

## Extreme Health Concerns regarding the Gunn's proposed pulp mill.

As a Tasmanian who has lived in Launceston, Hobart, Queenstown and Burnie, and as a qualified and practicing social worker and Tafe Teacher for thirty one years in the North of Tasmania, I am known to many residents of the Tamar Valley and of Tasmania. From the time Gunn's proposed pulp mill was mentioned one of the major concerns expressed to me was the effect on the health of the residents of the Tamar Valley and of the state.

As a result of listening to many people of all ages I embarked on a little research regarding what those concerns were. They often outlined to me where they had obtained their information.

When I became aware that TAP representatives were to meet with Premier Bartlett I produced the following as a collation of those concerns accompanied by some of the sources of that information.

I have also included my own comments.

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### INTRODUCTION

When the Pulp Mill Assessment Act 2007 was passed by the Tasmanian Government, little was known about the combined health effects of Gunn's proposed pulp mill in the Tamar valley and the health problems caused by the large area of tree plantations needed to support it. **Much has been learned in the four years since 2007 when the RPDC was bypassed and the mill was approved by the Tasmanian Government.** Many new discoveries have been made (e.g. April 2007 The Australian, "Triazine lingers for twice as long than experts expected". Attachment 1. ) Any political leader who ignores this subsequent information and the public concerns it generates, does so at his/her peril.

Many Tasmanians, especially the 100,000 residents of the Tamar Valley, have concerns about the effects of the proposed mill on the health of their families and themselves.

These health concerns include, but are not restricted to:

- An increase in dioxins in the environment with subsequent increases in cancer and effects on the gender balance of babies born to exposed mothers, etc.
- Increased rates of respiratory problems in an area notorious for respiratory problems.
- Possible increase in heart, kidney and brain disease etc. due to the increase of PM 2.5 particles and smaller in the air.
- An increase in the incidence in the number of children born suffering from ADHD.
- An increase in cancer rates due to an increase in the triazine group of chemicals (atrazine, cymazine, etc.) in the environment. Research by Professor Tyrone Hsyue, University of California Berkeley indicates that these chemicals are a cause of prostate and breast cancer.

- Concerns regarding the psychological effects of odour on the population should the mill be constructed.
- The effects of sulphur dioxide on the nasal cells.
- Concerns for the psychological effects on the Tamar Valley residents of having the mill hanging over their heads for the last six years.

**ANY ONE OF THE ABOVE CONCERNS SHOULD BE SUFFICIENT TO PUT THE PROJECT BACK THROUGH A THOROUGH RPDC ASSESSMENT, ONE WHICH INCLUDES INDEPENDENT HEALTH PROFESSIONALS (GENERAL PRACTITIONERS, SPECIALISTS AND MEDICAL SCIENTISTS).**

Last century hazardous industries were established e.g. the Minamata factories (that poisoned 2265 Japanese) asbestos, DDT, tobacco etc, these serve as a warning against establishing hazardous industries today.

**IN THE LATE 20<sup>TH</sup> AND IN THE 21<sup>ST</sup> CENTURY AND TASMANIANS EXPECT THEIR GOVERNMENT TO PROTECT THEM.**

THOSE LIVING IN TODAY'S DEMOCRACIES BELIEVE THAT ONE OF THE MAJOR RESPONSIBILITIES OF POLITICIANS IN A DEMOCRATIC SOCIETY IS TO ACTIVELY PREVENT HEALTH PROBLEMS OCCURRING. (exemplified by the OH and S legislation, notifiable diseases, food and road safety, environmental and coronial legislation, all of which are attempts to prevent illness, injury and death.)

In approximately 1688 John Locke wrote on the notion that government is based upon consent. That is, the notion that there is a social contract between the individual and government. This contract imposes obligations on both government and the individual. If the majority feels that government has failed to carry out its responsibilities under the social contract the individual is released from the responsibility to obey government.

There has been no referendum on the pulp mill but surveys indicate that the majority of Tasmanians do not support it.

The areas that Locke focused upon were the individual's right to life (with its close relationship to health) liberty and property.

Locke's writing has been one of the tenets of democratic government for three hundred years. ("Two Treatise on Government" Published 1690 {written 1680} Copy not attached.)

TASMANIANS ALSO FIRMLY BELIEVE IN THE PRECAUTIONARY PRINCIPLE IN RELATION TO THE USES OF CHEMICALS, AGRICULTURAL PRACTICES, DEVELOPMENT, ETC. That is, "Do not institute it unless and until it has been proven beyond doubt to be benign."

**FLESHING OUT EACH OF THE HEALTH CONCERNS DOT POINTS (ABOVE)**

- “DIOXIN LEADS TO MORE BABY GIRLS: STUDY” (Reuters, October 2007) Attachment 2.

Attached is a report from the IntraAmericas Centre for Environment and Health which showed that detailed research revealed health risks to those living up to 25 km from sources of dioxin pollution. These included a 5% increase in female births and subsequent 5% decrease in male births. The exact health effects are as yet undetermined, but, “Since more females were born in the 90 communities studied, more breast, uterine, cervical and ovarian cancers were observed among them than other forms of cancer, Argo said.”

Dioxin levels for Gunn’s proposed mill may be set too high, increasing the above problems.

“Dioxin Limits Too Lenient: Scientists” The Australian October 27, 2007”. Attachment 3.

See Attachment, “International Lactation Consultant Association – Position on Breastfeeding, Breast Milk and Environmental Contaminants.” Oct. 2001 (Note Date) Attachment 4.

Again the precautionary principle is expected.

- INCREASED RATES OF RESPIRATORY PROBLEMS.

Due mainly to the inversions experienced the Tamar Valley and the prevailing northerly winds, the rates of respiratory problems, (and deaths) in the Tamar Valley are higher than the Australian average. (There has been a wood heater buyback scheme operating in this area in order to reduce the problem of smoke particles etc.) – estimates are that the proposed mill will increase the level of smoke in the air equivalent to 11,000 to 50,000 wood heaters.) The airborne pollution emitted from the proposed Gunn’s smoke stack will cause increased problems.

See Attachments 5. to 11. from the submissions to the RPDC which have been prepared for numerous health authorities.

See also Attachment 12. “Asthma Alarm Over Traffic” The Examiner 1st November 2010 where it states even “apparently safe” levels of traffic pollution was found to exacerbate asthma in children. The planned kraft pulp mill and associated wood fired power station airborne effluent is a similar cocktail to traffic pollution and taking the precautionary principle detailed scientific assessment is demanded.

**NOTE. ELECTRICITY COSTS ARE INCREASING IN TASMANIA, MEANING THAT RESIDENTS WILL KEEP AND POSSIBLY PURCHASE MORE, WOOD HEATERS AS THEY ARE CONSIDERABLY CHEAPER TO OPERATE THAN ELECTRIC HEATERS. See recent comments in all Tasmanian newspapers.**

(NOTE ROAD ACCIDENTS. The matter of increases in road accidents due to increased log truck activity is raised in the above attachments, and was raised by many residents, but not dealt with here as, if the rail system can be solely used, the problem may be reduced. (This is fairly unlikely though.) These concerns are exemplified by the Dilston Bypass Safety Committee, the log truck rollover Monday 22<sup>nd</sup> November 2010, ad infinitum)

- POSSIBLE INCREASE IN HEART, KIDNEY AND BRAIN DISEASE ETC. DUE TO THE INCREASE IN PM 2.5 AND SMALLER PARTICLES.

Tasmania, including the Tamar Valley currently has higher than average levels of heart disease. This is of course a result of a number of factors.

However, very small (PM 2.5) particles in the air enter the lungs, pass through the tissue into the blood stream and lodge in the organs of the body. See Wikipedia highlighted sections of article "Particulate." Attachment 13. Internet Wikipedia Page 5

Pm 2.5 particles were not mentioned in Gunn's IIS. See attachments listed under heading INCREASED RATES OF RESPIRATORY PROBLEMS above.

The Ohio State University has produced a number of pieces of research into the health effects of polluted air:

"POLLUTED AIR INCREASES OBESITY RISK IN YOUNG ANIMALS.

Columbus, Ohio – Exposure to polluted air early in life led to an accumulation of abdominal fat and insulin resistance in mice even if they ate a normal diet, according to new research.

Animals exposed to the fine-particulate air pollution had larger and more fat cells in their abdominal area and higher blood sugar levels than did animals eating the same diet but breathing clear air." The Ohio State University Research 12/2/10 Attachment 13A.

This does not bode well for children of the Tamar valley, as the emissions from the proposed wood fired powerstation at the pulp mill site will be trapped by the regular Tamar Valley temperature inversions. AND

"OSU STUDY SHOWS EXPOSURE TO BAD AIR RAISES BLOOD PRESSURE

Columbus, Ohio—The air people breathe while walking in the park, working in the garden or shopping downtown may be unhealthy enough to seriously spike their blood pressure, a new study suggests.

Cardio vascular researchers at the Ohio State University Medical Center are the first to report a direct link between air pollution and its impact on high blood pressure, or hypertension. If the results from these animal studies hold up, this could be important for human health." The Ohio State University Research 7/28/08 Attachment 13B

These two pieces of research are yet to be proven on human beings, but should we take the risk? I think it is pretty short odds that the effects will be the same. Here is the precautionary principle again.

- AN INCREASE IN THE NUMBER OF CHILDREN BORN SUFFERING FROM ADHD.

Long serving teachers have noted the increase in children suffering from this condition. Evidence shows that organo-phosphates, (used in agriculture and in forestry plantations in Tasmania,) are a cause of this. See attached article "ADHD pesticide link confirmed" The Examiner August 20<sup>th</sup> 2010. Attachment 14.

There is also the possibility of a link between organo-phosphorus pesticides and obesity and diabetes. (See article, "Obesity and diabetes weigh in to Pesticide Debate." Tasmanian Farmer Issue 53 June/July 2010.") Attachment 15.

- AN INCREASE IN CANCER RATES DUE TO AN INCREASE IN THE TRIAZINE GROUP OF CHEMICALS.

These chemicals, which have already been found in Tasmanian streams (See article "Triazine Herbicides linger for twice as long as experts expected." The Australian , April 11 2009.") Attachment 1. are used in plantation growth in water catchments in Tasmania. Concerns regarding these chemicals are outlined in, "When farm sprays go astray" The Australian, April 11 2009. Attachment 16. An increase in plantations to feed the proposed mill is seen as an increase in these chemicals in the drinking water as so much of our plantations are in water catchments. (See map in brochure "WARNING. POISONED WATER. Authorised by Dr. Andrew Lohrey (ex-MHA, Tasmania." Attachment 17.)

See also attachment: " Professor Tyrone Hayes" Attachment 18.

- CONCERNS REGARDING THE PSYCHOLOGICAL EFFECTS OF ODOUR ON THE POPULATION SHOULD THE MILL BE CONSTRUCTED.

Pulp mill experts assert that when the seals, etc. become saturated odour will result. Whilst previously denying mill odour the new manager, Greg Lestrage, stated to The Australian Newspaper that Gunns would attempt to have the odour and noise requirements of the Tasmanian regulators relaxed as Gunns felt they would not be able to meet them. The Tasmanian Government felt these could be changed by regulation without going to the Parliament to alter the legislation. (This tends to indicate that previous statements re odour and noise were incorrect . Bio-chemists have stated that the odours emitted will affect the nasal tissue of the residents but I have found no direct references to this. Residents fear for the effects on the value of their property and their businesses. One of the major causes of psychological problems is long term stress resulting from situations over which people have no control. It is believed by the general public that "The Act" does not force immediate closure of the operation should odour be detected.

See also research, "Smell Research" Tim Jacob , "CAFOS and Public Health : Odour and its Possible Health Effects", "Comments on Psychological Impact of Offensive Odours ", %The "Gray Line" Between odour Nuisance and Health Effects" Michael A Mc Ginley and Charles M. Mc Ginley" Internet. Attachments 19. To 22.

- THE EFFECT OF SULPHUR DIOXIDE ON NASAL CELLS.

A number of residents expressed fear that sulphur dioxide deadens the olfactory cells in the nose causing many accidental deaths from gas leaks etc. No detailed references are provided here. However there does seem to be a case for further research. This is recommended.

If you can't smell you are less safe at work or at home and your quality of life is diminished.

- CONCERNS FOR THE PSYCHOLOGICAL EFFECTS OF THE MILL HANGING OVER THE POPULATION FOR THE LAST SIX YEARS.

Residents have held many concerns for the past six years. This has led them to put many aspects of their life, including economic development, on hold. Real estate agents have stated that their house prices have been devalued as a result of the concerns of buyers. Should the mill be built those who have purchased will want compensation from someone and fears are that it will be the seller. Residents and business owners have strong attachment to the area and have been concerned for the past six years. Constant stress like this causes mental problems, damage to the immune system, etc.

Aged people needing to sell to buy their place in high care facilities, cannot sell. Likewise couples separating and wishing to start again cannot do so because they cannot sell their jointly owned homes. Because some residents cannot sell their homes they have had to turn down promotion possibilities elsewhere or become flyin flyout workers with all the family stress this causes. These situations are extremely stressful for those involved and their families.

See article: "Mill: The Psychological Impact" Bev Ernst Psychologist. Attachment 23.

#### THE CATCH 22 SITUATION CAUSED BY THESE HEALTH CONCERNS.

The Launceston General Hospital is currently operating at a level behind the national standard. (See Examiner 22<sup>nd</sup> 2010 "LGH lags behind in national standard." Attachment 24. Should it be decided to build the mill, health services (facilities and staff) will need to be markedly increased before the mill commences operation. If it is not increased the community will be even more concerned. If it is increased it is confirmation that the concerns are valid and are recognised and that the Government has failed in its role to protect the population. (See introductory comments – The Social Contract of Government John Locke.)

One of the reasons for the proper assessment process (ie RPDC) is to protect the politicians and heads of departments from blame in such circumstances. Many residents, of course, realise that a full and complete assessment, particularly of health effects, was not undertaken.

## AND THE COLLECTIVE PICTURE

To treat one or two of these concerns lightly may be human, but to ignore them all is incompetent and extremely dangerous.

## THE STOCKHOLM CONVENTION

Australia is a signatory to the Stockholm convention. (See “Stockholm Convention on Persistent Organic Pollutants.” Attachment 25. This meeting of governments from around the world was set up because of the world wide concern for the health of their citizens.

Australia signed it. We are residents of Australia and through our government, state or federal, have a moral responsibility to uphold it.

## FINAL POINT

GIVEN THE HEALTH CONCERNS OF THEIR CONSTITUENTS AND THE DISCOVERIES SINCE THE PULP MILL ASSESSMENT ACT 2007 WAS PASSED, THE TASMANIAN GOVERNMENT AND OR TASMANIAN OPPOSITION HAVE A RESPONSIBILITY TO PUT THE PROPOSED PULP MILL BACK THROUGH A FULL AND COMPLETE ASSESSMENT.

**We didn't have all this knowledge regarding the health effects in 2007 when the Act was passed. WE KNOW MUCH MORE NOW.**

Written by George Chandler B.A. Soc. Wk., Cert. Ed., Diploma of Training and Assessment. 24<sup>th</sup> November 2010 to encapsulate some of the health concerns expressed by members of the local and Tasmanian communities.

## NOTES

1. The use of newspaper and Wikipedia as references is justified by the fact that these are the sources of many Tasmanian's health information.
2. Endosulphin – There have been recent comments by Lee Dayton (science writer for the Australian newspaper and expert guest on the ABC radio programme Nightline), regarding

the use of this chemical in forest operations in Tasmania. It is difficult to obtain any definitive information. This in itself raises concern. Endosuphin has acute toxicity, has potential for bio-accumulation and is an indocrine disruptor. It has been banned in 62 countries. The Stockholm Convention looks likely to ban it in future. It causes reproductive and developmental damage. Research shows that in can promote invitro-proliferation of breast cancer cells.