### HOUSE OF ASSEMBLY STANDING COMMITTEE ON ENVIRONMENT, RESOURCES AND DEVELOPMENT MET IN COMMITTEE ROOM 2, PARLIAMENT HOUSE, HOBART ON FRIDAY 17 AUGUST 2012.

### **INQUIRY INTO THE TASMANIAN HEMP INDUSTRY**

MS CHERYLE HISLOP, PLANT INDUSTRY ANALYST, DEPARTMENT OF PRIMARY INDUSTRIES, PARKS, WATER AND ENVIRONMENT; Ms KATE DICKINSON, PROJECT MANAGER, Ms CAROLE RODGER, ASSISTANT GENERAL MANAGER, FOOD AND AGRIBUSINESS SECTORS, TRADE AND MIGRATION, DEPARTMENT OF ECONOMIC DEVELOPMENT, TOURISM AND THE ARTS; Ms MARY SHARPE, CHIEF PHARMACIST, Mr JAMES GALLOWAY, DEPUTY CHIEF PHARMACIST, DEPARTMENT OF HEALTH AND HUMAN SERVICES; MS DEBRA SALTER, MANAGER, EXECUTIVE SUPPORT AND SECRETARIAT UNIT, AND Inspector JOHN ARNOLD, DRUG INVESTIGATIONS SERVICES DISTRICT. SOUTHERN DEPARTMENT OF POLICE AND **EMERGENCY** MANAGEMENT, WERE CALLED, MADE THE STATUTORY DECLARATION AND WERE EXAMINED.

- **CHAIR** (Mr Best) I will hand over to the Chief Pharmacist, Mary Sharpe. This committee is protected by parliamentary privilege, but you are not covered if you repeat something outside the committee.
- **Ms SHARPE** This statement is in addition to the whole-of-government submission to the inquiry. There are also a number of issues that have been raised in the evidence given to the inquiry that, as regulators, we would like to address. Our comments relate to matters that pertain to regulatory and licensing areas.

As administrators of the Poisons Act, we have an obligation to regulate scheduled substances. The obligation exists because *Cannabis sativa*, both internationally and nationally, is a schedule 9 prohibited substance and therefore falls under the requirements of the legislation. We are not able to comment on agricultural and industry promotional or developmental aspects relating to the growing of cannabis sativa for industrial or commercial use.

Firstly, in relation to licences there is a stated opinion that the licensing is a stumbling block to the industry in this state. This is not correct and no licences to date have been refused. Licences are required in all jurisdictions. Jurisdictions have a regulatory responsibility with respect to a nationally agreed schedule of arrangements.

The licensing requirements are simple and can be divided into four main areas. Growers need to apply with a police clearance and approval of the growing site. The personal police clearance is not required if the farmer has one for poppy growing. Growers need to provide the name of the supplier of the seed and, if harvesting for seed, to whom the seed will be sent. Growers are required to have the crop tested for THC content before harvesting. This is currently being facilitated by the Poppy Advisory and Control Board inspectors, and adequate security provisions in line with any police advice and basic security requirements such as limitation of access to crops. While the actual licences

have a number of points, terms and conditions, many of these points relate to the same condition. There have been no changes to the legislative requirements in relation to the licence. A statement that the licence requirements and conditions have changed in the last seven years is not correct. Delegation for the issuing of the licences has always been with this department and we have not changed our advice. Processes may have streamlined with a standard application form and guidelines now available to growers.

Many submissions make a point that there are 21 terms and conditions on the licence. The terms and conditions are set out under 21 points on the licence but many are a follow-on from the previous point and are set out in this manner for clarity and ease of reading. They could easily be combined to make 12 points. For example, all points relating to security could be placed under one point.

We believe there is no regulatory burden imposed that is greater than the growing of any licence crop because the conditions are set out in this manner. It should be noted that the growers of *Cannabis sativa* for industrial hemp assume all responsibility in relation to application and the licence requirements. Growers of *Cannabis sativa* do not have the support structure that surrounds the poppy growers, who grow for a particular company, and this company carries many of the licence requirements, particularly in the areas of harvesting, testing and transport. The coordination of poppy licences is handled by the PACB. The issue around leased land for poppies does not become an issue for the growers, who are effectively growing for the company which holds its own licence. Also, issues such as inspection of sites and checking of crop interference is a matter that the grower does not have to become solely, personally involved in as there is assistance with this from the PACB inspectors.

The fact is that the growing of poppies has far more licence requirements overall. Poppy growing has a three-tiered regulatory structure from the International Narcotic Control Board, through the commonwealth down to the state level. The flow chart of the conceptual framework for the regulatory activity in the narcotic industry is provided to the committee for its information. This is a complex framework but not something the individual grower needs to be actively involved in all aspects of.

The number of licences issues for *Cannabis sativa* is very small when compared to poppies and licences have dropped off markedly over recent years. For example, last year, of the five licences issued only four growers grew a crop. This is not because of any increased cost or obligations with licences as neither has changed, but this could be due to commercial or viability issues. Licences are issued annually as crops are not grown in the same area each year. A similar process occurs with poppies. If we look at the jurisdiction comparison and costs, all jurisdictions license the growing of *Cannabis sativa* for industrial hemp as all adopt the national scheduling through the Standard for the Uniform Scheduling of Medicines and Poisons. In other jurisdictions the particular act under which the licence is issued may not be a poisons act, but there is other legislation in an equivalent act that allows for licensing. For example, in Victoria it is through the Department of Primary Industries under part 4A of the Victorian Drugs, Poisons and Controlled Substances Act 1981. In Western Australia it is under their Industrial Hemp Act 2004. It does not matter which department controls the industry, national scheduling of *Cannabis sativa* remains.

If Western Australia and Victoria are taken as examples, the requirements for a licence are far more extensive and have significant costs when compared to Tasmania. For example, the application in Western Australia runs to five pages. The information required to be provided there by the grower is far more extensive than required in Tasmania. There are also further requirements with regard to the addition of other persons to a licence, as well as grower declarations relating to the seed and requests for analysis.

The process in WA comes under the Department of Agriculture and each step imposes significant costs on the growers. In Western Australia, an application for a licence costs \$310; for renewal, \$124; for an inspection, \$126 an hour plus hire car costs of \$100 a day plus travel costs; testing for THC, first sample, \$275 and subsequent, \$132. Compare that to Tasmania where the licence is nil cost, inspection and sampling is nil and testing, in the bills we have seen this year, is \$260. These are the only costs and I have copies of the West Australian licences for the committee's information.

Testing is only carried out once in the life of the crop just prior to harvest. This is facilitated for the growers currently by PACB inspectors, who sample the plant and send it to WA. This is currently at no cost to the grower.

The lack of facilities here to test is not a result of government direction, but possibly economic factors. For a facility to undertake the analysis is more than just testing the THC present but requires full quality standards to be undertaken to determine purity, that is, the THC percentage.

A facility would need NATA accreditation to undertake the testing for THC, and we understand no facilities are accredited in Tasmania for this testing. Of course there are facilities accredited for other forensic testing. To set up a facility to test for THC purity, not just its presence, would be expensive and may not be viable on an economy-of-scale basis. Of course if facilities were prepared to do this, the crops could be tested here.

We understand from the paperwork we have seen the cost of the tests done in Perth for Tasmanian growers is currently \$260, not the large figures quoted in *Hansard*. Any facility here undertaking testing would be charging a similar cost. Given there is no licence cost, this is the only cost required by licence requirements. As I have said before, West Australian growers also have to pay a collection cost, as do Victorian growers, as well as a testing fee.

The 0.35 per cent THC content is middle-range when compared to other jurisdictions. Some are lower at 0.1 and others are higher at 0.5. There is a historical basis for this 0.35. Tasmania was the first jurisdiction to license *Cannabis sativa* growing for industrial hemp. At that time the legislation in other jurisdictions did not have the means to allow for the growing of a prohibited substance and Tasmania was able to issue those initial licences as a way had already been facilitated through the licensing of *Papaver somniferum* for the poppy industry. This occurred in 1991 and the European standard for such crops was 0.3 per cent. The 0.35 per cent was set as it gave a slightly higher margin of safety given there was no way at that time to know what level of THC to expect in these crops.

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Over time other jurisdictions have been able to allow for the growing of crops when new acts have been proclaimed or old acts revised. Some jurisdictions adopted the Tasmanian level, others a lower level and others a slightly higher level. No crop to date has needed to be destroyed due to testing above 0.35 per cent and there has been no request received to increase that level.

It is important to note that there needs to be a level set for industrial and commercial crops in order to have the dividing line between illicit and licit crops. This is confirmed by similar regimes around the world, with the European standard still at 0.3 per cent.

The UN convention: the growing of *Cannabis sativa* is licensed to allow it to be used commercially. This in in line with the UN convention which states that the plant is a prohibited substance unless it is of low-THC content and able to be used in certain commercial enterprises. The licensing enables the convention to be respected. A single line of the convention cannot be read in isolation but must be read in conjunction with the obligations of the previous section which states that 'signatories must adopt measures as may be necessary to prevent the misuse of and the illicit traffic in the leaves of the cannabis plant'.

*Cannabis sativa:* This plant species has always been on schedule 9 and a licence has always been needed to grow any form of *Cannabis sativa*. *Cannabis sativa* is often known by a number of names including Indian hemp, industrial hemp or marijuana. However, it is the same species and the scheduling relates to the species *Cannabis sativa*.

Until the plant is grown there is no accurate way of determining the THC content of the *Cannabis sativa* plant. However, once tested, the low-THC products from the plant such as fibre, stalk and leaves are no longer scheduled. The seed remains scheduled as new plants can be grown from this and there is a level of THC contained in the dust on the seed. Having the seed on schedule 8 allows licenses to be issued for wholesaler dealing and manufacturing purposes.

If the seed is processed for oil, the resulting product is no longer scheduled if the THC is below that listed in the Commonwealth Scheduling Standard. If the seed from a low-THC crop is used in the manufacturing process to produce food, the resulting product is not scheduled. Currently it cannot be used in food in Australia. This is a matter for the Commonwealth through FSANZ. The marketing and development of commercial products is not a matter for licensing. Once the stem and leaves are harvested from low-THC crops there are no regulatory requirements and the market can determine how much is used where and for what.

The issue of *Cannabis sativa* in food is not a matter related to scheduling but to approval by FSANZ. Scheduling and licenses will not prevent this if approval is given by FSANZ. If FSANZ supports its use in food, a position for which the Tasmanian Government has indicated its support, little change will be needed to our poisons legislation as we now adopt the Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) into our legislation by reference.

If a change occurred we would most likely see the reference in the SUSMP for tetrahydrocannabinoids as found in the products created from hemp seed to be amended to allow for internal use and human consumption. It is important to note that licenses to

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grow the *Cannabis sativa* plant will still be required. Approval for low-THC *Cannabis sativa* in food does not change the listing of *Cannabis sativa* in schedule 9 as a prohibited plant, it just creates an exemption for low-THC end products.

FSANZ in its 7 December 2011 report on the application for low-THC hemp in food reinforced the need for the existing controls on the cultivation of hemp in order to provide sufficient control on the THC levels if an agreement to allow its use in food was forthcoming. Already oil obtained from pressed seed which is used externally is not subject to any license restrictions provided that the THC content is below that set in the national standard.

Tasmania Police requirements of hemp growing areas as with poppies are a matter for police risk-analysis. Illicit *Cannabis sativa* is the most commonly misused substance in this state. It should be noted that the poppy growing industry has an infrastructure in place to quickly deal with possible incidents and incursions into poppy fields.

**Mr ARNOLD** - Thank you for the opportunity to provide a statement to the standing committee on behalf of the Department of Police and Emergency Management. This statement aims to clarify the involvement of Tasmania Police in the regulation of the growing of low-THC *Cannabis sativa* for the purposes of industrial hemp. The standing committee is advised that Tasmania Police has not stated that it is unsupportive of the industrial hemp industry, either for the production of fibre or potentially food. Tasmania Police supports the current regulatory system for growing low-THC *Cannabis sativa* in Tasmania, noting that the industry is small. Tasmania Police has stated that if the industry grows, a regulatory framework such as that employed by the Tasmanian poppy industry may be required.

In regard to applications for a licence to grow low-THC *Cannabis sativa* for industrial hemp in Tasmania, the role of Tasmania Police is to process national and state police-checks for applicants, as well as assessing the suitability of proposed growing sites. Tasmania Police also maintains a role in the investigation and prosecution of thefts of *Cannabis sativa* plants from industrial hemp crops.

Assessment of growing sites is undertaken on a case-by-case basis with consideration of the security of the site, including location, storage facilities and public visibility. As *Cannabis sativa* remains the most commonly-used illicit drug, an approach has been taken to minimise the drawing of public attention to the crop in order to protect against thefts of plants. In some situations applicants have been advised to plant screening crops. If all required information is provided by the applicant then police-checks and site-checks are progressed in a timely manner. In the case of reapplications, in some situations where Tasmania Police has previously assessed a site and not become aware of any concerns over the growing season, a decision has been made to endorse the site on that basis.

The Tasmania Police submission to Foods Standards Australia New Zealand in relation to application A1039, Low-THC Hemp As Food, raised concerns about the lack of experimental data concerning the consumption of low-THC food products and the potential for a person to test positive for an illicit substance when subjected to an oral fluid test. This concern has been raised by a number of police jurisdictions including New South Wales, Queensland, Western Australian and South Australia. FSANZ is

currently undertaking further consultation in police jurisdictions in relation to the application.

Tasmania Police does not have concerns there will be growing of high-THC *Cannabis sativa* in among low-THC varieties or that issues will be raised through apprehension of persons in possession of low-THC plants or products. The current regulatory system supports testing of crops prior to harvest and also ensures that a person can only be in possession of low-THC *Cannabis sativa* plants, seeds or other products if they have a licence to do so.

Finally, in evidence supplied to the standing committee in Launceston on Tuesday 24 July 2012, Mr Lowndes cited an article from the *Examiner* in which a police officer allegedly expressed concerns about the industrial hemp industry. It would appear that Mr Lowndes misquoted an article that appeared on 16 February 2012, in which Ms Jan Davis from the Tasmanian Farmers and Graziers Association made comments in relation to police views. They were not attributed and cannot be considered anything other than hearsay. The views expressed and recorded in *Hansard* do not represent the position of the Department of Police and Emergency Management or Tasmania Police.

I have a copy of my statement and I think we also have a copy of that particular *Examiner* article, if that would be of help.

CHAIR - Thank you.

**Ms HISLOP** - Thank you for the opportunity to appear here today. As the representative of the Department of Primary Industries, Parks, Water and Environment, my focus is on the agronomic conditions and on-farm infrastructure required for the development of a hemp industry here in Tasmania. Questions regarding hemp industry supply chains and economic opportunities, the legislative and regulatory framework and the role of Tasmania Police within this framework should be directed to my colleagues from other relevant agencies.

The Tasmanian government fully supports the advancement of agricultural industries in our state, including industrial hemp. It has been identified as a potential crop in the Tasmanian government's Wealth from Water program and an enterprise profile and gross margin analysis is available on the Department of Primary Industries, Parks, Water and Environment website. The legislative and regulatory requirements for hemp production, wholesaling and manufacturing are also available on the DPIPWE website. Macquarie Franklin, the consultancy that prepared the gross margin analysis, obtained a range of hemp seed yield data from Tasmanian crops. While the highest was around 2 tonnes per hectare, most crops reliably produced 1 tonne per hectare of clean dried seed. Current prices are in the order of \$2.50 per kilo at the farm gate.

I now take the opportunity to table updated versions of the gross margin analysis provided in the whole-of-government submission to the committee earlier this year. The average water per hectare cost has now been incorporated into the hemp industry gross margin analysis available on the Wealth from Water website and the margin has been amended accordingly. So it now has that water figure in there.

I am also tabling additional gross margin analyses outlining, one, a likely return based on hemp seed production of 1 tonne per hectare at \$2.50 per kilo, which gives the grower a gross margin of around of \$290 per hectare and, two, a very optimistic return based on hemp seed production of 1.5 tonnes per hectare at \$3 per kilo that gives the grower a gross margin of \$2290 per hectare.

The Macquarie Franklin indicative hemp seed analysis calculates the gross margin for growers based on \$3.50 per kilo of clean dried seed at 1 tonne per hectare. At around \$1300 per hectare, hemp seed production would be competitive with a range of crops including cereals, pasture seed and lucerne. Improvements in crop management that resulted in average yields of 2 tonnes per hectare would significantly increase the competitiveness of hemp seed crops.

It should be noted that the hemp seed industry is at a semi-commercial stage and the margins vary according to seasonal fluctuations, external impacts, individual crop management practices and market dynamics. We have, however, also added supplementary gross margins to the tables I tabled earlier should the grower wish to value-add to the seed crop by turning the post-harvest stubble into garden mulch.

The hemp enterprise profile prepared by Macquarie Franklin concluded that a viable Tasmanian hemp industry would most likely need to focus on the potential high-value human consumption segment in the market. The economies of scale achievable in our state are likely to be too low to support a hemp industry focussed on low-value products such as fibre or oil for cosmetics. Without access to a domestic human consumption market the Tasmanian industry is unlikely to realise any significant commercial expansion.

Finally, unlike the poppy industry which developed in Tasmania as a result of post-war global shortage of opiates, the hemp sector is instead driven by producers looking for a market. For the sector to reach a viable commercial scale there would need to be considerable investment in the development of market and distribution channels.

DPIPWE supports the removal of the ban on the sale of hemp products for human consumption here in Australia and, together with all other relevant agencies, looks forward to working with stakeholders to identify the opportunities and challenges to hemp industry growth in the state.

#### CHAIR - Thank you. Kate.

**Ms DICKINSON** - The Department of Economic Development has had limited exposure to the issue of industrial hemp. Our contribution to this submission is largely based on that hemp enterprise profile work that was recently commissioned by the Wealth from Water program and some fairly limited desktop research.

The work prepared by Macquarie Franklin indicates that the state has some comparative advantage in terms of production of hemp seed. The work also shows that the gross margin return is similar to cereal crops such as barley and wheat and is achievable, but of course this return is dependent on variable costs. Farmers will assess their options in relation to the comparative returns against other agricultural enterprises.

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The opportunity to produce quality seed for oil and food products in Tasmania appears to offer the highest potential return for growers, but based on the desktop research the market opportunities for seed and oil in food products appear to be at the niche end of the spectrum. Whilst this may be promising or more promising for seed, the potential of a bast fibre industry appears less clear with some evidence suggesting that attaining sufficient scale to support commercially viable industry in Tasmania would be challenging. Industry analysts suggest that an Australian fibre industry would most likely need to be broad-acre, highly mechanised and capital-intensive to achieve viable gross margins.

Globally, hemp is grown in more than 30 countries with the fibre market dominated by China, which produces 63 per cent of the world production, North Korea, Russia and Chile and a number of countries within the European Union. These countries are generally in close proximity to their markets, have lower labour and resource costs such as China, or high levels of subsidisation such as those in the EU.

Hemp fibre as an input into manufacturing competes with a range of bast fibre alternatives that are derived from crops such as flax, jute and sisal. Some of these have well-established production areas in low-cost regions such as Asia, Africa and South America. This limits the global prices of the natural fibres.

Whilst there is growing demand globally for natural fibres and health food products, it is difficult to quantify the value of these markets. That is not to say that given the versatility, strength and environmental benefits of the products that hemp produces, that might not provide a market opportunity in the future. Any success in the fibre market will depend upon greater investment in production and processing technologies that could ensure that products are cost-competitive with alternative sources.

Regarding seed, should the application to the Food Standards Australia and New Zealand permitting the use of hemp seed and oil in food be successful, this would offer a higher value opportunity for local producers.

- **Ms PETRUSMA** As you've seen from reading the *Hansard*, everyone has been saying that it usually costs \$600 to have a test. Do you know where that misinformation has come from?
- **Ms DICKINSON** No, I don't. I've got an invoice that was sent to a grower that's where I got my \$260 from for this year.
- Ms PETRUSMA Right.
- Ms DICKINSON So, I don't know if it is something of an urban myth.
- Ms PETRUSMA It has come up quite a few times. So it's definitely \$260 -
- Ms DICKINSON That was what was on the invoice that was sent to a grower.
- **Ms PETRUSMA** John, in regards to fence lines, a lot of people and even the TFGA have commented about fence lines about it having to be so far away, why is there a difference

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between poppies and hemp crops? Is it more the plants or is it to keep it away from the public view?

- **Mr ARNOLD** In reality there isn't a difference. We will inspect a site, we will make a comment on fencing requirements and we will pass on that information to the Department of Health. It is a newer industry and certainly when the poppy industry commenced there were slightly different inspection details with the poppy crops. I think for any developing industry they are things that we probably need to take into consideration at the commencement but long-term I don't see any significant difference between the way we regulate poppies and the way we regulate hemp.
- **Mr ROCKLIFF** Just on that, we had some evidence from a few people around some of those differences, so-called regulations. One of them was the distance from public buildings. Is that a key difference between poppies and hemp?
- Mr ARNOLD Was that specifically relating to a school?
- Mr ROCKLIFF Yes, I think one of them -
- **Mr ARNOLD** Five kilometres from a school was mentioned and that was included in some of the paperwork that was available. That has since been reviewed and it's been removed. It was never our intention. It wasn't put in there on our behalf.
- **Mr ROCKLIFF** So, basically, from what I have gathered today from the last part of the evidence, particularly from Mary and you, was that essentially there is no real difference, in terms of the regulatory environment, between poppies and industrial hemp. Is that including a couple of examples we made?
- Ms SHARPE I think poppies are probably more regulated but the big factor is because -
- Mr ROCKLIFF At the farm level -
- **Ms SHARPE** Yes, at the farm level, the farmer has to handle everything. Because of the nature of the industry, everything falls to the farmer whereas with the poppies a lot of the hack work is taken out of the farmers' hands and is controlled by the poppy board or the company, even down to the harvesting. You will notice that poppy licences are made to a particular company, so the regulatory structure is dissipated across a number of people, so everything doesn't fall to one person. Because the industry is small, there are not those same bodies that are coordinating for the growers.
- **Mr ARNOLD** I think that's the same from our perspective as well. The hemp industry is very small. We are assisted by the PACB field inspectors who currently do some work in relation to hemp as well, so I don't see there's any significant difference.
- Ms PETRUSMA With the levels of THC, the TFGA says some states allow up to 1 per cent THC in a crop -

Ms SHARPE - 0.1.

Ms PETRUSMA - So between 0.5 to 0.1 is -

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- Ms SHARPE And the European standard is 0.3.
- **Mr ROCKLIFF** I thank everyone for their comprehensive opening statements; they were excellent, particularly cross-referencing of some of the evidence we have taken. It is very helpful for us and we appreciate that.

John, in some of the evidence - and it may get mixed up in some of the areas that the TFGA has commented on - there is a general perception of the negative view of police of expansion of the industry. It has been put to me that the main concern is around the mixing of industrial hemp leaf and the high-THC proper marijuana and the selling of the industrial hemp leaf as a quality marijuana product and the concerns that might have in terms of violence and drug-war-type scenarios. I think we took some evidence that the mixing of the products, in the view of police, would cause greater unrest amongst some of the players involved in that illicit market. Is that something you have heard about or agree with?

- **Mr ARNOLD** I don't agree. In any illicit drug market there will be disputes about the quality of the product at various times, and that exists now with a variety of drugs. It also happens now with illicit cannabis, so I don't think that will be the case. We haven't experienced any great drug wars or major disputes.
- **Ms SALTER** Even looking at thefts from low-THC *Cannabis sativa* crops, there have been very few. There was one on the north-west coast in March 2011 where a large amount of plants were estimated stolen over a period of weeks. There are very few reports of thefts from low-THC *Cannabis sativa* crops, which would support that there is not a strong market for taking low-THC varies and mixing them with high ones. If anything, if you were trying to sell that in an illicit market you're going to have a significantly degraded product. We would be looking to shut down any illicit markets, whether they be of low-THC or high-THC varieties.
- **Mr ARNOLD** From my perspective, if we look at the poppy industry and the number of interferences we used to have in the mid-1990s where they were in the tens of thousands, last year we lost less than 1 000 caps, with 12 interferences. That has been not only about the regulation of the industry but also the public knowledge of the crop itself and the value of it on an illicit market.
- Mr ROCKLIFF And the variety between morphine and thebaine.
- **Mr ARNOLD** Absolutely. In this industry we are starting at a base of being a low percentage drug in the first instance, so I think that initial value to the illicit market is nil.
- **Mr ROCKLIFF** Have there been any instances of people trying to grow the high-THC product in a crop of low-THC?

#### Mr ARNOLD - No.

**Ms SALTER** - I guess the fact that you have to be licensed means you are potentially under greater scrutiny, so you have to be accountable. There is testing of the crop prior to harvest.

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- **Mr ROCKLIFF** There are only four or five growers, but if it was to expand would you see a greater role for, say, the PACB or police? I know at the moment you're also involved with the poppy industry in terms of monitoring - all stakeholders are.
- **Mr ARNOLD** I think if it grew to the size of the poppy industry we would need a similar regulatory arrangement that we have for poppies. There were five licences last year and I think we've had one application that I know of and another inquiry this year. It is early, admittedly, but that's not a significant drain on our resources.
- **Mr ROCKLIFF** Could we nail it down to the fact, excluding hemp in foodstuffs, that the police are not against the expansion of an industrial crop in terms of seeds or the bulk of crop but you have some concerns around the food aspect of it?
- **Mr ARNOLD** We are not unsupportive of the industry in any form, including food, but that would need to be considered at a commonwealth level, and it may well impact on it.
- Mr ROCKLIFF And that would be around technology of deciphering -
- **Ms SALTER** As you are aware, we provided a submission to the application for food. We recognised in that submission that what we were raising sat slightly outside the scope of FSANZ, in that they were looking to determine the safety of low-THC products for food. This has been raised on a number of occasions about the potential for someone to consume a low-THC product, have some of the THC dust on the product and then been potentially able to test positive when an oral fluid test is applied. Our concern there is that potential for testing positive to something that somebody may claim to have ingested legally in that it was a low-THC food product that they ingested. FSANZ admitted in its assessment of the application that there is limited experimental data in relation to testing of low-THC food products and testing positive in oral fluid tests. All states are a little bit different, but in this state if somebody tests positive to an oral fluid test they would then be subjected to a blood test to confirm or otherwise. We would then assume that if it truly was ingested at very low levels of THC - the blood tests are slightly less sensitive than urine tests - we would assume that if a person had consumed what would be a recommended maximum daily dose of the low-THC product then it would come back as negative.
- Ms PETRUSMA How sensitive are the saliva tests? What sort of level can they pick up?
- Ms SALTER Apparently they are very sensitive.
- Ms PETRUSMA So even a 0.01 per cent or something like that?
- **Ms SALTER** FSANZ did some investigation of the test and said that if there was a maximum proposed level of THC for hemp seed oil at 10 milligrams per kilogram, given that the saliva swabs generally are testing positive at 5 nanograms per millilitre, they felt you could consume 0.005 mls of oil at 10 milligrams per kilogram of THC and that would trigger a positive result. Most of the research we could find related to the ingestion of oil rather than seed product, and obviously that makes some differences in terms of what residue is left in the mouth.

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Ms PETRUSMA - So is it higher in seed product or the oil?

- **Ms SALTER** It is that potential that if there is more of the THC on the product then you will retain that in your mouth and -
- **Mr ARNOLD** Once again, we are not trying to be obstructive. We are pointing out that if you test positive to a fluid test then that involves us taking you into custody for a blood test and it may all be for no particular reason because of the level. We think that needs to be addressed at some point.
- **Ms SALTER** We are searching for some clarity around this in terms of the testing. FSANZ is working with a number of police jurisdictions at this moment because a number have raised concerns through submission to FSANZ. Some of those have been raised individually by the policing jurisdictions and some of them have been raised as whole-of-government submissions. But FSANZ is certainly working with all police jurisdictions at the moment to try to get greater clarity around this issue.
- **Ms PETRUSMA** In some states they have different saliva testing kits. Is their tolerance a bit different, a bit less or more?
- **Ms SALTER** I am not entirely sure but I am aware that in some jurisdictions they use purely the saliva test. So you would be tested with an oral swab and then they could use a different mechanism of testing saliva and indicating what illicit substance you may have ingested. We don't use that.
- **Ms SHARPE** It became very clear through FSANZ's report that they felt protected by the fact that the growing was licensed and all over the world that is the same message that comes through. The licensing ensures that what ends up in the food chain, or wherever, comes from a licensed crop.
- **CHAIR** We have had a fair bit of evidence from industry people saying the same thing, that largely it is the identification of the grower and the supplier that protects the integrity of the produce.

How long does it take to process from, say, application to approval? You fill out the application and go through the process as you have explained -

- Mr ROCKLIFF If a farmer wanted to plant it this season, say in October, could it be done?
- **CHAIR** Yes. We heard people say it is really hard for them to plan because they wonder whether they are able to proceed -
- **Ms SHARPE** If they put an application in which has everything with it, it can be processed in a couple of days.
- CHAIR So there may be things missing -
- **Ms SHARPE** Maybe not the police clearance or they haven't got their grid reference. If you put in an application to get anything, if you left half of the information off the form, it

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comes back to you to fill it in. A lot of the delay is often because everything is not filled in.

- **Mr ROCKLIFF** For the poppy industry it is done by the company and the farmer would have to do it themselves. I am not sure what limited resources the department would have to work -
- **Ms SHARPE** If we get every bit of paperwork they have their police clearance, the site ticked off by the police, they have their grid reference then it is just a matter of issuing the licence and that is quite a simple process.
- **Mr GALLOWAY** Currently I am dealing with a licence that was cleared by police about a fortnight ago and we have the documentation saying the police are okay with it, but there is no specification of seed variety on the application. Yesterday I was dealing with the company saying, 'We need a specification around the seed' in that we can't have them growing any seed. There are often those issues to work through and that requires an effort from our side to sort out those issues.
- **Ms SHARPE** We will personally phone them and ask them for these things; we are not just sending snail mail backwards and forwards.
- **CHAIR** I know that you would but maybe because of what we have heard it is in some ways almost commercial, it is on the cusp of becoming an industry but it isn't quite there yet.
- **Ms SHARPE** I suppose it is the same with anything that you apply for a licence for. If you have every piece of your paperwork it will go through like a breeze but if you are missing vital documents, it can't be put through.
- **CHAIR** You talked about five applications was that last year or this year? There were five applications and five licences -
- Ms SHARPE And only four growers actually grew.
- **CHAIR** How does the communication work? You don't really deal with the growers as a group, they are basically on their own, aren't they?
- **Ms SHARPE** Our role is not economical or agricultural, our role is just to issue the licence. The only requirement we have after the licence is issued is for the THC content and we have facilitated through the graciousness of the poppy board for their inspectors to sample, and they will let us know what the THC content of the crop is once the analysis comes back. Apart from that, that is the only interface we need to have with the growers.
- CHAIR I think you made that clear at the start that you are really only dealing with schedule 9 -
- **Ms SHARPE** Yes, but once we have issued the licence, we know everything is right, we will inspect the seed storage at times if they supply it to a seed company.

CHAIR - With poppy applications, are they -

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Ms SHARPE- Very similar.

- CHAIR But they seem to be more streamlined because the industry is more evolved.
- **Ms SHARPE** The poppy licences come to us to be signed, exactly the same, but all the paperwork, all those other little bits that need to be put together, are put together either by the company or the poppy board, and once the licences come to us to be signed, we know that all the bits and pieces have been put together and there is nothing outstanding.
- **CHAIR** Have you refused any applications? You are saying that without the information you can't proceed, but with all the information have you ever refused any?

### Ms SHARPE - No.

- **Mr ROCKLIFF** Mary, you mentioned in your opening statement and some evidence we have had suggests that it should be taken out of the bailiwick of the health department and put into primary industries, economic development or somewhere, as it might be in Western Australia or New South Wales your view was that it doesn't matter what department it is but all these things still have to be ticked off. Are you happy with that being the main department here in control of it?
- **Ms SHARPE** If you want to grow hemp you are going to have to licence it. Currently we issue the licences under the Poisons Act and that is how the legislation is set up in Tasmania.
- Ms PETRUSMA Other states have it under agriculture?
- Mr ROCKLIFF They have a separate act.
- **Ms SHARPE** Some have a separate act. Each jurisdiction has different types of poisons acts. For example, our Poisons Act was altered when poppies first came on the scene to allow for the growing of a prohibited crop. At the moment, if you wanted to grow poppies in Victoria, you couldn't because their Poisons Act doesn't allow for it and it would have to be amended. That is why hemp was first grown here, apparently, in 1990 or whenever it was the first crops were grown. Since then other jurisdictions have allowed for the growing but they have either amended their drugs and poisons act or set up a separate act to license. But no matter what, at the commonwealth level it is still a prohibited plant schedule 9. Whatever a jurisdiction does with it, it is going to have to license it in some way, whether it be under a hemp act, a poisons act, a misuse of drugs act, or whatever.
- **Ms PETRUSMA** Are you saying it would probably be cheaper to stay under the Poisons Act like in other states?
- **Ms SHARPE** I can't comment on that. It shouldn't make any difference. It might make them more expensive, we don't charge for the licences, I don't know.
- Ms PETRUSMA One of the people that approved the submission said that we may be in breach of UN guidelines and that the Poisons Act might be invalid and that apparently

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FSANZ has this note from the UN and everything else. Are you aware of any breaching of the -

- **Ms SHARPE** No, as I said in the preamble, you have to look at the whole UN convention. The UN is basically saying you have to limit the prohibited marijuana end but if it is for a commercial crop you have to enable that, and to enable that, you have to licence it, so we are in accordance with the convention in licensing - licensing is enabling. I suppose, to use an analogy, it's a bit like saying, well, nobody can just walk in your door in Parliament House; you have to have a pass to get through that door. What they're saying is that it's a prohibited crop unless you've got a pass to get through the door and grow it. So, by licensing it, we are allowing people to do their legitimate commercial activities with it. If we didn't licence it, nobody could do those activities. So, we are actually complying with the convention.
- **Mr ROCKLIFF** You mentioned before, in your opening statement, and I think it was covered by some of the farmers that presented to us, the 24 conditions on the licence and for poppies it is 12 or something. I know you said that when you break it all down it is all very similar, et cetera. Can there be some thought of making it simpler, rewriting it -
- **Ms SHARPE** We can rewrite it the licence is the legislative instrument. Those conditions are written in a way that makes them easier to read. We can easily put all those conditions into 12 points. I see them more as points as opposed to conditions because I've got copies of the licence in there one might say exactly who is growing it and the next point might say something about the seed or something about the address or it has to be fenced, and something about the harvesting. Some of those things are actually not on the poppy licences because poppy growers don't have to do it because it's done by the company. Therefore, immediately, the number of conditions on the poppy licence that the grower sees whereas the manufacturer's licence extends to about five pages. So, you have to think about that but, yes, if people are finding them difficult to read, we can easily write them in a different way.
- **Mr ROCKLIFF** Yes but there is a distinct difference because it's a fledgling industry; poppies have this massive infrastructure, farmers just go to the field officer and say, yes, I want to grow them on these three or four paddocks; it goes away, gets approved, comes back signed and it's all done. Simple.
- Ms SHARPE Yes, it's all taken out of their hands.
- **Mr ROCKLIFF** Yes, no stress to the farmer apart from growing it, basically. So, I guess the absence of the major company or infrastructure for the industrial hemp industry is a major obstacle, you're saying, in terms of exacerbating the problems in terms of what the farmer has to do at that farm gate level, I guess.
- Ms SHARPE I think it adds to the perception that it's more regulated when it's not.
- **CHAIR** It's more like a cottage industry at the moment, isn't it; that's part of the problem. If there was one large company such as GlaxoSmithKline, that would make it a lot simpler for the applications.

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I was going to move on to some policing things. You might set me straight on a couple of things here, John. Do you have signage around the paddocks like you do for poppies? Do you have some sort of signage on the fences?

Mr ARNOLD - No.

- CHAIR Why wouldn't you do that, I wonder? Why haven't they?
- **Ms SALTER** Generally, the approach has been about the fact that *Cannabis sativa* is one of the most commonly used illicit drugs in this state, as in Australia. Not drawing attention to the crop actually has greater ability to divert people away from the crop and not seek to take plants from the crop. So it decreases the level of potential thefts for those growers.
- **CHAIR** I find this strange. I see this really differently in that there should be no psychoactive effect from the commercial hemp; there's a chance that there could be but, really, there shouldn't be. Screening and hiding it I find a bit odd in some ways because if you put a sign up and make it very clear that all you're going to get is a headache and make yourself very sick then people would soon cotton on to not even go there. I wondered what your thoughts might be on that.

You said you might license a paddock one year or then you might decide, because there has been interference in the paddock - you know you can't grow here now, it needs to be further off the road, or something. Does that happen?

**Mr ARNOLD** - Certainly we would identify that there has been interference if there has been and because a license is only granted for 12 months, as I understand, in the next license application that may well be a consideration for when it's issued. We don't impose that from a policing perspective.

Also from the signage, we could adopt that view as well. My position is that we've had very little interference in the past so what we're doing seems to be okay.

- **CHAIR** Yes, and I have picked up that you're not obstructionist. The main issue that you have, really, is about the testing as opposed to these other matters.
- **Mr ARNOLD** The potential implications for the food and the OFTs; that is our primary issue and I think that could be addressed.
- **CHAIR** Yes. In terms of sites with the applications, does it take long? Someone has to say, 'I'd like to put it on this block', and then do you go out and look at the block or can you work it off -
- **Mr ARNOLD** We do a site inspection. I have only had one inquiry during my time and that was in anticipation of applying for a licence, so we advise that once you have finished your paperwork there and you submit it, send us a copy and we can do the site inspection based on that. We have developed a standardised inspection form that we store locally so that we're not treating people differently in different areas. So even if it's the north-west coast it will be coordinated through my office but we know that that inspection will form the same details as ours. The inspection forms are very simple. It is

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mainly just a box tick for yes/no, with an opportunity to put some comments by the inspection officer.

- **CHAIR** So it probably wouldn't take that long from the time someone might apply for someone to have a look and so forth.
- **Mr ARNOLD** Certainly as long as the licence application is filled out. The main thing is checking the grid coordinates that are provided so we can sign off on those. It's not a complicated inspection. We've standardised our inspection forms because we could see, potentially, this is a growing industry and we want to make sure we have our records in check. But apart from that it's not an arduous task for us.
- **Ms SHARPE** It might be good for the committee to look at the forms that I have provided from Western Australia or you can go on the internet to look at the requests that some of the other jurisdictions require. Some of them are quite intensive. They want to know a person's current financial status, whether they've been bankrupt a whole range of quite pertinent information. Some of the application forms from the other jurisdictions extend to about five pages. So in comparison the information we require is quite small.
- **Mr ROCKLIFF** It seems to me that one of the main inhibitors of growing the industry is perhaps perceived regulation. There might be some issues around how we can streamline the processes for farmers, but also the market and potential markets. Have you noticed any difference in the last five or six years of improved yields or gross margins with the stuff that comes across your desk in the department?
- **Ms HISLOP** There has been so little grown that I have not seen any previous figures. I have some figures from the last couple of years, not with me, and no, I have not seen anything that demonstrates that. Macquarie Franklin identified that some yields have been up to two tonnes per hectare but I do not know where that is. I have not found out yet but I can take that on notice. To make it a viable gross margin there would need to be investment in research to improve productivity per hectare and establish a market at a higher per kilo rate for seed than is the case at the moment.

I have spoken to some growers groups that have been canvassed around the state, proponents looking to get growers growing, and they have said that they are not interested because of the current economies of scale. They do not see the gross margin at the moment as worth the investment.

**Mr ROCKLIFF** - Some of the evidence that we have heard has been less than complimentary of the Department of Primary Industries, in particular, in encouraging it - whether right or wrong. Some of the farmers have a perceived view that the department has a negative view on the future of the industry than the growers perhaps have and that there could be a lot more done by the department in assisting farmers to coordinate some of these more difficult bureaucratic aspects of growing the crop. Do you see a role for the department or any areas of the department in the next few years - this could be a question for the Department of Economic Development as well - to try to assist farmers and show an interest at the very least? They could go out to a field day, which I know you have been to, and from that point say that this is a potential industry; we are not sure where it is going to go but we are here to help you and assist you if you want to go through the processes of trying to make this a goer and so we can all improve the

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economies of scale by getting more growers together and some sort of processing facility that might see some value in investment in Tasmania. Is there any way that the department or the Department of Economic Development could play a role there?

- **Ms HISLOP** Simply in terms of identifying possible gaps where we might be able to meet a market gap, from DPIPWE I do not think it has been a negative view at all. I think we have taken a fairly realistic view of it at the moment. We did extensive research into market mechanisms in Canada and China and the European Union and it just stands to reason that it is much cheaper, as was mentioned earlier, to grow in Canada because their biggest market is the US. Even in the US there are now more and more states growing industrial hemp. They just export straight across the border.
- Mr ROCKLIFF Into a big market.
- Ms HISLOP Into a very big market. Especially for body building or weight gain products for poorer communities, it has enormous value in terms of a food product with nutritional value. If everything was streamlined in Tasmania we still need to find somewhere to sell the product. This is the very big difference from poppies. As I said in my opening statement, the processing companies were desperate to find new locations suitable for growing poppies to meet market demand because the supply of opiates plummeted by the time World War II had finished. That was markets looking for growers whereas the strong impression we get is that this is more about growers looking for a market. It is not for lack of trying to get information about why this industry is seen as viable, where people are seeing the gaps, but we just cannot seem to find it at the moment. Certainly if is it agreed that it can be for human consumption in Australia then that will change. But it is very expensive to package oil and the powder product because it turns rancid very easily through exposure to light or heat. It is never going to be a cheap product, no matter how it's marketed, in comparison to canola oils or olive oils. There needs to be a huge education campaign about the benefits of it and why it's worth investing in buying hemp foods. I would imagine it is going to be slow, no matter what happens.
- **Ms PETRUSMA** Do you see it as a niche product, like our olive oils? They can get a premium because it is Tasmanian grown and produced, so can you see that as a potential?
- Ms HISLOP Yes, I can.
- **Ms DICKINSON** It is a fairly small niche, or it appears to be. New Zealand grow seed entirely for oil production and they only grow between 50-100 hectares. The value of that industry currently is less than \$1 million, so even though there is room for expansion and there is growing interest in health food products, these are fairly small niche markets. For a market in Australia there would have to be a significant investment in market development in terms of building up clientele that would be prepared to purchase that product.

In Canada they previously produced a lot of fibre that now predominantly produce seed for the US market and their own market. They have invested hugely in R&D in improving the cost efficiencies and yields because in a global sense we are still, and continue to be, a high-cost producer compared to countries such as China, which also produces huge volumes of seed but does it comparatively cheaply because they have low

labour costs and low resource input costs. There are still significant challenges in developing the industry - beyond regulation.

- **CHAIR** I saw a 750 ml bottle of hemp oil for sale in Devonport, but it wasn't for human consumption obviously. I think it was \$15 and was a New Zealand oil. Obviously with regulation if it becomes usable as food then I could imagine there would be quite a large opportunity for, say, niche businesses that may become broadacre. I would think people would want Tasmanian products. We had some evidence about the quality and the temperate climate that is needed.
- **Ms DICKINSON** The seeds produce a very high oil content in Tasmania because of day length and night-time temperatures, so we have some comparative advantages there.
- **Ms HISLOP** I think \$15 is phenomenally cheap; 750 ml from the Queensland company that I think buys its seed from Tasmania is close to \$100. It might have been \$15 because it was about to expire or it had already gone rancid.
- Ms PETRUSMA What do they use the oil for at that price?
- Ms HISLOP It's very good for your skin topical application and massage oil.
- **Mr ROCKLIFF** If we have further questions can we write to you on the individual aspects of them because I think we will go through the opening statements again and it would be very helpful rather than call you all in again. We appreciate your coming.

#### Ms HISLOP - Yes.

CHAIR - Thank you very much.

### THE WITNESSES WITHDREW.