

Pulp, seals and dioxin

Tasmanian Times: by Jon Sumbly

<http://tasmaniantimes.com/index.php/weblog/comments/seals-and-dioxin/>

Gunns continually dismiss any issue with dioxin pollution. Dioxins are the most poisonous and persistent chemicals we know; they don't go away and they don't disappear. The seals on Tenth Island live their lives where the pulp mill will dump poisonous water; it is a wrong that they suffer for our profit.

THE pulp mill IIS is a large document to work through and assess. It is structured in a way that makes it difficult to draw coherent analysis.

For instance, it has been pointed out to me that most of the information about which forests will be affected, and when and how much timber will be used is in the section about 'transport'. This would naturally favour the proponent and makes it harder for the community to draw a clear assessment of, and prepare a reply to, this IIS.

Additionally, it seems that every pdf file in the IIS has security settings that do not allow people to copy and paste extracts. This may appear reasonable, but it means anyone who wishes to quote from the IIS must manually re-type the extracts they wish to quote.

In the preparation of any comment on this IIS, it means a substantial investment of time, which is a precious commodity in the context of replying to this IIS. If you wish to extract a graph, table or diagram to comment on, you can't.

While content editing is usually disallowed in public documents, in order to protect the integrity of original document, content extraction is usually allowed as a fair and reasonable process to enable people to quote and reply to assertions made in the original documentation.

For example, the RPDC guidelines for the pulp mill are downloadable from their website and allow cut and paste of text, so if you wanted to copy a paragraph and then comment on it, you can. It seems that either Gunns are paranoid or have taken to heart the saying, 'Life was not meant to be easy'.

Browsing through the IIS, I came upon the section 'V10_A23', which is an impact assessment on the Tenth Island seal colony; a mere 12 kilometres from the ocean waste disposal site. Reading through this I came across the part assessing dioxins.

Dioxins are among the most poisonous and persistent chemicals known and Gunns have repeatedly dismissed the possibility of dioxin pollution as non-existent. The dioxin assessment for the seal colony raised my eyebrows and I think it needs a closer examination.

This part of the IIS starts out by saying:
'Dioxins:

The following conclusions regarding the bioaccumulation of dioxins by marine organisms have been formulated by review of the literature available for this project:

- Dioxins do not magnify through the marine food chain.
- Dioxins are not significantly bio-accumulated or biomagnified by fish.
- Fish living in local environments where dioxin concentrations are low also have low levels of dioxins.
- The theoretical increase in dioxin levels of fish after the effluent outfall becomes operational is markedly less than the analytical capability to measure.
- There will be no demonstrable increase in dioxin concentrations of fish that might reside around the ocean outfall.
- Animals higher in the food chain, including whales and seals, have relatively high metabolic and/or excretory capacity towards dioxins.
- Seals do not readily assimilate dioxins from their food and do not bio-magnify dioxins.'

(Gunns Pulp Mill IIS, V10_A23, p. 4)

This chapter of the IIS concludes: 'there will be no demonstrable impact on seals from dioxins in the effluent.' (Gunns Pulp Mill IIS, V10_A23, p. 4)

It is difficult to predict the amount of dioxins that may be released by the mill but it is worth addressing the assumptions made by the Gunns pulp mill IIS. I will use quotes to bring my point across; this method can be challenged as 'selective', or 'out of context' quotation, so I include websites so you can examine where the quotes derive and their context. I hope the quotes in themselves are sufficient.

Dioxins

Dioxins are among the most poisonous and persistent chemicals known as organochlorines. They are so toxic that exposure standards are set at extremely low levels.

If you went to an Olympic-sized swimming pool and dropped three grains of sand into it, and if those grains weren't sand but were dioxin, those three grains would be enough to make the pool unsafe to swim in, much less drink the water.

They are persistent; that is, dioxins remain in the environment for decades as toxic pollution. They are classed as 'persistent organic pollutants' or POPs. This means a few things; they can move- dioxins can be measured in the fat of seals in Antarctica, far from factories that made them.

They can bio-accumulate, or bio-magnify, since they remain in the bodies of animals, so they become more concentrated as they move up the food chain- from a crab to a fish to a seal. This affects people; today on the ABC website, there was a story about dioxins in the body of a boy in Sydney.

In this case the source is Homebush Bay (remember the Greenpeace campaign?) where dioxins are leaking out of the sediment and working up the food-chain until people start seeing deformed fish and eating fish that carry a disturbing concentration of dioxin.

Goto: <http://www.abc.net.au/news/newsitems/200607/s1691649.htm>

The IIS, V10_A23, p. 4, says that: 'Dioxins do not magnify through the marine food chain.'

Quotes:

'Bio-magnification in Arctic food chains increases the potential threat from POPs.

Due to the processes of bio-accumulation and bio-magnification, POPs can reach very high concentrations in top predators even when levels in air, soil and water are low.

Bio-magnification is a process that occurs in food chains where animals consume other animals for food but at the same time consume all the contaminants that their preys have accumulated.

Since many POPs are not broken down or excreted, concentrations increase with each step from prey to predator. Bio-accumulation of POPs is particularly strong in Arctic marine food chains leading to high levels of POPs in top predators such as seals and polar bears, and ultimately man.'

(<http://www.arctic-council.org/en/main/infopage/67/>)

[The Arctic Council is a high-level intergovernmental forum that provides a mechanism to address the common concerns and challenges faced by the Arctic governments and the people of the Arctic. Russia serves as Chair of the Council for 2004-2006.]

'Due to a process known as bio-magnification, animals high in the food chain, such as dolphins, whales and seals, can be exposed to high concentrations of organochlorines.

These chemicals move up through the food chain, increasing their concentrations each time contaminated prey is eaten. Once the contamination reaches the top of the food chain the level of toxins can be many times greater than that in the surrounding environment.'

(<http://www.deh.gov.au/settlements/publications/chemicals/scheduled-waste/solutions6.html>)

[The DEH in [deh.gov.au](http://www.deh.gov.au) is the Commonwealth's Department of Environment and Heritage.]

-The IIS, V10_A23, p. 4, says that: 'Dioxins are not significantly bio-accumulated or biomagnified by fish.'

Quotes:

'Mussels link water and sediment

Mussels have an important role in the circulation of dioxins since they filter large amounts of particles in the water and also process the surface sediments.

Mussels increase the deposition rate of these substances on the seabed and make them more easily available to organisms living on the sea floor. In addition to this, mussels increase the residence time of substances in the water, and accumulate and excrete them.
Fatty fish contain dioxins

The fat-soluble properties of dioxins cause them to accumulate in fatty tissues. Herring and salmon are fatty fish, and contain the highest dioxin concentrations when calculated by fresh weight.' (Dioxins in the Baltic Sea (2004). The Helsinki Commission – Baltic Marine Environment Protection Commission: Helsinki, Finland.)

'Soils and sediments are mentioned to be important reservoir sources due to the persistence of these pollutants in the environment. The most important route for human exposure to dioxins is food consumption, contributing for more than 90 % to total exposure. Products of fish and other products of animal origin account for approximately 80 % of the overall dietary dioxin exposure.

(Commission of the European Communities 2001 b).'
(Helsinki Commission – Baltic Marine Environment Protection Commission. Project Team for the Implementation of the HELCOM Objective with regard to Hazardous Substances, 7th Meeting, 11-13 March 2002: Helsinki, Finland.)

The IIS, V10_A23, p. 4, says that: 'Fish living in local environments where dioxin concentrations are low also have low levels of dioxins.' [The levels of dioxin released by the proposed mill are not known, only estimated. Dioxin is poisonous, persistent, and accumulates in the environment. It cannot be said that a low environmental concentration level means that there will be a low level of dioxin in the food chain. Recall the comment from the Arctic Council; 'Due to the processes of bioaccumulation and bio-magnification, POPs [e.g. dioxin] can reach very high concentrations in top predators even when levels in air, soil and water are low.']

Quotes:

'However, it is important to realise that both invertebrate bioassays and bottom fish bioindices are useless in the determination of bioaccumulation potential unless ecological interactions are taken into consideration.

In a study by Rice et al. (2000), the commonly used sediment bioassay invertebrate, *Armandia brevis*, was exposed to sediments that would typically not be identified as toxic using most invertebrate bioassays. When these *Armandia brevis* were fed to English sole [a fish], reduced growth and increased hepatic adducts [liver chemicals] were observed.

These results indicate that sediment contamination levels that would normally be identified as non-toxic through typical invertebrate bioassay analysis can cause significant adverse effects at higher trophic [food chain] levels.'

(Hall, J.E., (2002). 'Bio-concentration, Bioaccumulation, and Bio-magnification in Puget Sound Biota: Assessing the Ecological Risk of Chemical Contaminants in Puget Sound'. University of Washington: Tacoma, USA.)

The IIS, V10_A23, p. 4, says that: 'The theoretical increase in dioxin levels of fish after the effluent outfall becomes operational is markedly less than the analytical capability to measure.'

[This is an ambit claim. The 'theoretical increase' is less than the 'capability to measure'. The fact is the proposed mill will put dioxins into Bass Strait. If these are below the 'capability to measure' it does not mean they don't exist, even Gunns says that dioxins will be a part of the mill waste. Dioxins don't disappear, degrade or change; they're persistent and poisonous, they don't go away.]

The IIS, V10_A23, p. 4, says that: 'There will be no demonstrable increase in dioxin concentrations of fish that might reside around the ocean outfall.'

[‘There will be no ...; this is an assertion of faith and therefore unprovable. Dioxins don’t like water and tend to stick to particles in the wastewater, so they usually fall to the seabed near the waste pipe.

Then they get eaten by animals that live on the seabed, then by other fish and so on, up the food chain. There is a large body of research that shows this process. Dioxins are poisonous and persistent; they will accumulate no matter the amount of dioxin the pulp mill releases.]

Quotes:

‘The benthic food chain studied consists of species living in or close to sediment accumulation areas. Amphipods and isopods are sediment-dwelling crustaceans.

Amphipods feed on material from the sediment and serve as a food source for isopods, which are also carrion feeders. Four-horned sculpins are bottom dwelling fish that feed on both isopods and amphipods.

The sculpins are sedentary, and are, therefore, good indicators of environmental pollution within the region they inhabit... Bleaching with chlorine, chlorine dioxide, or hypochlorite is used for further treatment of the pulps.

During this bleaching, a large variety of chlorinated aromatic compounds are formed, including not only polychlorinated dibenzo-p-dioxins and dibenzofurans (Swanson 1988), but also alkylated polychlorodibenzofurans (RPCDFs) (Beck et al. 1989).

Historically, this group of compounds was first identified... in sludge samples from seven different pulp and paper mills, sediments, and fish (Kuehl et al. 1987).’ (Lundgren, K. (2003). ‘Properties and Analysis of Dioxin-like Compounds in Marine Samples from Sweden.’ Department of Chemistry, Umea University: Umea, Sweden.)

The IIS, V10_A23, p. 4, says that: ‘Animals higher in the food chain, including whales and seals, have relatively high metabolic and/or excretory capacity towards dioxins.’

Quotes:

'Marine mammals also have a limited capacity to metabolise chemicals such as organochlorines in comparison to terrestrial mammals.

Testing for these chemicals in marine mammal blubber therefore provides some indication of the presence of these chemicals exist in the marine environment.'

(<http://www.deh.gov.au/settlements/publications/chemicals/scheduled-waste/solutions6.html>)

The IIS, V10_A23, p. 4, says that: 'Seals do not readily assimilate dioxins from their food and do not bio-magnify dioxins.'

Quotes:

'Investigators have demonstrated immune dysfunction as a plausible cause for increased mortality among marine mammals and have also demonstrated that consumption of persistent organic pollutant [POP] contaminated diets in seals may lead to vitamin and thyroid deficiencies and concomitant susceptibility to microbial infections and reproductive disorders.'

Investigators have also noted that immunodeficiency has been induced in a variety of wildlife species by a number of prevalent POPs, including TCDD's [dioxins], PCBs, chlordane, HCB, toxaphene and DDT.

Exposure to POPs has been correlated with population declines in a number of marine mammals including the common seal the harbour porpoise, bottle-nosed dolphins and beluga whales from the St. Lawrence River.

Similarly, investigators have also demonstrated a convincing correlation between environmental concentrations of PCBs and dioxins with reduced viability of larvae in several species of fish.

Noteworthy as well is a report suggesting significant reproductive impairment in a number of Great Lakes species described as top level predators dependent on the Great Lakes aquatic food chain.

(<http://www.chem.unep.ch/pops/indxhtml/asses123.html>)

[chem.unep.ch is the website of the United Nations Environment Program's Division of Technology, Industry and Economics.]

'High levels of organochlorines or mixtures of organochlorines in mammals such as seals can lead to preimplantation disorders, spontaneous abortions, or premature pupping.'

There is substantial information regarding the effects of endocrine-disrupting chemicals during gestation, lactation and adulthood in some wildlife, domestic animals and laboratory animals.

The full effects on marine mammals have not yet been established; however, it can be assumed that contamination by these chemicals will result in similar consequences.'

(<http://www.deh.gov.au/settlements/publications/chemicals/scheduled-waste/solutions6.html>)

'In mammals, the transfer of dioxins from mother to offspring during lactation is an important route of exposure to newborn aquatic mammals... Colborn and Smolen (1996) review several studies examining maternal transfer in marine mammals.'

These studies reported 98% transfer of the maternal body burden of dioxins to grey seal (*Halichoerus grypus*) pups. The placental transfer of dioxins is much lower than in milk, with about 1% in grey seals and 2% in Weddell seals (*Leptonychotes weddelli*).'

(<http://www.deh.gov.au/settlements/publications/chemicals/dioxins/report-11/comparison.html>)

'In the North Sea, for example, approximately 20,000 seals - more than half of the seals in Europe - died in just six months in 1988.'

As in the case of the deformed frogs, scientists at first speculated that there could be multiple causes: poisonous algae, global warming, or a chemical spill. Then, some months later, it was determined that the immediate cause had been a newly discovered distemper virus.

Although the episode had been devastating, there was a sigh of relief that the crash had been due to natural causes. But seven years later, further research showed that contact with high concentrations of synthetic chemicals, particularly of PCBs which had lodged in the fish these seals were eating, may have made the seals susceptible to the virus.

That discovery came about through a study in which healthy seal pups caught in relatively clean waters were divided into two groups. One group was fed herring from the heavy polluted Baltic Sea while the other ate herring from the much cleaner Atlantic Ocean.

The study began in October 1991, and after only two years, the blubber of the seals that were fed contaminated fish contained 17 parts per million (ppm) of PCBs - concentrations three to ten times higher than those in the control seals.

At these levels, the test seals showed a 20 to 50 percent reduction in natural "killer" cells, which attack foreign bodies in the blood, and a 25 to 60 percent reduction in T-cells, the white blood cells essential to orchestrating immune response. Yet, their 17 ppm was only a fraction of the hundred and sometimes thousands ppm found in the wild North Sea seals.

Although seals and other sea mammals are particularly at risk because they feed almost entirely on fish from polluted oceans, people too are at risk; in fact the fish that the test seals consumed has been destined to human consumption.

The human immune system is almost identical to that of other mammals and consequently, so are the effects. Recent studies have found that Canadian Inuit children, who also eat large quantities of wild fish, produce fewer antibodies than usual when they are vaccinated for certain diseases. As a result, they too are abnormally susceptible to illness.'

(http://www.fao.org/ag/AGP/AGPP/Pesticid/Disposal/intro5_en.htm)

[The FAO in fao.org is the United Nation's Food and Agriculture Organisation.]

The IIS, V10_A23, p. 4 concludes: 'there will be no demonstrable impact on seals from dioxins in the effluent.'

Seals and Dioxin: Does it Matter?

[Sarcasm mode: On]

Does it Matter? Hell No! Seals are dumb; they stink, damage nets, and steal fish. No one will miss them. Tenth Island is just a rock. Just go to the Tourism Tasmania site to see how useless and insignificant Tenth Island is:

http://www.discovertasmania.com.au/home/tasmedia_index.cfm?level1=fact%20file&level2=content&chapterid=139

[Umm... there's a small tour operation there, does it Matter?] Hell No! The pulp mill is a Project of State Significance; a penny-ante, eco-tourism business don't matter, hey, if you go to their website and click on the map of their tour route, you'll see they go over the ocean waste pipe.

This is great! They can stop and say, 'Here is where millions of litres of effluent is dumped at sea every day, look around, it's just water – everything is good. Now, where did the seals go? Oh, look, here's our life-like model...' (Visit: <http://www.sealandsea.com/prod01.htm>)
[Sarcasm mode: Off]

Gunns continually dismiss any issue with dioxin pollution. **Dioxins are the most poisonous and persistent chemicals we know**; they don't go away and they don't disappear. The seals on Tenth Island live their lives where the pulp mill will dump poisonous water; it is a wrong that they suffer for our profit. The RPDC, in its infinite wisdom will decide if the Gunns IIS about the effect of dioxins on seals is correct, right, adequate, sufficient, and comprehensive. I submit that it is not.

Jon Sumby has trained and worked as a professional photographer, high-rise window cleaner and marine ecologist. He worked for five years as the Australian representative for the Sea Shepherd Conservation Society and crewed on the 2002/03 Antarctic whaling campaign. He is presently working on a PhD in science and policy-making.

'This world is indeed a living being endowed with a soul and intelligence ... a single visible living entity containing all other living entities, which by their nature are all related.' — Plato, 4th century BC.

1. Thank you Jon for exposing the non-science nonsense that this IIS put out on dioxins. as you show it flies in the face of credible, reproducible science.

A few relevant additions: Recently the NSW Government banned the taking of commercial fishing in the Sydney Harbour environs. This came after a public study confirmed the presence of dioxin concentrations in a range of fin fish that exceeded acceptable levels for human consumption.

On Thursday of last week, the results from 95 fishermen and their families directly occupationally exposed (through ingestion) to these contaminated fish were released.

ALL had dioxin levels between 2 and 10 times the national average. We have no idea of about the levels of dioxin in the many thousands of Sydney fish consumers over the years that bought this contaminated product....nor the association of these chemicals with the prevalence of immunological, developmental and neoplastic disease in the Sydney area.

Secondly, it is surprising that Tasmania - the only State with a commercial aquaculture industry based on salmonids - was not part of an extensive world-wide survey of dioxins and polychlorinated biphenyls (PCBs) in both farmed and wild caught salmonids (salmon and trout).

This study published in the journal, Science in 2004, gave scientific validation to the bioaccumulation of these chemicals through the food chain (i.e. consumed by these fish from contaminated environments or fed processed product containing contaminated feedstuffs) and the extent to which countries where these studies had identified the risk to human health had responded.

It is an unacceptable abuse of the process that this IIS should attempt to be so biased and dismissive in its assessment of the matter of persistent organic pollutants (POPs) that include the dioxin chemicals.

It is likely that this IIS of 7500 pages is merely playing to the mediocrity that Tasmania takes for governance and bureaucracy.
Posted by [David Obendorf](mailto:David.Obendorf@tassie.net.au) <mailto:David.Obendorf@tassie.net.au>

on 07/23 at 09:51 AM

2. Note: Dioxin greatly enhances the activity of the enzyme system that converts most environmental carcinogens into active agents.

(Reference: Barry Commoner, 'Making Peace with the Planet' p74)

Launceston sounds like a wonderful place for breeding cancers, especially with dioxin emissions to push them along. Carcinogens from forestry burnoffs, house fires, aerial spray drift from the plantation coupes, chemicals leaching into the drinking water from forestry and agricultural operations.

Posted by [Brenda Rosser](mailto:rosserbj@bigpond.com) <mailto:rosserbj@bigpond.com> on 07/23 at 10:30 AM

3. Jon Sumby makes a not unreasonable case for caution and concern about the potential for pollutants from the proposed pulp mill to detrimentally affect local marine populations, particularly seals. The relevant section of the IIS was prepared by Dr Roger Drew and John Frangos who both have qualifications in science and toxicology, and are the principals of the consultancy company, Toxikos (<http://www.toxikos.com>).

What Jon Sumby has omitted from his article is that there was an entire section of the IIS (entitled "Potential for bioaccumulation of dioxins by seals") that deals with a range of scientific studies around the world that indicate that seals are highly unlikely to be a bio-accumulator of dioxins from eating local fish.

There is also plenty of science and scientific references related to pollutants and other marine species in the rest of the report. What is curious is that Jon Sumby has not commented on the quoted science leading to the consultant's conclusions.

Instead, Mr Sumby tends to use very generalised references from web sources, some of which may be reputable (usually representing policy positions rather than a balanced analysis of the scientific data) but not entirely specific for this particular issue.

What we have instead is the old tired activists approach to attempt to raise enough doubt about the potential for toxins to do something bad to potentially mobilise the populace against a particular development.

Given Mr Sumbly's stated expertise as a marine ecologist and that he is doing a PhD on science and policy making, it would be worth him tackling where the consultant toxicologists have got it wrong in their report.

I am not in favour or against the pulp mill – I think that it may well be an economic boom for the North of State, but I also see analysts suggesting that the pulp mill adventure may be a bit risky in terms of economic sustainability.

I am however vigilant to how arguments get skewed depending on what values are held – and am particularly sensitive to the misuse of scientific evidence.

On a related matter, I am starting to have grave worries about elements of this state's University - where there seems to be a range of academic activities more related to supporting opinion over the balance of facts and/or the underlying science.

I always knew that this tertiary institution was a haven for Greens supporters, but I am hoping that Mr Sumbly is not enrolled in the Faculty of Science as I know its Dean is a firm supporter of basing decisions and policy on science rather than preference or values.

Posted by [super annoied](mailto:super_annoied@yahoo.com) mailto:super_annoied@yahoo.com
on 07/23 at 10:47 AM

4. It's great that someone is evaluating the IIS although I believe that we shouldn't give the Draft IIS any credence whatsoever. Certainly Gunns own shareholders haven't, they're voting with their feet.

The only valid way to assess impacts on the community from such a major proposal is via an independent assessment by a competent organisation(s) that reports directly to the community. If the government can give millions to Gunns, why not fund an independent assessment?

The community should specify what's important and then demand that Gunns (and other projects) meet the requisite standards.

The only ways to assure community protection are through legislation and guarantees of performance.

As it stands, Gunns can change any element in the 'draft' IIS at any time, they can also vary the project at any time under government changes to the relevant planning Acts which allow them to do whatever is 'convenient' to the project.

The only rational approach is to demand guarantees of protection and assurances that Gunns insurance policies will cover any harm to communities or businesses.

Tasmanians need to ask the State government has outsourced its public protection responsibilities to the proponent?

The State government's actions to date in supporting Gunns to the exclusion of the taxpayer are making them appear to be trying to manipulate the share market in favour of the project.

Overall, it's not a good look at all.

Posted by [Mike Bolan](mailto:mbolan@tpg.com.au) on 07/23 at 12:52 PM

5. Super, how is the nature of Jon's post different to Gunns Ltd hiring a consultancy to prepare the report it wants to hear? If the information prepared by Toxikos was in any way contrary to Gunns' previous assertions about the effects of effluent outfall on the marine environment, would it have been included in the draft IIS?

Had Gunns Ltd approached another consultancy, would it have received the same 'apparently' safe verdict? Indeed, did those given the task of preparing the draft IIS shop around until they found the response they wanted? No doubt they had the resources, and the time, to do so if they wished.

I'm happy to apply the basic legal caveat here; all of this creates some reasonable doubt about the efficacy of the draft IIS to suggest that any threat to the biodiversity of Bass Strait if this development proceeds. Near enough is not good enough.

And remember, this is only concerning one potential aspect of the mill's operation. What other credibility gaps are there concerning resource security, water supply, transportation, ongoing viability and so on in the draft IIS?

The mushroom factor seems to be the strategy of choice here. Thanks to people like Jon, who are impertinent enough to have some skills and experience the area, it ain't workin'.

Posted by [Cameron](mailto:tpf_inc@yahoo.com.au) mailto:tpf_inc@yahoo.com.au on 07/23 at 03:50 PM

6. Annoying said

"I am not in favour or against the pulp mill – I think that it may well be an economic boom for the North of State, but I also see analysts suggesting that the pulp mill adventure may be a bit risky in terms of economic sustainability".

A fence sitter ay annoying? How convenient. I don't actually believe you, but I am more interested in why you say that this project may well be an economic boom for us in the north? That is a big call. I also think saying that analysts' description of the project as 'a bit risky' is a gross understatement. Didn't Comsec describe the project as 'fraught with risks'?

Did you hear Stephen Mayne from Crikey on Gunns last Friday (tim Cox mornings)? What a swerve! Mayne was clearly giving this Gunns Pulp Mill project the big thumbs down. I was a little shocked listening to him.

I actually cant recall Mayne come out as strong against anything before. Go to the ABC radio 'tas mornings' website, click on pod casts and listen to the most recent "Crikey Chronicles" (windows media). Give it a listen.

I believe he is right. Is Mayne not a respected business analyst? Shall he be dismissed as a greeny trouble maker as well or just conveniently ignored as Comsec were.

Posted by [rick pilkington](mailto:rickpilkington@hotmail.com) <mailto:rickpilkington@hotmail.com> on 07/23 at 05:23 PM

7. Once again SA, could you please come clean and tell us all who you are, what is your experience and who you work for?

By all means engage in the dialogue but in the case where you choose to rebut and give opinion on the standing of others using your pseudonym, Superannoyed - it's rather like a boyish prank of lobbing rocks on the neighbor's roof.

If you are a state public servant that might explain your reluctance to become known, but by the drift of your take on various matters expressed on Tasmanian Times, your view would probably concur closely with the current Government and the State bureaucracy.

Maybe that's why you like being SA and not yourself, but in my opinion it affects your credibility.

You could of course try to convince us with a fictitious name and a fictitious career and 'go for it'. Only just be careful to remember who you are or you might just stuff up badly.

Posted by [David Obendorf](mailto:davidobendorf@tassie.net.au) <mailto:davidobendorf@tassie.net.au> on 07/23 at 05:56 PM

8. Anyone tempted to accept any of the IIS scientific advice on trust needs to become acquainted with another rapidly growing epidemic- cash for comment in scientific matters. The IIS, however, seems to be almost obliging in making its furphies on bioaccumulation in marine mammals so obvious. The neck-and-neck battle between orcas and polar bears as the world's leading repositories of bio-accumulated nasties is common knowledge.

Some readers may find it hard to believe that entrepreneurial types could be so utterly indifferent to the deaths and serious illnesses that their projects are likely to inflict on fellow humans and other forms of life.

Perhaps Super Annoyed could whip up a monograph on moral narcolepsy based on observations of himself and his associates.

John Hayward

Posted by [lhayward](mailto:lhayward@tassie.net.au) <mailto:lhayward@tassie.net.au> on 07/23 at 06:16 PM

9. First I have to say that I am against a pulp mill anywhere in Tasmania that uses native forest timbers or even plantation timbers.

Timber is far too valuable a resource and our native forests are too diverse and valuable as water catchments, animal habitat, recreational and tourist havens to be merely pulped to make paper.

The pulp mill is another case of high volume low value, minimal employment, and high profit enterprise.

The Draft IIS states that the pulp mill will only be viable if the resources are made available at a competitive price.

What is a competitive price and who are we competing with. If the competition is China, Chile, Portugal, South Africa, Indonesia or Brazil then we will have to pay Gunns to take the trees off our hands to be competitive.

Secondly in VOI 1 6-153 of the Draft IIS is it stated that NOx emissions need to be revised upwards.

And later on on P170 it says that SO2 and NOx are to be recorded separately from mill wide sources.

So I may only be a lowly trained Electrician/Builder etc but for a proponent to say that the allowable levels of emissions need to be revised upwards would seem to me that they are telling the regulators what to regulate.

Not unusual as this is part of the current "Worlds Best Practice" that masquerades as the norm here.

Posted by [Pete Godfrey](mailto:pete.godfrey@dodo.com.au) <mailto:pete.godfrey@dodo.com.au> on 07/23 at 08:29 PM

10. After Stephen Mayne's segment on Statewide Mornings on Tuesday the Gunns share price tumbled further from \$2.80 on Tuesday to close at \$2.59 on Friday. It hasn't been this low for a very long time. The financing of this mill based on the current value of the company is now becoming a problem for Gunns especially when the risks are taken into account. So why are Gunns pursuing this dud when it's clear that investor confidence in the company has significantly eroded? Why put the Tasmanian community through a divisive debate that could rival the days of Lake Pedder and the Franklin Dam when in all likelihood the company will be hard pressed to finance the mill?

Is it because the company is caught between a rock and a hard place? It knows it cannot continue to export woodchips at current levels as the markets are turning elsewhere.

Plantations in some areas are not growing as fast as projected hence the reliance on Native/Old Growth forests for many years to come. Japanese customers are already looking towards the plantation timber now coming on line from South America.

I disagree with Stephen Mayne when he stated that abandonment of the pulp mill will result in an immediate surge in the Gunns share price as the company is facing difficulties regardless.

I believe the company genuinely sees the pulp mill as its saviour if it can somehow get it built.

It must be an interesting time for Government spin doctors. If the mill falls over for financial reasons there will be egg on lots of faces about the amount of taxpayers money that has gone into promoting it.

I am still amazed at the lack of attention the local media (Mercury excluded) has given to the financial angle of the mill. Even Gary Magnussen during his "Dorothy Dix" interview with Les Baker on Stateline avoided the question.

As Stephen Mayne said on Tuesday morning. It is almost unheard of for a 900 million dollar company to embark upon a project worth 1.4 billion. Especially when the 900 million is diminishing and the 1.4 billion by project approval (this time next year) could 1.5 billion plus.

Posted by [David Mohr](mailto:mohrdave@bigpond.net.au) <mailto:mohrdave@bigpond.net.au> on 07/23 at 09:26 PM

11. I think that the posts regarding the integrity of the consultant's report on the dioxin issue are quite interesting - is anyone legitimately suggesting that their view was paid for? Difference of scientific opinion is one thing, suggesting that a consultant company, and the scientists involved, would commit fraud for cash is another.

Also, have any of these Doubting Thomases actually looked at this section of the IIS? At the scientific references that are cited? The IIS report was a much more thorough scientific analysis than the original article posted above. Go and have a look. I think I trust the actual scientists rather than Mr. Hayward's 'common knowledge' approach.

I agree with Rick P - I think the pulp mill is a thoroughly risky economic venture. It could be the Northern saviour or it could be the last large scale development in Tasmania in our lifetimes.

I am happy to amend my view from 'a bit risky' to 'quite risky'. I don't have any Gunns shares so it is not my nest egg on the potential chopping block.

I am surprised that the ant-mill activists don't target the Gunns shareholders for a scare campaign - may be a more effective tactic to scuttle the project. Conversely, I don't think this project has any chance of not getting past the RPDC.

David O - I don't think I am obliged to reveal my identity. I am not too concerned about your views on my credibility - I let the argument speak for itself.

Fair enough if you want to belittle my posts, but I wish you would focus on the issue at hand - is the consultant's report an accurate reflection of the science or not?

I gather you might have some scientific background to bring to bear on this - however, when I have challenged you previously to provide scientific background and opinion, you have not responded.

So, don't hold your breath for my expertise on these matters. It is enough to say that I have no conflicts of interest - I am not a public servant, nor do I have any association with the present government, or Gunns, or the myriad secret societies that are actually running this State.

Posted by [super_annoyed](mailto:super_annoyed@yahoo.com.au)
mailto:super_annoyed@yahoo.com.au on 07/23 at 09:30 PM

12. I suppose the point, Super, is that science is like other disciplines, history being the other current example; sooner or later you can find evidence to support your position, whether its empirical data, or an experienced individual's considered interpretation of that data. We could get into a semantic debate about 'truth' and 'facts' and whether this scientific study has more integrity than that one, for whatever reason; but perhaps that's for later.

You miss one of the key points of Jon Sumbly's posts: the scientific evidence provided in the Draft IIS does not provide sufficient proof that this pulp mill will not cause pollution, and that the points raised in the relevant section of the draft IIS, as Sumbly demonstrates, can (and indeed should) be actively disputed.

However, all of that aside, I will be very surprised if the RPDC knocks this back. No one in a plush air-conditioned office in Hobart really gives a stuff about a bunch of seals, do they?

Posted by [Cameron](mailto:tpf_inc@yahoo.com.au)
mailto:tpf_inc@yahoo.com.au on 07/23 at 10:50 PM

13. Save the seals and eventually there will be enough to re-establish the sealing industry. Nobody wants dioxins in their sealskin coats.

Posted by [Justa Bloke](http://www.cornfordpress.com/) <http://www.cornfordpress.com/> on 07/24 at 11:22 AM

14. Unfortunately it was the proponent that defined the focus of the reports from the various consultants. The report might be completely different if consultants were asked to report on the studies that had shown effluents to be safe versus if they were asked for a comprehensive list of risks to the public, businesses and environment.

Trusting the word of the proponent without independent verification is needlessly risky, particularly as the IIS is still a draft subject to virtually any changes that Gunns wants to introduce.

Posted by [Mike Bolan](mailto:mbolan@tpg.com.au) <mailto:mbolan@tpg.com.au> on 07/24 at 12:17 PM