the Tasmanian economy. Modern pulp mills provide many opportunities in many countries to sustain communities into the future with little or no impact on our natural environment.