

**Queensland Police Service Submission Paper
Low THC Hemp as a Food Consultation Paper
Application A1039**

CONFIDENTIAL SUBMISSION: NOT FOR PUBLICATION

The information contained in this submission highlights significant law enforcement concerns and is of a sensitive nature. The Queensland Police Service has not approved publication of this document or any information contained within.

The Queensland Police Service are submitting a response to Application A1039: Low THC as a Food Consultation Paper in accordance with the objectives outlined in Section 18 of the *Food Standards Australia and New Zealand Act*; specifically the Protection of Public Health and Safety. The Queensland Police Service does not support the FSANZ Application A1039 – Low THC Hemp as a Food.

The Queensland Police Service is submitting concerns in relation to:

1. the impact of the introduction of low THC hemp food on Roadside Drug Testing in Queensland
2. the levels of monitoring and regulation of low THC hemp seeds with particular reference to:
 - the requirements in relation to appropriate cleansing or shelling of seeds and the disposal of any waste from this process
 - sterilisation of seeds to prevent unlicensed propagation and the level of monitoring of the current regulations surrounding this
3. Additional issues relating to the protection of community safety highlighted by the State Drug Investigation Unit, Queensland Police Service

The Queensland Police Service have addressed the following questions presented in the application relevant to law enforcement issues below.

Question 3: Can you provide any evidence in addition to that presented in this Consultation Paper whether or not the consumption of low THC Hemp food can return a positive result for a THC Drug test?

For Random Roadside Drug Testing, the Queensland Police Service detects THC in saliva [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] Positive urine 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, (Fortner, Fogerson, Lindman, Iversen, & Armbruster, 1997). The likelihood of such a result is dependent upon:

- the quantity that is consumed
- the testing threshold
- individual metabolism
- the length of time between consumption and testing (Fortner et.al., 1997).

Recent findings that even excessive consumption of hemp food will not result in positive results from drug testing are assumed to be due to the reduction of THC in hemp food, (Lachenmeir, Kroener, Musshoff & Madea, 2004), however they are based on concentration in urine and/or blood and not saliva; so have limited applicability to the current situation. Proponents of hemp seed oil cannot definitively say whether the level of THC in hemp food will affect drug testing or further whether there is a cumulative effect in the body, (Pure Delight Hemp, Hempseed.ca) that may affect results. Finally, there is currently no method for distinguishing between THC ingested by use of

illicit marijuana and that of licit hemp products, (Holler, Boso, Dunkley, Levine, Past & Jacobs, 2008). This inability to distinguish between THC from the consumption of low THC hemp as a food as opposed to marijuana significantly complicates the drug testing process and may result in legal challenges to positive results from random Roadside Drug Tests.

Question 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?

[REDACTED]
[REDACTED]
[REDACTED] Regulatory limits in terms of the appropriate level of THC in food should be set low to prevent false positives. Regulations which ensure THC content is reduced further through appropriate cleaning and production processes should also be implemented to reduce risk of false positives further. [REDACTED]
[REDACTED]
[REDACTED]

Question 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?

There is a high probability that costs associated with testing for THC in humans will be increased due to the introduction of low THC hemp as a food product. The cost of the tests themselves is quite expensive; however the cost would be more significant for false positive readings and for people potentially challenging the results and attesting that the results were from low THC food consumption. There is also potential for individuals whom have knowingly ingested marijuana to challenge the findings and attest that it is a result of ingestion of low THC Hemp food products (Fortner et.al., 1997); which has obvious legal ramifications with particular reference to Roadside Drug Testing in Queensland.

Although THC concentration in hemp seed oil may be a result of contamination during the cultivation and production process, because of this presence the ‘unintentional use defence’ may be used with a positive THC result; and has been successfully used as a defence within the American Air Force and Marine Corps previously (Callaway, Weeks, Raymon, Walls & Hearn, 1997). This is indicative that with the introduction of low THC hemp food products it is not implausible that at the very least some individuals will claim that their readings are as a result of the consumption of hemp food products. It is undetermined whether the ‘unintentional use’ defence will be supported within a legal context in Queensland. Unfortunately because of the associated potential increase in cost it is important to exercise caution in this matter and ensure that appropriate processes are implemented to ensure that any risks are minimised.

Question 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.

It is important to implement strategies to mitigate any risk of high THC *Cannabis* products entering the food supply. For this to be achieved every batch that was released for human consumption would have to be tested to ensure that contamination risks were minimized. Production processes, contamination issues and environmental factors may influence the level of THC in Hemp seeds. Under current regulations the THC content in commercial industrial cannabis plants which are grown for seed or fibre within Queensland must not exceed 1% THC (Department of Primary Industries and Fisheries (DPIF)). This provision accounts for variance in environmental conditions beyond the growers control, however it highlights that the actual THC content of industrial hemp

can vary significantly. Introduction of hemp as a food source would require high quality, regular testing to ensure that standards in terms of appropriate concentration levels are adhered to.

Question 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?

Due to the additional risks associated with the introduction of low THC hemp foods, food enforcement costs would be significantly increased. Rigorous testing to maintain adequate control and prevent batch contamination would be necessary; to ensure that the levels of THC in hemp food are in accordance to the regulations. Regular monitoring would also need to be introduced within production facilities to ensure that standards are adhered to. This would be at a high cost and would be above that which would be anticipated for the introduction of other substances.

Question 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?

Although QPS recognises the strict controls already in place for the industrial production of hemp; there are other regulatory options that should be considered that have been internationally implemented to ensure adequate quality control when low THC hemp food has been introduced as a food source. Currently certified cannabis seeds for propagation must have a THC concentration of 0.5%; with the 1% limit being implemented to allow variability in growing conditions, (Department of Primary Industries and Fisheries). Regulations associated with denaturing the hemp seed are provided for within the *Drugs Misuse Act 1986*, and include cracking, de-hulling, or heating the seed to prevent seed germination.

Differing quantities of THC can be found on the outer shells and hemp seed products, dependent upon a number of factors including the level of seed cleaning and the hemp variety, (Leson, & Pless, 2000). Hemp seeds themselves do not contain THC or measurable amounts of any cannabinoid (Callaway, et.al., 1997); however they may be contaminated by the leaves or flowers through the growing process.

It is a requirement that hemp seeds designated for importation into Canada and the United States are steam sterilised to prevent propagation. Sterilisation is a process in which Hemp Seeds are heat or steam treated to ensure that they are no longer capable of germinating; a process which alters the enzymes responsible for photosynthesis, (INNVISTA). Due to improvement in seed decontamination and cold pressing in the United States Hemp industry, the THC content in Hemp products for food consumption have been decreased significantly and as such the probability of these products returning a positive on drug testing has been significantly reduced, (Holler et.al., 2008). Processes related to the appropriate management of any by-products of the cleansing or shelling process and appropriate handling of waste need to be assessed to determine whether it is necessary to implement strategies around this.

Question 14: Would food manufacturers be required to be licensed under existing hemp regulations?

Food manufacturers should also be licensed and subject to regulations; there is a provision for Manufacturers in the *Drugs Misuse Regulation 1987*. However sections that specifically address any concerns around the use of hemp as a food source may need to be extended beyond what is already provided for within the current regulatory framework.

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

Any introduction of low THC Hemp food would need to be accompanied by strict regulatory requirements that are aimed at reducing the levels of THC through processes such as de-hulling and cleansing to ensure that THC concentration is minimal. Regular monitoring would also need to be implemented to ensure adequate quality control. Seed cleaning and quality control measures designed to reduce the concentration of THC in hemp oil and hemp seeds may be effective in reducing the likelihood of low THC food interfering with drug testing, (Holler et.al., 2008). However such processes would not necessarily prevent individuals from challenging the results of drug tests; and given the current state of scientific evidence it would be difficult to prove that results were from the consumption of marijuana or hemp; which is of significant concern.

Additional Law Enforcement Issues

The State Drug Investigation Unit (SDIU) will not support the amendment of the *Drugs Misuse Act Act 1986* to allow production of hemp food products unless the concerns outlined below are adequately mitigated with effective monitoring processes. These processes would also have to be detailed within the conditions outlined in any licenses issued under the licensing authority and breaches of these conditions would be subject to actions such as fines and removal of authority to manufacture.

Two similar applications for hemp to be used in food have been refused as numerous jurisdictions have raised enforcement concerns. The current application seems to differ only in the specification that the cannabis will contain low THC levels. This does not satisfactorily address the concerns of law enforcement held in the previous two submissions. In addition to these previously identified concerns, there are also some further potential risks that need to be considered:

- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]
- [Redacted]

[REDACTED]

- [REDACTED]
- [REDACTED]
- [REDACTED]

[REDACTED]

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