

**HEALTH PROTECTION DIRECTORATE**

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File Number: QCHO/2313 part 1  
Our Ref.: GB110051

04 May 2011

Standards Management Officer  
Food Standards Australia New Zealand  
PO Box 7186  
Canberra BC ACT 2610

Dear Sir / Madam

**Submission – Application A1039 – Low THC Hemp as a Food**

Thank you for the opportunity to provide a submission on the Consultation Paper for Application A1039.

This is a whole of Queensland Government response and is made by Queensland Health since it is the lead agency in Queensland which coordinates policy advice relative to the national policy on food regulation. Our approach follows consultation with other relevant Queensland Government agencies.

The Queensland Department of Employment, Economic Development and Innovation and the Queensland Department of Justice and Attorney-General raise no concerns about this Application. However, Queensland Health including Queensland Health Forensic and Scientific Services (QHFSS) as well as the Queensland Police Service (QPS) have identified a number of issues and concerns and request these be considered during the next assessment stage.

**The submission by the QPS is attached separately to this letter and must be treated as confidential.** Should there be need for consideration of this submission outside of Food Standards Australia New Zealand, Queensland Health requires to be advised of such prior to this occurring.

At the outset there appears a need for clarification as to what part/s of a hemp plant is being considered for use in this Application.

It has been noted by a respondent from QHFSS the following quotations which demonstrate it is not only the seed portion of the hemp plant that is being proposed as a food.

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*"Hempseeds, which are the main part of the hemp plant utilised as a food source, ...."* (page i of the Consultation Paper)

*"The seeds are the main part of the hemp plant used as a source of food."* (page 2 of the Consultation Paper)

*"A previous Application to FSANZ, Application A360, requested the approval of industrial hemp as a food."* (page 2 of the Consultation Paper)

*"FSANZ recommended the removal of the prohibition on all Cannabis species in Standard 1.4.4 and the approval of hemp foods, ...."* (page 3 of the Consultation Paper)

It has been suggested these quotations infer all parts of the plant may be acceptable and included under this Application. Accordingly the continued assessment of this issue should be restricted to hemp seeds and specifically exclude leaf, roots, flowers or stem material. This would simplify the discussion and is probably the intent.

Whilst the document refers to hemp products generally there will be confusion. The document did not examine the safety of leaf material with up to 0.5%THC, only the seeds and subsequent oil product with little or no THC.

The QHFSS respondent went on to state:

- Leaf material should not be included in this Application. .
- Possession of seeds is as problem. It is not possible to analytically determine if a seed will produce a low THC or a high THC plant. Growing the seeds is a potential test however it is recognised that environmental conditions influence the concentration of THC in the plant. A potential solution may be to ensure that all food hemp seeds are sterile.
- Typo: The statement *"approximately 125 ml (approx 8 teaspoons of oil) or 300 g of seeds, daily."* should read "table spoons" not "tea spoons".

Those specific questions posed in the Consultation Paper are now addressed:

***1. Are you aware of any evidence that consumers believe low THC hemp foods have psychoactive effects?***

Many people have baked illegal hemp cookies potentially on the belief that they have psychoactive properties. This may lead to the conclusion that there is a belief in the psychoactive nature of cannabis foods generally.

***2. Are you aware of any evidence that representations on low THC hemp foods (including labelling and advertising) mislead consumers by leading them to believe that low THC hemp foods have psychoactive effects when consumed?***

A review of hemp products sold on the internet shows that a number of the associated food businesses are relying on the use of a marijuana leaf or marijuana leaves on the label as a marketing strategy.

This marketing strategy was also noted in 2001 in relation to imported "Hemp Beer" from the UK into Australia.

***3. Can you provide any evidence in addition to that presented in this Consultation Paper whether or not the consumption of low THC hemp foods can return a positive result for a THC drug test?***

Queensland Health Forensic and Scientific Services testing goes to levels below the 15ng/ml cut off so may pick up the levels proposed in this paper.

The response to this question in the attached confidential submission by the Queensland Police Service also needs to be considered.

***4. Can you provide information on THC drug testing procedures in Australia and New Zealand, particularly with regard to regulatory limits of THC that may be set?***

The Queensland Health Forensic and Scientific Services cut off for the immunoassay screen is 25ng/ml and the cut off for confirmation is below 15ng/ml. In some cases the test reports a drug as presence or absence, not a level. Level only provides additional evidence for the penalty. Queensland Health Forensic and Scientific Services reports levels of THC below the 15ng/ml level mentioned in this paper. This is done at the request of the client.

The response to this question in the attached confidential submission by the Queensland Police Service also needs to be considered.

***5. Can you provide information to indicate whether there will be an impact on the cost of testing for THC in humans that could arise from an approval of hemp foods?***

In the case of roadside saliva testing, additional positives would be obtained and require confirmatory analysis. One article Queensland Health Forensic and Scientific Services has notes that you can observe THC in oral fluid after ingestion of normal THC cannabis products. No paper was available on low THC products.

In the case of oral fluid testing for cannabis, the QHFSS is not looking at transfer from the blood and oral fluid but more of a release of THC from the oral cavities, where it can be trapped after smoking. There may be additional positives due to residual hemp foods in the mouth.

In cases of possession of cannabis seed, all suspects would offer the defence of the seed being a low THC variety. It would be necessary to carry out testing to prove the variety. This would be difficult and expensive. Sterilisation of seeds would decrease costs by allowing a simple germination test.

If the outcome is legalisation of seeds and hemp seed oil only then there are fewer problems. If the proposal is to legalise the use of leaf material then there are major issues involving human testing due to the higher level of THC.

The response to this question in the attached confidential submission by the Queensland Police Service also needs to be considered.

***6. Do you agree that there are adequate controls currently in place, or that would be achieved by imposing maximum limits for THC, to mitigate any risk of high THC Cannabis varieties entering the food supply?***

There is a difficulty associated with enforcement, since hempseed from low THC cultivars is indistinguishable from seed of high THC cultivars without genetic profiling. This difficulty in enforcement will be the same which currently exists for determining non genetically modified plants from genetically modified plants.

Obviously there would need to be ongoing field sampling and analytical costs in monitoring any limit. Prosecution costs for exceedances would also be involved.

The response to this question in the attached confidential submission by the Queensland Police Service also needs to be considered.

***10. Are there likely to be any additional costs for food manufacturers wishing to supply hemp foods?***

There would be substantial analytical costs in monitoring crops and monitoring the level of THC in raw materials and finished products.

The Queensland Health Forensic and Scientific Services advises there are considerable laboratory sample processing and analytical costs involved in confirming that a crop is in fact a low THC crop and not a high THC crop. For a single one-off industrial hemp sample the cost is about \$420. This price includes stripping leaves from stalks, sieving and grinding the sample before analysis.

For routine bulk samples the cost is less, possibly around \$100 for the analysis alone. This assumes there is no sampling process to get a representative sample. The reason for the high cost of single sample analyses is the lack of economies of scale.

The crop needs to be tested immediately prior to harvest to ensure that the crop is legal. This necessitates rapid turnaround time on analysis and thus the inability to wait to accumulate a batch of samples.

***11. Would the approval of low THC hemp foods increase the cost of food enforcement beyond what would be expected of the approval of any other substance added to food, or other food regulatory change?***

It is understood the foods currently being made internationally with hempseed and hempseed oil include health bars, salad oils, non-soy tofu, non-dairy cheeses, non-dairy milks, additives to breads, biscuits and cakes, butter pastes, as well as whole seed, raw or roasted.

It is also understood there is currently some commercial and community interest in having available low THC hemp foods in Australia.

If there was an introduction of low THC hemp as a food it would be inevitable a number of overseas and Australian food businesses would produce food with low THC hemp given any change to the *Australia New Zealand Food Standards Code*.

Queensland believes the introduction of low THC hemp foods would increase the cost of enforcement for food regulatory agencies such as the Australian Quarantine and Inspection Service and jurisdictions.

The response to this question in the attached confidential submission by the Queensland Police Service also needs to be considered.

***13. Would the approval of hemp food have an impact on existing hemp regulations in Australia and New Zealand? For example, would industrial hemp destined for use in food require additional controls to those already specified in industrial hemp regulations?***

The response to this question in the attached confidential submission by the Queensland Police

Service also needs to be considered.

***14. Would food manufacturers be required to be licensed under existing hemp regulations?***

The response to this question in the attached confidential submission by the Queensland Police Service also needs to be considered.

***16. Can you identify other risk management options that have not been considered in the impact analysis? Comments on the possible costs and benefits are welcome.***

Sterilisation of the seeds may overcome any illegal trade in the seed and make it possible, through a simple germination test to differentiate sterile industrial hemp seed from illegal seed materials

The discussion on control did not mention saliva testing. The police currently screen drivers for cannabis use. The possibility that the person has consumed as cannabis based food product would test positive would complicate this process and lead to a higher cost to government.

This proposal will add significant expense to the cost of enforcing the prohibition on cannabis use.

***17. Can you identify any other costs and benefits for any of the risk management options considered in this paper?***

There are considerable analytical costs under the current hemp legislation in ensuring that a crop is in fact industrial hemp.

***18. Do you have a view about an appropriate preferred regulatory option regarding the approval of hemp foods, based on benefits and costs?***

It is acknowledged Food Standards Australia New Zealand has not identified any safety concerns relating to the consumption of hemp foods. Likewise we acknowledge that hempseeds, which are the main part of the hemp plant utilised as a food source, have a favourable nutritional profile and may offer an alternative plant source for a range of nutrients (including omega-3 fatty acids, protein and some vitamins and minerals).

However, we require further assessment of this Application based on the input provided in this response before an appropriate preferred regulatory option can be suggested.

The response to this question in the attached confidential submission by the Queensland Police Service also needs to be considered.

***Other issues which need consideration***

It is probable that marketing which allows the presence of hemp, even at low THC levels, will result in the gradual community acceptance of Cannabis as a benign drug.

Furthermore, Queensland Health has concerns the allowance of low THC hemp foods, will result in "legal uncertainty" associated with the detection of and prosecution for low levels of THC in biological fluids.



It would also extend to Government and private drug maintenance and rehabilitation programs and probably extend to matters involving insurance (eg., accidents involving motor vehicles, accidents involving machinery).

This uncertainty which would surround the detection of low levels of THC in biological fluids would also pose difficulties where prosecution was not the intended course of action. For instance, Australian sportspersons who test positive for low levels of THC at sport events.

It is also understood there have been occasions in the past (Tasmania) where there have been unauthorised access to industrial hemp crops and some offenders have not been apprehended. It has been suggested that some of the material stolen from low-THC hemp crops may have been mixed with illegal *Cannabis* with high THC levels for the purposes of adulteration and extra profit.

The additional law enforcement issues detailed in the attached confidential submission by the Queensland Police Service also need to be considered.

Yours sincerely

Gary Bielby  
Team Leader  
Food Safety Policy and Regulation Unit  
Environmental Health Branch

## Seamons, Colleen

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**From:** Gary Bielby <Gary\_Bielby@health.qld.gov.au>  
**Sent:** Thursday, 5 May 2011 4:50 PM  
**To:** submissions  
**Cc:** Humphries, Cathie; Gary Golding; Tenille Fort  
**Subject:** Submission – Application A1039 – Low THC Hemp as a Food

Attn: Standards Management Officer

Dear Sir/Madam

I refer to the Queensland whole-of-government submission concerning the above Application which was sent to you at 3:17 pm on 04 May 2011.

Advice has been received there is an incorrect unit shown for the THC cut offs. They should read ng/ml not ng/L. See item 3 and item 4 comments in our submission.

It would be appreciated if you would arrange for this errata to form part of our submission.

Regards

Gary Bielby  
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Environmental Health Branch  
Health Protection Directorate  
Division of the Chief Health Officer  
Queensland Health

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## Seamons, Colleen

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**From:** Gary Bielby <Gary\_Bielby@health.qld.gov.au>  
**Sent:** Wednesday, 4 May 2011 3:17 PM  
**To:** submissions  
**Cc:** Suzanne.Kelly@deedi.qld.gov.au; Zena Dinesen; Humphries, Cathie; Gary Golding; Kevin Lambkin; Pieter Scheelings; Simon Critchley; Tenille Fort; jo.hughes@justice.qld.gov.au; Beattie.SusanH@police.qld.gov.au  
**Subject:** Submission – Application A1039 – Low THC Hemp as a Food  
**Attachments:** GB110051\_LT\_A1039\_Consultation Paper\_FSANZ.doc; QPS Submission A1039 Low THC Hemp as a Food.doc  
  
**Categories:** Blue Category

Attn: Standards Management Officer

Dear Sir/Madam

Please find attached a submission concerning the above Application which FSANZ allowed extra time for lodgement.

It might be noted the submission by the Queensland Police Service is attached separately to the Queensland Health correspondence and must be treated as confidential.

Should there be need for consideration of the Queensland Police Service submission outside of Food Standards Australia New Zealand, Queensland Health requires to be advised of such prior to this occurring.

Regards

Gary Bielby  
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