

# TRANSCRIPT

## LEGISLATIVE COUNCIL ECONOMY AND INFRASTRUCTURE COMMITTEE

### **Inquiry into the Industrial Hemp Industry in Victoria**

Melbourne – Thursday 7 September 2023

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Renee Heath

Sarah Mansfield

Rachel Payne

**WITNESS**

Mark Smith, OneLife Botanicals.

**The CHAIR:** I declare open the Legislative Council Economy and Infrastructure Committee's public hearing for the Inquiry into the Hemp Industry in Victoria. Please ensure that mobile phones have been switched to silence and that background noise is minimised.

I would like to begin this hearing by respectfully acknowledging the Aboriginal peoples, the traditional custodians of the various lands we are gathered on today, and pay my respects to their ancestors, elders and families. I particularly welcome any elders or community members who are here today to impart their knowledge of this issue to the committee, or who are watching the broadcast of these proceedings. I also welcome any other members of the public watching via the live broadcast.

Mr Smith, before we begin, I will just get committee members to introduce themselves to you, starting with Ms Payne.

**Rachel PAYNE:** Rachel Payne, South-Eastern Metropolitan Region.

**John BERGER:** John Berger, Southern Metropolitan.

**The CHAIR:** Georgie Purcell, Northern Victoria Region.

**Sarah MANSFIELD:** Sarah Mansfield, Western Victoria Region.

**Bev McARTHUR:** Bev McArthur, Western Victoria Region.

**The CHAIR:** And we do have Dr Heath, who is Eastern Victoria, she will be back soon.

**Mark SMITH:** Bless you all, before we start. Thank you.

**The CHAIR:** All evidence taken is protected by parliamentary privilege, as provided by the *Constitution Act 1975* and further subject to the provisions of the Legislative Council standing orders. Therefore the information you provide during this hearing is protected by law. You are protected against any action for what you say during this hearing, but if you go elsewhere and repeat the same things, those comments may not be protected by this privilege. Any deliberately false evidence or misleading of the committee may be considered a contempt of Parliament.

All evidence is being recorded. You will be provided with a proof version of the transcript following the hearing, and transcripts will ultimately be made public and posted on the committee's website.

For the Hansard record, can you please state your name and the organisation you are appearing on behalf of.

**Mark SMITH:** Mark Anthony Smith, OneLife Botanicals, OneLife Hemp and OneLife Labs.

**The CHAIR:** Beautiful. Thanks, Mr Smith. We now welcome your opening comments. We ask for a 10-minute maximum, but shorter is fine, and then we will go round and ask questions.

**Mark SMITH:** Okay. Well, thank you for the opportunity to talk about the world's greatest vegetable today. My name is Mark Anthony Smith, I am a cannabis patient, advocate and alleged criminal, currently impacted by discrimination by our government, police force, VicRoads and the entire health system. I won my licence back by creating a precedent in VicRoads by showing that I was safe to drive with THC in my system. My doctor's reports also stated this, but the police still want to prosecute me. Surely a decision can be made in government based on compassionate duty of care to your constituents. How can we create an industry and give no protection to people, such as patient amnesty and a homegrown allowance?

I am the firstborn of seven and a carer and protector of my siblings. One of my brothers is illegally alive today because of cannabis. After receiving news he had three weeks to live, a death sentence he fought very hard for, he used illegal cannabis to save his life. He is illegally alive five years now.

I am currently working with a group of high achievers at OneLife Botanicals, good people wanting to make a difference to people's outcomes, in particular for epileptic children. My views expressed are my own. My career in cannabis officially started in 2014 as the idea to replicate a system I saw in the States and Europe was born with my old business partner, Rangi Faulder. Over 12 months we scoured the internet and Australian regulation to find a way to grow CBD hemp, all under 1 per cent THC. We were later awarded the licence in 2015 by the New South Wales DPI. We invested and built a small business around this licence, only to have our ability to trade removed by the ODC in November 2016. This led me to leave Australia, and I found myself speaking with developing nations around cannabis hemp. I helped inspire and plant the first cannabis CBD hemp in Italy and created the cannabis light industry. Also with the same company, I planted the first 3000 CBD hemp plants in Greece.

I spoke in the Malaysian Parliament and advised Mahathir Mohamad and all of the chief ministers of Malaysia, getting a stay of execution for Lukman Mohamad and planting the seed for hemp crops in the fourth wave of industry with the Malaysian Agricultural and Research Development Institute and the mufti institutes. I was the first speaker to speak in the new Thai parliament and assisted in the development of special economic zones and learning centres in Thailand, working closely with the Bhumjaithai Party to make cannabis legal. I spoke with the two previous Peruvian governments to legalise cannabis and the regulators of Colombia. All of these nations are moving swifter and smarter than my own government.

All people need cannabis in their lives, and it will help us to reinstate empathy, integrity and humility as attributes a society needs. This is also documented by the secret government US agency Majestic 12 and in the benefits of cannabis hemp in our diets.

The last time I was at the Australian Parliament – I was in Canberra also fighting to uphold the rights of Australians – I met with the dishonourable John Skerritt, who was fighting to remove the special access scheme from sick people needing some hope of alternative, unapproved medicines. Grace Sands; Lanai Carter, whose son was the first patient in Australia; Rangi Faulder and I were challenging John and the TGA to uphold the special access scheme. After much fight we were able to uphold the scheme to become the terribly managed ODC and medical cannabis scheme we know today. Why is this relevant at a hemp inquiry, you may ask. Well, Victoria has the opportunity to right the wrongs of the federal government and install its own agency of control to both cannabis schemes, low-THC and high-THC. The federal government has impacted the hemp industry whilst blocking Australian companies from exporting and limiting the products that we can take from the hemp plant. It should be a whole-of-plant approach, not limiting us to only seed and fibre.

We have 80 per cent of the world's organic farmland, creating much demand for high-quality agricultural products. GACP CBD crops from hemp from broadacre sources around the world feed their domestic market and feed their medical and industrial markets by creating a platform for the industrial farmers to have some revenue to invest into the industrial purposes. Why do we import hemp biomass from all other jurisdictions for extraction by a manufacturer as a GMP product? Why can't we use domestically grown hemp? Greater than 70 per cent of the medical cannabis products in Australia come from Canada, over half of these being CBD from hemp derived from other countries.

We deprive sick people and children in Australia because the health authorities and the ODC think that their definitions are what control this industry, when actually it is the 1961 treaty and the 1967 *Narcotic Drugs Act* that has the manufacture, separation and production clearly listed. We already have the agency of Vic Agriculture controlling low-THC hemp, an agency capable of implementing its own state-based policy without the need for ODC, who have proven incapable of meeting industry needs with no statutory minimum time frames or the staff to navigate the burdensome regulations they have created for themselves and industry – a feedback loop of misery. An autonomous state industry would return profits to Victoria and Australia, not send them offshore to Canada or elsewhere. The economic benefits of the licensing structure for both industries, below 1 per cent THC and above 1 per cent THC, would allow the government to collect excise tax, payroll tax and a goods and services tax. This Act could simply be amended to include supply for medical and non-therapeutic purposes, creating a platform and revenue stream to then invest in further research and infrastructure to support the industrial manufacturing and infrastructure needed to change the entire paradigm of the toxic waste stream industry we know today – a return to wholesomeness we all need. Amend the Victorian hemp Act to the Victorian cannabis Act. Allow all parts of the plant for industry and include high-THC research and breeding for domestic supply, all simply managed by the agency already established, as is the

obligation under the old, old, old UN 1961 treaty, which we find ourselves obligated to. Hemp cannabis is the answer to replacing everything we rely on that is unhealthy. Bless you all. May this ripple through the halls.

**The CHAIR:** Thank you very much, Mr Smith, and thanks for sharing your story with us. We have about half an hour for questions, so I will start with Ms Payne, and we will go around again if there is time.

**Mark SMITH:** Sure.

**Rachel PAYNE:** Thank you, Mark, for your submission and your contribution today. I do appreciate when you talk about the limitations around whole-of-plant use. Can you provide the committee with what the current regulations around plant use are – and particularly you talk about those limitations – and how would whole-of-plant use advance the industry to the best of your knowledge?

**Mark SMITH:** Okay. Under the UN *Commodities at a Glance* document – I am not sure if you saw that in the submission.

**Rachel PAYNE:** Yes.

**Mark SMITH:** There is a picture there with all of the products that can be made from hemp cannabis. Currently we are limited to seed oil, seed or fibre. That is it. We cannot do any extractions, we cannot take any of the valuable lignins, pectins, bioflavonoids, anthocyanins or cannabinoids, and these cannabinoids would be a feedstock to actually create a medical industry that was strong as well, rather than supporting Canada. So if we were able to, in the legislation, use the whole of plant, extract it from the seeds, take the oil from the seeds, take the cannabinoids and take all of the other constituents of the plant, which all have a use – but we cannot use them. So that is why we do not have an export industry, because every other jurisdiction is already selling hemp or seed. We do not have an edge in our market in Australia. We are limited by the regulations in the state Act and then also the federal Act.

**Rachel PAYNE:** So what is currently happening now? If you have a plant that you are using, say, for the fibre, what happens to the rest of that plant currently?

**Mark SMITH:** It is composted, burnt, disposed of. It is thrown in the bin. So all of these farmers are losing revenue streams that could actually support the industry. Terpenes, for instance – I mean, a hemp-derived terpene starting at a litre can go for about US\$10,000. We can take a litre out of about 15 plants.

**Rachel PAYNE:** Wow. Some of the contributions that have been made today talked about a cooperative or industry coming together under one banner. Do you think that that would be something that would be viable in Victoria?

**Mark SMITH:** I think a central processing hub and a learning centre is something that needs to happen. We have got no actual skill set in Australia around hemp or cannabis. Yes, we have got cotton farmers and flax farmers, and with all of these farmers that skill set could translate, but there is no specific training around cannabis or hemp. So we could have a learning centre and a processing centre that would then further support all of the state, and if there was a central processing hub – if it is the government or whether it is industry that supports that – it would then create ma and pa businesses as well as corporate businesses. We could actually create an industry that would replace a lot of the toxic things that we are already doing.

You have just got rid of the logging industry. We can replace that very quickly and have more than 1000 jobs in Victoria very quickly, based on the yield returns from hemp being greater than trees. One acre of hemp replaces 4 acres of trees. I mean, we have got so much redundant farmland now as well that we could be phytoremediating with hemp, taking out any of the toxic aluminium, cadmium or anything like that that has been left around by the mining industry. We could clean that up and actually turn it into land that could be used, even as land for housing.

**Rachel PAYNE:** Thank you. And just a final question, if I may, because we have had different contributions today and there have been, I guess, not contradictory arguments but differences of opinion around the fact that hemp as a crop is – some people have stated that hemp is a difficult crop to grow and that it needs a lot of water, it does not like it too wet and it needs a lot of fertiliser. I would love your expertise on this. From your

experience, as someone who has cultivated hemp over a long period of time, what are your experiences with the crop?

**Mark SMITH:** Well, a hectare of cotton is about 19,000 litres of water. Hemp is about 300. So we are already reducing the amount of water that we need for the crop. Hemp is not a difficult plant to grow; it is just using the specific genetics for the environment. I mean, if you go to Afghanistan, Iraq, Iran or anywhere like that, you will see fields and fields and fields of it growing naturally. Go to Nepal. Go to India. They have built their livelihoods around these massive feral hemp crops.

**Rachel PAYNE:** Thank you.

**The CHAIR:** Thanks, Ms Payne. Mr Berger.

**John BERGER:** Thank you for your appearance and your presentation this afternoon. I have got a real interest in this processing hub and how it might operate and where it might be located. I do not want to draw that processing hub in terms of what the milk industry do, where they have a series of hubs, if you like, dotted around northern Victoria and in the west of Victoria and some in the east. We have heard today of a million acres being a number that would be used to plant this crop. How would that hub system work in terms of location and –

**Mark SMITH:** There is one actually being built by an entrepreneur that has invested some of his own money, but he has got to a point where he cannot finance it any further because he is not selling it because he is limited in the amount of products that he can make because of the legislation. That is in Pakenham currently, and that could actually be licensed all around Australia to develop the industry correctly. The government has put money into cotton, they have put money into the opium farmers and they have subsidised the scopolamine farmers – why can't the hemp industry be subsidised?

**John BERGER:** I do not pretend for a minute to understand how you harvest this stuff. How is it harvested?

**Mark SMITH:** With combines.

**John BERGER:** So, like a normal wheat.

**Mark SMITH:** Essentially, yes. There is a different set of teeth on them, so they can cut it and wrap it and so the fibre does not wrap around the wheel that is turning, but similar, very similar. They can be retrofitted, some of these machines.

**John BERGER:** So then it is wrapped, and then it can sit for how long?

**Mark SMITH:** Depending on the property that you are using it for – for instance, the gentleman in Pakenham, he likes to have the lignin in it. Lignin is a binding agent that actually creates very solid products – solid products that will also sequester CO<sub>2</sub> over their lifetime. That is not an easy answer. Anywhere else in the world it would depend on what those processes are that they need it for, the amount of time that it sits in the field. Some people like to field ret, which means it breaks down the lignin and pectin so that the fibre is easily pulled off the stem so it can be used in industry, but some of the more innovative products use the whole of the plant. They will use the whole of the plant to create tables like this, soundproofing for roads, composite materials or bulletproof jackets. I mean, it is endless what this plant can be used for. We have got some very, very smart farmers in Australia that could just do with a little bit of support from the government to change the Act just slightly, and we have got a huge industry. I mean, we –

**John BERGER:** So is it difficult to break it down – I am looking at your thing – into its constituent parts?

**Mark SMITH:** No, it is not. Look, there is infrastructure that is needed, and some of that infrastructure is very expensive, yes. But there are a lot of other properties of the plant that are paying for all of those investments into these other things – for the wood vinegars and things like that or for the anthocyanins out of the plant when it goes purple in the winter. It is very technical. It can be very technical with using HPLC to do extractions and synthesising individual parts of the plant, but it is all very doable.

**John BERGER:** One final question: when you say there could be thousands of opportunities for employment, given that industries are closing down, such as the timber area, how do you see that those people are easily transportable into another industry, knowing that this has not even got a startup as yet.

**Mark SMITH:** Well, if it is people from the automotive industry, they are used to working with moulds and panels and being able to implement these systems very easily. It would not be any different. It is just using another input, and that input is quite simple to be able to put into moulds and to be able to make panels and make bricks. I think we could basically return the workforce that has been retired since the automotive industry.

**The CHAIR:** Thanks, Mr Berger. I have noted in your submission that you made a recommendation to convert hemp production to now redundant agricultural parcels, and it relates to a question that I asked an earlier witness. Something else that is becoming a more common occurrence is existing farmers who might want to transition away from their current practice due to the climate and other changing threats. Do you think hemp creates an opportunity for transitioning farmers if we were to remove some of the regulations?

**Mark SMITH:** It is a fantastic opportunity. It can be a rotational crop that will remediate the soil in between crops. It can be another compost for green manure. Agriculture is facing huge issues around fertilisers at the moment, so nitrogen, potassium and phosphorus we are having shortages of due to the Russian war and other things that are impacting farmers. We have a green manure crop that could actually replace a lot of those inputs at a broadacre scale. Currently cotton uses about 400 kilos of fertiliser per acre, and hemp is about 280 kilos. There is a huge reduction in just fertiliser costs there as well. So in answer to your question, yes, I think it is a very easy crop to swap out. The cotton industry have suggested that they would like to replace 15,000 hectares of the million hectares that they do out in the west there, but they cannot extract everything from it so it is not a viable crop for them just yet.

**The CHAIR:** Okay. Thank you, and apologies if you are not an expert on this particular question, but I am going to ask it anyway.

**Mark SMITH:** I will try.

**The CHAIR:** Something I am particularly interested in is hemp as a material for clothing, and how it would compare environmentally in terms of land use and other factors to a product made of wool.

**Mark SMITH:** Okay, big question. Around the cellulose man-made fibres, we are currently looking at a shortage in the next 20 years of 50,000 metric tonnes, I think it is. I would have to dig this up to share it with you. That means that we are running out of textiles. With the growth of Asia, the way that it is growing so quickly, there are a lot of them who are not going to be having clothing, so we need to be planting at least 50,000 hectares just to manage the shortfall and then another 50,000 hectares to actually have a backup textile to replace all of these cellulose man-made fibres that we are now running out of. We are getting polyesters and microfibrils that are also contributing to climate change and environmental destruction. It is creating endocrine disruption in our people, which is why we need cannabinoids even more. Hemp as a material is antibacterial, it is antifungal and it is very durable. Over time it becomes softer. I have got hemp clothes that I am not afraid to say are 25 years old and still look good, so it is time. It is time we stopped using all this redundant industry and actually swapped it out for something that works.

**The CHAIR:** I borrowed Rachel's hemp shirt, and I did not want to give it back afterwards.

**Mark SMITH:** They are lovely to wear, aren't they?

**The CHAIR:** Just one final question: you have also mentioned some work that can be done around the higher education system. Does anything like that already exist in Victoria?

**Mark SMITH:** No. Look, a good friend of mine Tom Forrest and I have got a TAFE course that we offered to Chisholm, and the old toffs there laughed at us and turned their noses up. There is a great opportunity for that. I mean, Chisholm TAFE I think has 2 per cent agricultural students there. The enrolments have gone down. We need to enliven agriculture again. Victoria was the Garden State – I mean, we have lost that moniker.

**The CHAIR:** Thanks, Mr Smith. Dr Mansfield.

**Sarah MANSFIELD:** Thank you. And thank you for your presentation and your submission. I am curious about some of the comments made in your submission about how hemp can be grown on land that might have toxicity issues. I am wanting to understand more about why that is not an issue for hemp.

**Mark SMITH:** Hemp is one of the greatest bioremediators in any of the plant kingdoms. Its ability to sequester metals – and because of its taproot, it is able to break up very compacted soils and actually allow the biology, when it rains, to get down and build the soil again. And it is a green manure as well. If there was not a large metal content in the soil there, like cadmium or aluminium, you could then use that product again to fertilise your property. It is a very good phytoremediator. It will even take up monatomic gold, so at old mining sites you could plant hemp and be able to harvest the gold out of a pyrolysis machine on the back end, because all substances become inert on the back end, and you could harvest also the metals out of that.

**Sarah MANSFIELD:** Yes, wow. That is interesting. So I guess its suitability for those sorts of sites would depend a little bit on what you plan to do with the product, because there would be some metals and toxins you would not necessarily want used for, say, a food.

**Mark SMITH:** Correct. But aluminium can be locked up into bricks or for soundproofing on the highway – there are lots of ways around that. And pyrolysis would actually bring it down to its actual substance, so all these little inert substances would come out the other end.

**Sarah MANSFIELD:** Another one that has been brought up by just about everyone is hemp's role in carbon drawdown and carbon sequestration. Have you seen, in your experience overseas, anywhere where this has been really capitalised and is starting to come into its own?

**Mark SMITH:** It is just starting to, yes. 22,000 kilos of CO<sub>2</sub> are sequestered over a hectare, and the carbon credit price currently is \$40 to \$80 a metric tonne. So per hectare, what is that? 22,000 kilos are 22 tonnes; 22 tonnes by \$40. That is also another benefit that the farmer could get on the back end.

**Sarah MANSFIELD:** Yes. And whereabouts are we starting to see that?

**Mark SMITH:** In Europe.

**Sarah MANSFIELD:** In Europe?

**Mark SMITH:** Yes.

**Sarah MANSFIELD:** Yes, okay.

**Mark SMITH:** And I have seen a little bit about Australian carbon credit pricing as well.

**Sarah MANSFIELD:** With hemp?

**Mark SMITH:** Not with hemp, no.

**Sarah MANSFIELD:** And is there anywhere in the world that is doing it with hemp yet?

**Mark SMITH:** The UK, I believe.

**Sarah MANSFIELD:** The UK is doing it, okay. The other issue that has come up is around water use. I am not sure whether this is something that you are familiar with, but we have had different views about how hemp might compare with other crops in terms of its water use, so I just wonder if you want to comment on that.

**Mark SMITH:** Look, once it is naturalised, you do not need to water it; it is a very robust crop. But in terms of cotton, it takes like 20,000 litres to grow a hectare of it, and hemp takes about 300 – minimum – litres. So it is a substantial difference.

**Sarah MANSFIELD:** Yes, okay. But you are saying it would need, at least to get it started, a reasonable amount of water?

**Mark SMITH:** It needs a little drink to get its feet into the soil, yes. If you have got the right genetics and you are planting properly, you normally plant before it is going to rain anyway, and then the rain does it for

you. It is however the farmer sees fit, really, and most guys have got water licences anyway. If they are saving money watering it, they can grow more.

**Sarah MANSFIELD:** There were some questions raised about whether – there were different perspectives about whether you would need to have access to irrigation to be able to grow hemp crops.

**Mark SMITH:** It depends on the environment where you are at. I mean, in Gippsland, no. In Tasmania and most places, no.

**Sarah MANSFIELD:** Because of the rainfall?

**Mark SMITH:** Yes. I mean, if we go out into the wheat belt, yes, we will need irrigation.

**Sarah MANSFIELD:** Yes, and how well does hemp as a crop deal with various climate shocks and drought, frosts, extreme rains –

**Mark SMITH:** It is very, very strong. I have planted 750 plants right in the middle of June in the Hunter Valley – 16 June, 750 plants – and only one plant died through all of the frosts. I just wanted to see if the crop would grow through winter, and it did.

**Sarah MANSFIELD:** Thanks.

**The CHAIR:** Thanks, Dr Mansfield. Mrs McArthur.

**Bev McARTHUR:** Thank you very much, Mark, and contrary to your perception I am totally in favour of innovative agriculture –

**Mark SMITH:** Fantastic.

**Bev McARTHUR:** totally supportive. What I am not in favour of is taxpayer subsidy, but what I am in favour of is government regulation that assists and enables industry to get on with their best practice.

**Mark SMITH:** Music to my ears, Bev.

**Bev McARTHUR:** I knew we would find a winning line together.

**Mark SMITH:** Yes.

**Bev McARTHUR:** So tell me – and we have tried to ask the other witnesses today – what regulations can we recommend from this committee that we change here in Victoria so that the entrepreneurs can get off and running as quickly as possible and produce this fantastic product that is going to change the world and create a lot of wealth for a lot of people? I am all in favour of that too.

**Mark SMITH:** Absolutely. I mean, we are in a capitalist society. If we can support each other to eat, though, that is much more important. Anyway – I have lost my train of thought now.

**Bev McARTHUR:** Regulations. Give us the tick list of what we can get rid of or fix up.

**Mark SMITH:** Let us make hemp legal – all cannabis under 1 per cent THC legal – and let us use all of the plant – all of it – under the hemp Act as the agency that is provided under the regulations and obligations under the UN 1961 treaty. Make it the agency.

**Bev McARTHUR:** Right, that is pretty simple. Just two recommendations.

**Mark SMITH:** Exactly. Remove it from the SUSMP list.

**Bev McARTHUR:** You have also referred to medicinal cannabis. Can you just tell us about the blind studies that have been done in the area of medicinal cannabis?

**Mark SMITH:** The blind studies? That is a big one. Well, THC – I heard earlier, ‘Is THC dangerous?’ No. In developing children? No.



**Bev McARTHUR:** But where – have you got the evidence to back that up?

**Mark SMITH:** There is a study out of Jamaica with breastfeeding women that were using cannabis, and there were no negative impacts on the children.

**Bev McARTHUR:** Could you provide that to us?

**Mark SMITH:** I can find it for you, yes.

**Bev McARTHUR:** Great.

**Mark SMITH:** Neurogenesis is created by THC. In a learning and developing brain neurogenesis is key in development. THC, or THCA acids, actually support the development of a young brain. Studies, though – I mean, there are over 26,000 studies on the benefits of medical cannabis, right back to William O’Shaughnessy for Queen Victoria. We are trying to reinvent a wheel that we have rolled for 12,000 years. This is the world’s greatest vegetable, and we carried this vegetable everywhere we went. We traded the seeds, we traded the fibre, we ate the leaves and we ate the roots, just like Rachel did in Thailand recently.

**Rachel PAYNE:** I did.

**Mark SMITH:** So primarily this is a food. This is an agricultural crop that is a food. It should be treated like grapes. I can grow grapes, I can eat grapes, I can make wine from grapes, but if I need to sell it or I want to sell it commercially, I need a licence to be regulated. Cannabis should be legal. It should be legal like in most other jurisdictions in the world, and we are dragging the chain.

**Bev McARTHUR:** I was in Thailand recently to look at how the cannabis issue is being rolled out in their supposed deregulation framework, and it appeared that the medicinal cannabis area cannot do proper blind studies to be able to actually give us the evidence of the benefits of cannabis. You mentioned you talked to the government there. What are they saying about that?

**Mark SMITH:** Well, they have got the traditional Chinese or traditional cannabis medicines in Thailand.

**Bev McARTHUR:** Correct.

**Mark SMITH:** So they have created a dual scheme there, where they are endorsing and supporting the traditional cannabis medicines. So in the Thai cornucopia I think there are 4600 entries around kaycha and kancha – so hemp and high THC – and 2000 more entries in the Chinese cornucopia for traditional medicines.

**Bev McARTHUR:** But we were told they cannot get their blind studies going. Nobody really wants to volunteer for them.

**Mark SMITH:** Well, they are selling flower at a rate that they do not need to put money into studies.

**Bev McARTHUR:** Well, I mean, that is part of the deregulation, isn’t it, that medicinal cannabis should be able to be sold?

**Mark SMITH:** Correct. And you will see the States are now looking to make it schedule 3 so they can research. Everything is going back to medicinal. Canada is returning back to it. They are trying to change and tweak that system. America is now trying to endorse it. All use is medicinal – all use is medicinal; it does not matter whether you are self-medicating or not. It is to treat something. So we need to have hemp and the feedstock of hemp also supplying the medical industry so that we have got a lower cost input to actually then divert some of the funds into research. We have got the ability to actually be the model for the rest of the world. It is just we need to get it into the politicians’ heads that we could. We have got the world’s best agriculture. We have got the world’s best manufacture.

**Bev McARTHUR:** We just need to get government out of your way.

**Mark SMITH:** Absolutely.

**Bev McARTHUR:** What a wonderful thing.

**Mark SMITH:** No. We need to get the regulation out of the way and actually marry the Act and not have a regulator that it is actually putting in regulations that do not even follow the law.

**Bev McARTHUR:** Roadblocks.

**Mark SMITH:** Roadblocks, diversion. They are saying diversion is our biggest issue, it is their biggest issue.

**The CHAIR:** Thanks, Mrs McArthur. Dr Heath.

**Renee HEATH:** I actually only just came in. Is it okay if I skip my chance?

**The CHAIR:** We only have a few minutes left. So if you do not have any questions, that is fine.

**Renee HEATH:** Yes, okay.

**Mark SMITH:** None?

**Renee HEATH:** Well, I just walked in, so we will go to somebody better, like Ms Payne.

**Mark SMITH:** Okay.

**The CHAIR:** Ms Payne, probably time for one more question.

**Mark SMITH:** But if I could address the safety profiles of cannabis to you.

**Renee HEATH:** Oh, yes.

**Mark SMITH:** The LD50 of cannabis, a baby of 5 kilos would need to be injected with 200 milligrams of high THC to actually have a death event, and that is almost impossible – 200 milligrams of THC is a huge, huge dose, and to give it intravenously to a child, no-one would ever do it. But opium, the LD50 of that, a child has only got to get a tiny little grain of it and they will die. I cannot remember the exact figure, and I will send you that figure.

**Renee HEATH:** Please send it to me, as well as the Jamaican one, because the research I have read is actually the opposite. The assessment done for Health Canada, which I have quoted a few times here, says: ‘New food products and cosmetics made from hemp ... pose an unacceptable risk to the health of consumers,’ and it talks about how the most vulnerable are children that are in utero or being breastfed. So I am very interested.

**Mark SMITH:** Could you share that with me, please?

**Renee HEATH:** Yes, absolutely, and these guys are going to share it with some others.

**Mark SMITH:** Could you elaborate a little further on that? Sorry, Rachel. I have hijacked your question.

**Rachel PAYNE:** No, that is okay.

**Renee HEATH:** I am really happy to hear about the one you have quoted, from Jamaica, because really what I am looking for is something that guarantees the safety. So there are quite a few. I am happy to share them with you.

**Mark SMITH:** Sure, yes.

**Renee HEATH:** This is the quote I have got:

A risk assessment done for Health Canada states that, “New food products and cosmetics made from hemp ... pose an unacceptable risk to the health of consumers. It also says that hemp products may not be safe because even small amounts of THC may cause developmental problems. “Those most at risk,” the study says, “are children exposed in the womb or through breast milk, or teen-agers whose reproductive systems are developing.”

And it goes on.

**Mark SMITH:** That sounds like a loaded study to me because breastmilk is actually full of endocannabinoids. We need to top up our endocannabinoid system, our system within, with exogenous cannabinoids, and exogenous cannabinoids are found in cannabis. In echinacea there are cannabimimetics.

**Renee HEATH:** So are you saying that for people that use cannabis, it is actually going to help brain development rather than hinder it?

**Mark SMITH:** Yes. I would say that for some of that, yes, it would.

**Renee HEATH:** It would actually help?

**Mark SMITH:** It depends on the limits that they are using. I mean, I am not saying smoke a gram and then breastfeed your child, but there are definitely going to be benefits to those exogenous cannabinoids supporting the endogenous cannabinoid system.

**Bev McARTHUR:** And you will happily provide us with that evidence?

**Mark SMITH:** Well, there is lots of evidence on the endocannabinoid system, yes, and exogenous.

**Renee HEATH:** Send them through, yes.

**Bev McARTHUR:** We will look forward to reading them.

**The CHAIR:** Are you happy to provide that to the committee to be distributed?

**Mark SMITH:** Yes, I can. I will find what I can.

**The CHAIR:** Thank you very much.

**Renee HEATH:** Thank you so much.

**The CHAIR:** Are you all good?

**Renee HEATH:** Yes, that actually ended up being one of my most helpful answers for the day. Thank you.

**Mark SMITH:** Thank you.

**The CHAIR:** Thanks. Ms Payne.

**Mark SMITH:** Could someone also make a list of everything I have got to –

**The CHAIR:** Yes.

**Bev McARTHUR:** You will get a letter.

**Mark SMITH:** Okay. Cool.

**The CHAIR:** The committee staff will be in contact, yes.

**Rachel PAYNE:** I just want to go back – you were talking about domestically grown hemp and how we import more product than we grow to manufacture products with. Can you explain that to the committee a little bit further? Is it because of the current regulatory system that it is more viable to import rather than actually grow here? Is that what is happening?

**Mark SMITH:** That is under the medical companies, and that information was actually provided by Honahlee to me. Seventy-four per cent of the Australian industry is imported products. The ODC does not end up managing it all; it is actually under the state. Those federal legal products come and sit in the state warehouse. There is no import excise or duties on that. Fifty per cent of that 74 per cent would be CBD products, maybe even a little bit higher, with CBD being grown at scale as hemp and then used for extraction for a GMP process. Clearly under the Acts ‘manufacture’ is changing one drug into another drug, and the TGA or the ODC are saying that all things under ‘hemp’ and ‘cannabis’ come under ‘manufacture’. But that is not true. You have got separation of resins from the leaves and the flowering heads, which is a definition in the

1961 UN treaty and a definition in the 1967 *Narcotic Drugs Act*. It is also further supported by the New South Wales hemp Act, which actually lists manufacture, separation and production. It allows for these things, although they then put limits on the amount of cannabinoids in the cosmetics that they can make or the pet foods. But that is the platform to actually have a really strong industry. It is the only way we can actually get any sort of revenue in to invest in any of the infrastructure needed to make hemp a viable commodity crop.

The UN has written a document that addresses all of the inquiry's questions, and more, stating the commodities at a glance that industrial hemp or cannabis is, and that is that picture there. It also includes cannabinoids and resins, nutraceuticals and pharmaceuticals. We have misinterpreted it, and we have created an ODC which is an absolute misery loop for everyone, even the workers there, because they do not even know their own regulations. It is a terribly messy situation, and that is impacting our hemp. We are limiting ourselves to seed and fibre; it is never going to grow.

**The CHAIR:** Thanks, Ms Payne.

**Rachel PAYNE:** Thank you.

**The CHAIR:** That is all we have time for today, Mr Smith, but I just want to say thank you very much for coming along and sharing your story with us. I acknowledge a lot of it was personal, but it is great context for us to understand the issue.

**Mark SMITH:** Yes, thank you. It is how we have got it wrong. And why are we behind Thailand and Colombia, of all things? You know – far out.

**The CHAIR:** Thanks very much, Mr Smith.

**Witness withdrew.**