

Supporting document 4

FSANZ discussions with police agencies and forensic analysts (at Approval) – Application A1039

Low THC Hemp as a Food

1. Introduction

FSANZ has conducted a series of phone conversations with Police agencies in Australia and New Zealand and the New Zealand Institute of Environmental Science and Research (ESR) (see Attachment 1 for full details of agencies consulted). Police have expressed concern that the legal availability of hemp foods may interfere with roadside oral fluid drug testing and therefore impact on police efforts to reduce drug driving and the potential road trauma associated with drug driving.

The concerns expressed by police relate primarily to the following:

- uncertainty in relation to whether the consumption of hemp foods, even with low levels of THC, will produce a positive result, or false positive, for THC in oral fluid drug screen tests. Such false positives would require additional confirmatory testing and potentially subsequent court action
- the potential for the consumption of hemp foods to be used as a legal defence against a positive THC oral fluid test result.
- Inability to distinguish between seeds derived from high and low THC cannabis

Police agencies are confident that the current roadside oral fluid drug testing regimes are robust and effective in detecting illicit drug use in drivers. Police generally indicated a lack of opposition to hemp food availability if there was strong evidence to show that hemp foods would not result in positive oral fluid drug screening results. However, it should be noted that some police agencies did indicate other concerns in relation to the availability of hemp foods. These concerns are explored in section 2.3.

1.1 **Background - roadside oral fluid testing procedures**

The following describes the process followed for roadside oral fluid testing in most Australian jurisdictions (exceptions noted in text):

- Random breath test for alcohol is generally taken first (this may be a targeted test if there is evidence a driver may be impaired while driving). If the breath test is negative a drug screen test is then conducted.
- First drug screening test involves a tongue swab sample, taken while the driver is seated in their vehicle. The result of this test will be available in around five minutes.

- The detection thresholds appear to vary between jurisdictions, which may impact on the likelihood of positive screening test results in different jurisdictions.¹
 - If this test is negative, the driver is free to continue driving and is released.
 - If this test is positive, the driver is arrested for the purposes of conducting a follow-up drug test.
- Follow-up drug test is also an oral fluid test, but is conducted in a police vehicle or station, and is a different test kit to that used for the first test. Tasmanian police will collect a blood sample at this stage (at a hospital), rather than a second oral fluid test, to confirm the presence of a drug. Other jurisdictions indicated that the second oral fluid test is sufficient for confirmation.
 - If this test is negative, the driver is free to continue driving and is released.
 - If this test is positive, the driver's licence is suspended (for 6 to 24 hours). The driver receives a portion of the second oral fluid sample, with the remainder being sent to a laboratory for confirmatory testing.
 - If the laboratory test is negative, the driver will not be charged.
 - If the laboratory test is positive, the driver will be charged with drug driving (it will likely be a matter of weeks after the test before a driver will be charged).

Oral fluid testing is not currently conducted in a roadside testing environment in New Zealand.

2. Issues

2.1 Impact on roadside oral fluid drug screening

Police are concerned at the lack of evidence to indicate whether or not hemp foods will trigger a positive oral fluid drug screen result. They consider that hemp foods should not be approved until sufficient evidence is available to address this concern.

A number of potential impacts were noted by Police:

- The consumption of hemp foods could result in a number of false positive screening results, which would require confirmatory testing at a cost to police and to the inconvenience of drivers who have legitimately consumed hemp foods. Some jurisdictions conduct a significant number of oral fluid drug tests each year, with South Australia undertaking 47000 random roadside oral fluid tests in the last financial year (this is the greatest number of roadside tests conducted internationally). There were around 2000 positive screen results, which is greater than the number of positive alcohol breath test results in South Australia.
 - Indicative costs of roadside oral fluid testing:
 - Initial screening test - \$40 per test
 - Secondary screening test - \$42 per test
 - Laboratory confirmation - \$200 per sample, although may be as high as \$500 in some jurisdictions.

¹ the Australian standard specifies a positive test cut-off level of 25 nanograms per millilitre (ng/ml) for the rapid screening of oral fluid samples.

-
- Impact on the effectiveness of roadside oral fluid testing in drug driving reduction strategy. Police noted that these tests currently play a major role in efforts to reduce drug driving and the trauma associated with drug driving attributable accidents (South Australia indicated that the drug detection rate in road fatalities is around 30%).
- The consumption of hemp food may be used as a defence against conviction of a drug driving offence. At present, the consumption of cannabis is illegal and any detection of THC in oral fluid of a driver is an offence. If hemp foods were legally available, drivers may claim that the consumption of hemp food resulted in the positive drug screen result, rather than any illicit use of cannabis. This could result in a greater number of court challenges against convictions and an undermining of the effectiveness of roadside oral fluid drug testing. It should however be noted that currently other legislation may prohibit the possession and consumption of substances containing THC, regardless of an approval in the Code.

ESR indicated that they had conducted a small in-house study investigating the effects of high THC cannabis smoking and consumption of a cannabis cookie on oral fluid THC levels. Extrapolation of the results of this study back to the levels of THC that are likely to be present in hemp foods suggests it is unlikely that hemp foods will trigger a positive result in oral fluid drug screen tests. However, the study did not utilise low THC hemp food products, so while it provides an indication of potential impact, it does not directly address the concerns of police. More information on this study is provided in SD2. ESR indicated that they would be in a position to undertake an appropriate study in future if requested.

2.1.1 Impairment versus detection

At present, cannabis consumption is prohibited, and the presence of THC in the oral fluid of a driver is an offence. The presence of THC does not relate to impairment of a driver, merely to the presence of the illicit substance. Accordingly, police have not investigated levels of THC detection in oral fluid that may be indicative of impairment. Victoria police indicated that some international jurisdictions are investigating the potential introduction of roadside oral fluid testing, but these investigations are in their infancy.

The legal availability of hemp foods in these jurisdictions is likely to complicate the introduction of roadside oral fluid testing and may require consideration of levels of THC in oral fluid that indicate impairment or which could legitimately arise from food consumption, rather than presence alone. This may also require investigation in Australia and New Zealand if hemp foods were legally available to consumers.

2.1.2 Effect of rinsing mouth before collecting oral fluid sample

FSANZ asked whether rinsing the mouth before the collection of an oral fluid sample may alleviate concerns that hemp food consumption will result in false positives. The suggestion is that the levels of THC present from illicit cannabis use are likely to be much higher than from hemp food consumption and rinsing may remove hemp food contamination while not impacting to such a degree on THC present at higher levels.

Police noted that oral fluid tests are reliant upon the presence of THC in the oral cavity as a result of direct deposition from consumption of THC containing products (eg. smoking and oral consumption) and that rinsing the mouth will reduce these levels significantly, thereby potentially compromising the detection of THC.

Victoria police noted it is possible that some THC is secreted into the oral cavity from salivary glands after absorption of THC.

However, it was also noted that the level of THC initially secreted into the oral cavity is likely to be very small and that the majority of THC present in the oral cavity is a result of direct deposition from smoking cannabis or from consumption of THC containing products. However, ESR noted that rinsing the oral cavity may reduce THC levels, but secretion of THC from the salivary glands will quickly increase levels of THC in the oral cavity again.

A number of police agencies also noted that rinsing the mouth may not be a practical procedural step in a roadside testing environment that takes place while drivers are still in their vehicles and that this may also impact on the screening results of other illicit substances.

2.2 *Urine and blood drug testing*

Police accepted that there is evidence to support the position that the consumption of hemp foods is very unlikely to result in detection of THC (or its metabolites) in urine or blood samples.

2.3 *Other issues*

2.3.1 *Public health and safety*

Western Australia questioned FSANZ's assertion that there are no public health and safety concerns associated with the consumption of hemp foods. They counter that the potential adverse impacts of hemp food consumption on drug driving reduction strategies could result in more road trauma associated with drug driving, therefore adversely affecting public health and safety.

2.3.2 *Confused message to consumers regarding illicit cannabis use*

Western Australia noted their concern that the legal availability of hemp foods may send a confused message to consumers regarding the use of illicit cannabis, particularly if hemp food labels and advertising used images of the cannabis leaf. FSANZ noted the use of the leaf on a hemp food label may not be misleading as hemp is a variety of cannabis, but that any inference or statement linking hemp to the psychoactive effects of illicit drug use would be misleading because hemp foods will not produce any psychoactive effects. FSANZ also noted that misleading and deceptive conduct is controlled by consumer protection legislation.

Drug paraphernalia is not permitted to be sold in Western Australia. It is not clear whether the use of the cannabis leaf on a hemp food label would contravene this prohibition (not discussed).

2.3.3 *Use of hemp crops and seeds for disguising illicit cannabis*

New South Wales Police indicated there have been cases of illicit cannabis being grown within licenced hemp crops. This is outside of FSANZ's remit, is clearly illegal and it is questionable as to whether the legal availability of hemp foods would have an impact on this practice.

Other police agencies also expressed concern that hemp seeds may be used to disguise the trafficking of illicit cannabis seeds. At the assessment report stage, FSANZ's preferred position was to only approve hulled and non-viable hemp seeds. In response to this concern, FSANZ noted this position and questioned the effectiveness of trafficking hulled illicit cannabis seeds that are not likely to be viable.

Police questioned whether hulled hemp seeds were actually non-viable and maintained this concern. FSANZ has not obtained any definitive advice on whether hulled hemp seeds are totally non-viable, although it is likely that most hulled seeds would not be viable.

FSANZ is satisfied that the requirement for seeds to be hulled and non-viable is sufficient to address this concern. FSANZ questions the likelihood of criminals attempting to pass hulled marijuana seeds off as hemp seeds. The hulled seeds would generally be non-viable and the seeds of all cannabis varieties do not produce THC, so it is questionable as to whether there would any benefit for illicit drug users in attempting to disguise hulled marijuana seeds as hemp seeds. Police did question how viability of seed would be ascertained at an enforcement level, with FSANZ noting that a germination test is currently possible. FSANZ also noted that DNA testing techniques are being investigated (by Queensland Health Scientific Services) as a relatively quick method of differentiating between hemp and high THC varieties of cannabis.

A subsequent informal discussion with a police botanist indicated that hulling is likely to render most seeds non-viable, but this was a general opinion only and not substantiated with evidence at the time. The police botanist indicated that a New Zealand organisation was also investigating such DNA testing techniques and would notify FSANZ of any additional information that is available.

2.3.4 Warning statements on hemp food labels

Western Australia also suggested that hemp foods may require a warning statement, if approved, that the product may contain THC.

2.3.5 Workplace drug testing

Some police agencies also noted that workplace drug testing occurs in a number of jurisdictions, including the mining industry; and that similar issues to those discussed above for oral fluid methodologies exist in these settings.

Attachment 1 – List of police and forensic science agencies consulted by FSANZ

Queensland Police
Tasmania Police
South Australia Police
Western Australia Police
Victoria Police
New South Wales Police
New Zealand Police
New Zealand Institute of Environmental Science and Research
Australian Capital Territory Federal Police