



**'SUBMISSION'**

A1039: Low THC Hemp as Food

Submitted: February 2012

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ALSO BY BRETT ELLIOTT:

'THE STATE OF INDUSTRIAL HEMP IN AUSTRALIA'

@ <http://www.wefts.org.au/downloads/state-industrial-hemp.pdf>

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## Introduction

The following information has been prepared following a thorough review of the documentation and supporting documents published by FSANZ on December 7<sup>th</sup> 2011, as found at:

<http://www.foodstandards.gov.au/foodstandards/applications/applicationa1039lowt4708.cfm>

Key questions have been identified, and leading experts consulted for support to address key questions.

The Queensland Police Service submission presented in the first round of submissions on A1039 has also been reviewed.

Experts consulted include:

Phil Warner  
*Director*

Ecofibre Industries Operations

Original applicant A360,  
Phil has hemp growers license in Queensland, NSW, Victoria and Tasmania.  
[phil@ecofibre.com.au](mailto:phil@ecofibre.com.au)

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Here following, First Planet Pty. Ltd attempts to answer key questions presented by FSANZ.

Change to the FSANZ code enabling the legalization of industrial hemp as a food will bring Australia in legislative and production harmony with other producing countries. Given Australia will be the last country in the developed world to do so, there is no question that the concerns raised by various stakeholders are surmountable.

Hemp by virtue of it's name, and by definition is low THC. Marijuana by definition produces a psychoactive. To address the 'brand issue' associated with hemp, also known as Industrial Hemp, Marijuana should be used exclusively when referring to the drug material. In this public perception can be easily managed. Putting the drug and the food in the same sentence misinforms the reader that there is a relationship.

There is a clear need for the government to develop balanced and equitable policies in keeping with other government regulations. Inconsistencies on a range of levels, including poppy seed foods which can generate a positive reading for opiates, provide clear grounds to contest a ruling against the legalization of Industrial Hemp as a food.

There is no illicit drug without it having a financial value to drug barons. 3% THC would be considered a low value drug, which wouldn't sell on the 'black market'. Marijuana with drug value requires a THC content of 6 – 10% minimum. Low drug hemp or low the hemp is under 1% and has no psychoactive effect. It is impossible to consume enough through the digestive system through the lungs into the blood system.

Seeds currently used for other purposes might be expected to yield double the price if used for food consumption. Therefore there is a real financial loss to farmers if hemp foods continue to be prohibited.

In contrast to fibre, seeds can be processed and marketed for consumption on a small scale by small farmers with low costs (100ha compared to 10,000ha for fibre). Farmers with smaller farms will potentially be able to enter the industry.

The figures provided in the FSANZ report are false. Hemp seed has the capacity to make a profit for a smaller operation because of the harvesting. The entry point for hemp production is lower for seed than it is for fibre. You can grow 6 Ha of Hemp seed. The machinery and infrastructure to clean, process, squeeze, blend, transport seed is currently available, and significantly cheaper than for fibre processing.

It is worth noting that buyers will enter the hemp foods market to promote the nutritional value of their products rather than hemp itself.

Referencing the FSANZ document which proposes:

1. Government or law enforcement agencies will need to adopt regulation and



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implement compliance and enforcement processes and controlled licensing.

This is not true. These already exist. Regulation, compliance, enforcement processes and controlled licensing for fibre crops already exist, which need extremely minor inclusions to allow hemp foods. Only in SA and NT will there need to be any changes. QLD law change” Not for human consumption.

2. Government stakeholders identified the possibility of road drug tests and work place drug tests being compromised due to the consumption of hemp food.

The matter is not the presence of THC in the blood, but the presence deemed intoxicating. This has already been defined by FSANZ.

Regarding 8.2.3.3 Option 2B

Paragraph 2:

Under existing Industrial Hemp Act law in most states, the Hemp grower licensee subcontractors and suppliers such as the freight company and processing entity, currently operates under the license of the grower.

This works in the same manner for suppliers who come in to harvest crops. They are likewise covered under the licensee subject to existing legislation under the Industrial Hemp Act.

The general process is hemp farmers send seed by courier or transport company in bags or bulk to a company which is contracted to clean the seed. Both suppliers come under the grower license. If there is a breach of any nature It is under the growers license. Hemp product may then be freighted to a food manufacturer who denatures it as a food products so it won't grow. Now a viable food product, it no longer falls under the regulatory jurisdiction of anyone in most states. It has become a nutritious food stuff supplement that would be used to enhance the protein of fatty acid profile of any number of foods.

Seed may be denatured (that is made sterile) through heating to 40 degrees celsius given under proposition 2B.

8.2.3.4 Option C

Para 2:

Distinguishing hemp seeds destined for food use from all other cannabis seeds could lead to additional cost and resources with this option.

All the regulations associated with the transport and processing of seeds already exist, and fall under the license of the grower.

Supporting document 3

## 2. Impacts

Table 2.1

### 2. Potential access to potential export / import markets

Food manufacturers would be provided with the ability to innovate and provide hemp food to the Australian and overseas markets. In China hemp seed food is traditionally seen as a longevity food. China is a major export food opportunity for Australian hemp food agriculture.

3. Potential for employment. The estimated number of work hours to grow hemp compared to wheat is 8 hours compared to 4 hours per hectare. Therefore hemp, when cultivated profitably would create more employment.

The regulatory, compliance and business requirements to grow hemp are 500% greater than to grow wheat. EcoFibre, (one of Australia's leading Industrial Hemp famers) has a whole team filling in licenses, doing THC testing, getting transport people under the EcoFibre Hemp license, and auditing the seed.

Preparation and harvesting is twice that of wheat. Most include regulatory costs. This includes dealing with mandatory THC testing and the DPI. The farmer must cleaning down of harvester when they leave the farm. All up, there is a huge raft of work in addition to what a normal crop would require.

Ecofibre estimates an additional 20 hours per crop.

Industry development of IP and technologies for high yielding crops for more efficient harvesting systems are actively being developed in Australia. Australia doesn't Canadian wheat, nor will it be growing Canadian Hemp. Australia has the largest most diverse cannabis gene stock banks in the world and would give rise to new varieties not seen elsewhere with export potential.

- EcoFibre Industries
- Plant scientists at Southern Cross Uni
- Agri-fibre in Bundaberg

Downstream value add within the food manufacturing industry will create employment. The opportunity to value add hemp seed is far greater than hard grains such as wheat.

A hard grain gets milled and made into pastries. Hemp seeds has greater applications, and requires refrigerated containers and different handling / splitting. Value adding to produce butter or milk or paste are more labour intensive and machinery value intensive.

The processing side would compare equally with the growing side in the sense of the doubling of preparation before a finished product. This doubles down stream jobs, in turn promoting a new industry.

In the 1960s canola yielded 400 kgs per Ha. It now yields 4000kgs. That sort of development cost several millions and employed people. This process would mirror the development of hemp seed production if given the go ahead.



Note:

The annotation for the web address of the Canadian hemp trade Alliance appears to be incorrect. The correct address is:

[www.hemptrade.ca](http://www.hemptrade.ca)

Not

[www.hemptrade.com.ca](http://www.hemptrade.com.ca)

10. Government stakeholders identified the possibility of road drug tests and work place drug tests being compromised due to the consumption of hemp food.

- This statement has not been qualified by those government stakeholders to any degree.

In the unlikely event that a 100 kg individual has just consumed 150mls of pure hemp oil was roadside tested for THC, he would still fall within the safe TDI of 6ug per kg bw, and would not show signs of toxicity. Therefore, it would be inappropriate for any roadside test showing a reading of any number up to the FSANZ recommended safe THC intake as dangerous. In the event that a roadside test showed level exceeding the FSANZ recommended safe limit of THC, then that individual could be considered to be intoxicated. Therefore there is no compromise due to the consumption of hemp foods. Rather, the findings of FSANZ simply qualifies the safe and acceptable legal blood / THC limit, which should be adhered to by the police.

Consider how these issues are dealt with in the rest of the world. This doesn't pose a problem in more sophisticated countries.

There are no known cases cited where the prosecution of individual has used consuming hemp food as a defense. There is no proven case anywhere in the world that has lead to the prosecution of any person from ingesting foods mistakenly being used as a drug.

11.

Governments will potentially have research costs to develop compliance and enforcement plans. –

Compliance and enforcement plans are already active and in place under the Industrial Hemp Acts.

12. See point 10. This assertion is unqualified.

The existing law requires the analysis of organic matter to determine if it is cannabis or not.

They are doing it now anyway. There are no additional costs.

- e.g. policeman getting a seed.
- Under recommend 2B this issue won't exist.

P 12 of supp. 3

10) Do you think that businesses would have to do any other additional activities with regard to hemp product compliance or enforcement? (see also



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questionnaire) If there are other activities please name these and provide time estimates.

- Seed storage and cold room monitoring
- Seed must be stored at 5 degrees Celsius and its acceptability as a food by the market.
- Germination tests
- Pressing the oil: fatty acid profiles on a per batch basis
- Speak to Fred Davies about those costs. What the profile is.
- Speak to Brandt and Lisa: Hemp Australia : biggest oil producers in Australia
- 

12. There is a certain amount of self regulation as all other foods. There must be some guarantee by the manufacturer. Limits would be enforceable. Fall into line of existing food laws related to safety.

Re: THC in addition to existing food laws. Procedures already exist, outlined in the 2B recommendation.

Quality issue and food fitness issue is already covered in FSANZ laws.

Labelling is a matter self regulation.

There is no entity that regulates labeling. It enforces it doesn't regulate.

"You don't" apply for a label. Label must comply.

13. Needs to change ICON customs duty import and export database to allow both import and export of these processed foods in accordance with 2B.

2C not viable cannot work. Can't export without regulation. Whole hemp seed cannot be permitted on to the market because once on the market there's no regulation. Wouldn't fit with UN protocol.

If we were to export live seed we would be in breach of the UN regulation. Live whole seed cannot be exported without the appropriate paperwork. Apply to TGA and get an export permit and license. For every seed export you get a permit.



FURTHER QUESTION FOR SUBMITTERS:

TAKEN FROM DOC:

A1039 LOW THC HEMP AR FINAL.PDF

AS ON DECEMBER 12<sup>TH</sup> 2011 FOUND AT:

[HTTP://WWW.FOODSTANDARDS.GOV.AU/FOODSTANDARDS/APPLICATIONS/APPLICATIONA1039LOWT4708.CFM](http://www.foodstandards.gov.au/foodstandards/applications/applicationA1039LOWT4708.cfm)

#### SECTION 6.1.1

P12.

1. Will the inclusion of a maximum level in the Code for hemp seed oil products be an issue for hemp seed oil products produced in or imported into New Zealand?

No. Already guaranteed at less than 10 ppm.

#### Section 6.4.1

p. 18

2. Are there other methods of distinguishing between the seeds of hemp and drug varieties of cannabis? Please provide evidence in support of these methods. (p.18)

In short, there are no other methods. The most common methods are through dna testing or sample propagation.

3. Are there other methods of rendering hemp seeds non-viable that will also result in the whole seed being distinguishable from the seeds of drug varieties of cannabis? Please provide evidence in support of these methods.

4. Can you provide any evidence on whether hulled hemp seeds remain viable?

It is technically impossible to germinate a hulled seed. There is no drug in the seed whether it is hemp or marijuana. Non viable seed has no drug value.

- Phil Warner, Agronomist, hemp farmer and founder of Ecofibre Industries

#### Section 6.5.1

p. 20

5. Are you aware of any studies reflecting the effect of consumption of hemp foods on the results of saliva THC tests?





(Fortner, Fogerson, Lindman, Iversen, & Armbruster, 1997) the QPS assert that “Positive urinoid cannabinoid results through drug testing have been found after the consumption of low THC food, despite there being negligible traces of THC in the food that was consumed in the study. With the sensitivity and accuracy of such tests accelerating at the rate it is, there is no doubt that saliva THC tests may on occasion return a positive result from a saliva test.

In a new study by scientists from the Rome-based [Institute of Atmospheric Pollution Research](#), titled "Possible social relevance of illicit psychotropic substances present in the atmosphere.", the lead author of the paper, Angelo Cecinato, [had in 2007 found traces of cocaine](#), marijuana, nicotine and caffeine in the air above Rome and Taranto. In another study levels of the female sex hormone oestrogen in was found in the river Thames. It is known that consuming poppy seeds can return a positive reading for opiates. These studies demonstrate the incredible sensitivity of current measuring instruments. The issue is not the presence of THC, but the levels deemed to render the individual intoxicated. FSANZ has already identified the level at which THC is non intoxicating in the body. Any testing should focus on these levels, in the same way a blood alcohol reading of .03 in a full license driver is deemed to be acceptable.

The fact that the presence of a substance can be detected is not the issue. Law enforcement in association with this matter is to ensure that intoxicated persons do not operate vehicles. What is relevant in this issue, is the FSANZ recommended safe upper limit of THC / blood content.

6. Can you provide information on the type of saliva tests that are available, including sensitivity of the tests?
7. What saliva THC tests are currently in use in Australia and New Zealand? For these tests, what levels of detection of THC are currently used? Can you provide information on the methodology of these tests and the costs of conducting these tests?
8. Can you provide any additional data on other THC testing methodologies that are used in Australia and New Zealand (for example, urine and blood)?
9. Which analytical laboratories currently conduct confirmatory THC testing, for example blood tests? How much do these tests cost?

According to Dominic Reynolds, *Science Business Manager* of the **ChemCentre** in West Australia:

[See: [webenquiries@concateno.com](mailto:webenquiries@concateno.com)]

roadside drug screening in Western Australia are delivered by Cozart oral fluid kits manufactured by Concateno. The manufacturer's website <http://www.concateno.com/products-and-services/drug-testing/oral-fluid-testing/> provides some relevant information regarding these kits. Other jurisdictions may use other similar kits, however they are all based on



immunoassay technology.

ChemCentre has developed confirmatory methodology based around cutting edge liquid chromatography/ mass spectrometry techniques for clients which include the WA Police, the WA Coroner and a number of multinational clients for their workplace testing regimes. These methods are applicable to all matrices including blood, saliva and urine and are extremely sensitive and specific for the drug in question. It important to note that testing

10. Do you have data to indicate the levels of THC in current hemp food products? Is it likely that hemp foods could be produced to comply with lower maximum levels of THC?
11. Would additional processing costs be incurred in order to achieve lower THC levels in hemp foods?

This issue is already addressed in various Industrial Hemp Acts. Regulations already exist to ensure that seeds are rigorously cleaned to prevent contamination of the seed. No further processing is required. This isn't an issue elsewhere, and won't be an issue in Australia, which already has extremely strict regulation in place.