Division/Agency: Australian Pesticides and Veterinary Medicines Authority **Topic:** 1080 Hansard Page: 89 (26\05\2009)

Senator Sterle asked:

Senator STERLE– Dr Bennet-Jenkins, could you give us an update on the alternatives to 1080?

Dr Bennet-Jenkins—I would have to take that on notice because I do not actually have the information with me here, but we are aware that there is research going on into alternatives to 1080. We are certainly working together with the people that are researching it, to make sure that they are quite aware of what our data requirements are and are able to make sure that when they come to apply for a registration application, they have all the information that we need to be able to assess their application.

CHAIR—While you are at it, I believe there is something already being used in New Zealand, an alternative, that you may have some more information on, too. **Dr Bennet-Jenkins**—Yes. We will do that.

Answer:

Australian Pesticides and Veterinary Medicines Authority (APVMA) has issued a number of research permits to investigate potential alternatives to 1080, and these are yet to be lodged formally for registration.

The New Zealand Environmental Risk Management Authority (ERMANZ) has granted an approval for sodium nitrite. Approvals for research and manufacture of another vertebrate control agent have been granted (November 2008). The APVMA has also issued a research permit for the same control agent.

Products that are being researched, either jointly with New Zealand or independently, are yet to be approved in New Zealand or Australia.

Division/Agency: Australian Pesticides and Veterinary Medicines Authority **Topic:** Chemicals Originating in Australia Hansard Page: 89 (26\05\2009)

Senator Back asked:

Senator BACK–Can you give us some indication of how many chemicals actually originate in Australia itself? How active are we now in actually developing and researching, for veterinary chemicals, particularly, for the industry, and how many of that 2,500 are actually in from overseas? Are we still active in the game? **Dr Bennet-Jenkins**—I would have to take that question on notice. I do not know the proportion of products that would be developed in Australia, but a large proportion of the chemicals are developed overseas, globally, and then come to the Australian market.

Answer:

The Australian Pesticides and Veterinary Medicines Authority (APVMA) can provide the following statistics for veterinary chemical products:

- currently there are 3271 registered veterinary products to a total of 270 registrants;
- of the 3271 products 2983 are registered to 221 registrants based in Australia;
- of the 221 registrants 171 manufacture in Australia; 44 of the 221 registrants manufacture in either Australia or overseas; 6 registrants only have overseas sites of manufacture
- the 171 registrants that manufacture only in Australia account for 871 (approximately 30 per cent) of the 2983 veterinary products registered to Australian registrants.

The APVMA does not have records on whether products are researched or developed locally.

Division/Agency: Australian Pesticides and Veterinary Medicines Authority **Topic:** 1080 Hansard Page: 91 (26/05/2009)

Senator Brown asked:

Senator BOB BROWN–On the question of 1080, there is an apocryphal story about a man in America having ingested a lethal amount—or nearly sub-lethal, because he survived. But he had the spasms that we see so often marsupials having in pictures after they have been poisoned in Tasmanian logging areas, and he said afterwards that he experienced no pain. Is that a factual story, or is it an invention?

Dr Bennet-Jenkins—We are aware of the story. I cannot comment on whether it is factual or not. We certainly are aware of the story.

Senator BOB BROWN—Could you help me by finding out whether it is factual, if there is any literature on that?

Dr Bennet-Jenkins—I certainly can, yes.

Answer:

The Australian Pesticides and Veterinary Medicines Authority's review of sodium fluoroacetate ('1080') which was completed in January 2008 referred to literature on 1080 poisonings in humans (Sodium Fluoroacetate: Final Review Report And Regulatory Decision. The reconsideration of registrations of products containing sodium fluoroacetate and approvals of their associated labels.

http://www.apvma.gov.au/chemrev/downloads/1080_final_review_report.pdf). Reported symptoms in humans involve central nervous system stimulation with clinical signs of anxiety, agitation, nausea and generalised tonic-clonic convulsions, but pain is usually not reported. In one example, a man poisoned during mixing of 1080 powder reported tingling sensations around the mouth and nasal passages, extending to the arms and legs. However, there was no recollection of pain during the spasmodic contractions of voluntary muscles that occurred in the 2.5 hours before unconsciousness intervened. (reported at http://www.invasiveanimals.com/media-centre/hot-topics/1080-debate/index.html).

Division/Agency: Australian Pesticides and Veterinary Medicines Authority **Topic:** 1080 Hansard Page: 91 (26\05\2009)

Senator Colbeck asked:

Senator COLBECK—Is the group that is doing the work that you are doing in relation to 1080 doing that in conjunction with some funding that came out of the Tasmanian Community Forest Agreement a couple of years ago? **Dr Bennet-Jenkins**—It is not work that we are doing, but the research group might be doing it. I am not entirely sure, so we would need to take that question on notice. **Senator COLBECK**—Yes, if you could take that on notice, I would be interested where the focus of that work is coming from and if it is coming from the source that was funded from the 2004 election. I think there was about \$1 million put into that research at that point in time.

Answer:

The work that has been funded through the Tasmanian Community Forestry Agreement into alternatives to 1080 involves a chemical which is being jointly researched by the Tasmanian Institute for Agricultural Research and the Department of Conservation and Lincoln University in New Zealand. The Australian Pesticides and Veterinary Medicines Authority (APVMA) has approved a research permit for the use of the chemical for the control of feral species. The APVMA is unaware of the funding arrangements associated with this research.

Division/Agency: Australian Pesticides and Veterinary Medicines Authority **Topic:** CSIRO concern with pesticides Hansard Page: 91-92 (26\05\2009)

Senator Brown asked:

Senator BOB BROWN – Are you aware of CSIRO work expressing concern about this group of pesticides?

Dr Bennet-Jenkins—I am not aware of the particular work that the CSIRO is doing in this area, no.

Senator BOB BROWN—The CSIRO has expressed concern about endocrine disruption, hasn't it?

Dr Bennet-Jenkins—In terms of the Triazine group of herbicides, we looked at the endocrine disruption potential in quite extensive detail with the Atrazine review, and we were unable to conclude that there was sufficient evidence that it was going to occur at a level that would be harmful to humans. We are continuing to—

Senator BOB BROWN—Were you able to conclude that it would not occur? Dr Bennet-Jenkins—The weight of evidence suggests that it would not occur in humans. Having said that, we are continuing to investigate all the research that is going on in the area that is suggesting that there may be other modes of action that may not have been taken into account, and we have asked the Office of Chemical Safety within the Department of Health and Ageing to review all the newest literature and provide a report to us. We expect to have that report finalised in the near future. Senator BOB BROWN—What was the CSIRO's opinion on the matter? Dr Bennet-Jenkins—I would have to take that on notice. I do not specifically know what the CSIRO have stated on that matter.

Answer:

In 2007, CSIRO researchers, amongst others, were involved in a meeting on endocrine active chemicals in water supplies. This meeting was held at CSIRO premises on Black Mountain, in Canberra. The following statement was taken from 'The Black Mountain Declaration'' arising from the meeting (see http://www.clw.csiro.au/conferences/ourwater/EDC-conference-declaration.pdf):

...exposure to EDCs via water (either through recreation or consumption) is considered relatively insignificant compared to other sources such as occupational or dietary exposure".

Question: APVMA05 (continued)

CSIRO has also developed a Pesticide Impact Rating Index (PIRI), enabling chemicals to be given a rating in terms of their relative risk to the environment. (Additional information is available at <u>http://www.csiro.au/files/files/pl6u.pdf</u>.) In this model, CSIRO uses a hazard (ecotoxicity) rating for a range of pesticides, taken from the general literature, but the APVMA is not aware of any new research conducted by CSIRO in relation to modulation of endocrine systems by chemicals such as the triazines. PIRI does not use endocrine disruption data, but uses toxicological data for fish, daphnia and algae in general, plus additional data where available.

The PIRI model focuses more on the potential for agricultural chemicals to move from the application zone to the surrounding environment (by run-off or spray-drift), taking into account their use patterns and their inherent physicochemical properties.

Division/Agency: Australian Pesticides and Veterinary Medicines Authority **Topic:** Pesticides and herbicides registered for use by the forest industry in Tasmania Hansard Page: 96 (26\05\2009)

Senator Milne asked:

Senator MILNE – Thank you. Could you provide to the committee a comprehensive list of all the pesticides and herbicides registered for use by the forest industry in Tasmania?

Dr Bennet-Jenkins—We could do that, yes.

Answer:

Refer Attachment 1.

Division/Agency: Australian Pesticides and Veterinary Medicines Authority **Topic:** Chemicals used by the forestry industry in Tasmania and research permits Hansard Page: 98 (26\05\2009)

Senator Milne asked:

Senator MILNE—We know, for example, that there are at least 11 different pesticides that are used, and probably more. When you do your toxicology test, do you look at the mixture of the chemicals applied in the same time, or in the same timeframes and, if not, why not, given that the toxicity may well change immeasurably by the mixture of those chemicals?

Dr Bennet-Jenkins—Each chemical gets assessed on its own merits. So, when we have an application, we look at the chemical that is before us, as to whether we grant the registration or not. That is, again, how the framework is looked at. Certainly, again, the assessors in the agencies will be aware or we will be aware through label instructions of whether chemicals are mixed and that people will apply tank mixes, where they mix several chemicals at one time. I would probably have to take it on notice, but the area of assessing mixtures is quite a complex one because all the different chemicals will have different modes of action and, from my understanding from having talked with my colleagues in Health, those modes of actions are so different that, at this stage, there are no concerns that the mixtures themselves would have an additive or a cumulative effect. But it is an area that internationally there is much research going on in, and we are keeping an eye on what other regulatory agencies are doing and certainly becoming aware if there are any issues with regard to having to look at cumulative or mixture assessments.

Senator MILNE—I appreciate you taking on notice the need to have the list of chemicals that are for pesticides and herbicides registered for use by forestry in Tasmania. I would also like you to take on notice any work that has been done on the mixture of those chemicals. It has recently been revealed, we understand, that the chemical terbuthylazine has been used in Tasmania for two or three years for forestry. The community had no idea it was being used because it is not registered for general use by your agency for forestry. But we have discovered that it is being used under a permit that you provide for research, with the conditions of use protected by a commercial-in-confidence agreement. Can you explain to me whether that chemical is being used in Tasmania for forestry, can you confirm how long it has been used for forestry, and can you explain to me how long this research project is going to go on for? For how many years was the research permit granted, and why is it commercial-in-confidence? I would like to know what the permit conditions are with regard to that particular chemical. Could you explain to the committee the whole history of this and why the community has had to find out about it in the way that they have?

Dr Bennet-Jenkins—Perhaps I can speak in general terms about research permits and then I could take on notice the type of information that we can give you in terms of this particular research permit. Traditionally the APVMA processes have been that research permits are considered to be largely commercial-in-confidence. Our permit

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database has an area for confidential information for permits to be placed and that is where our research permits are placed. Having said that, were are looking at that process and that policy presently to see what components of a research permit we would be able to release to the general public so that they are aware of it but that does not give away confidential information. On many occasions research permits are in relation to a new company with a new chemical, and it is of commercial interest to them that those research permits are retained in the confidentiality provisions. I would like to get back to you on notice the type of information that I can give you of the detail for that particular—

Answer:

Refer to Attachment.

Division/Agency: Australian Pesticides and Veterinary Medicines Authority **Topic:** Chemicals used by forestry in Tasmania Hansard Page: 98 (26\05\2009)

Senator Milne asked:

As you said there would be a risk assessment report before the research permit would be issued, could you table for the committee that and as much information as you can about the use of this chemical. I would particularly like to know for how many years this research is going on and over what physical area. We know it is the Georges River catchment but I would like to know whether it is for the whole of Tasmania or just certain catchments and so on. I also understand that another chemical, Fluazifop, is listed as being used by Forestry by the river and catchment management people but is not registered for use by Forestry. Also, another one, Spinosad, is also known to be used by the forest industry but it is not listed anywhere as being used by the forest industry. So could you confirm whether either of those is registered for use by Forestry and, if not, what happens when you have got an understanding that they are being used by Forestry and they are not registered for use by them. What happens in that circumstance?

Dr Bennet-Jenkins—Certainly. I will take that on notice and confirm whether there is information about whether they are used by Forestry. It largely becomes a control of use issue. The state departments would need to investigate the use of a unregistered product. For us, if they are not a registered product, it would be a supply issue. I am not sure in this case whether this is supply of an unregistered product or the use of a registered product in an unapproved situation, so we would need to investigate that. But it would be either the APVMA, if it is the supply of the product, or the state if it is unapproved use.

Senator MILNE—I would like have some information about what you know about the use of those in Tasmania, and if they are not registered for use by Forestry I would like to know what action is proposed to be taken. It has also recently come to light that Forestry has been using another chemical, Tebufenozide, for at least five years in Tasmanian plantations. We know it is an insecticide. We know that it affects fungi, crustaceans and insects. We know it has a long half-life in soil, has the potential to pollute groundwater and is very toxic to aquatic organisms, but we note that it is not listed for use in Tasmania by the Tasmanian River Catchment Water Quality Initiative. Could you tell me whether that is registered for use in Tasmania by Forestry and in what circumstances. If you cannot answer that—

Dr Bennet-Jenkins-I cannot answer that straight off my head, no, but-

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Question: APVMA08 (continued)

Senator MILNE—I did not expect you would. Dr Bennet-Jenkins—Yes.

Answer:

Fluazifop is approved under an existing Tasmanian off-label permit for use in eucalypt species, tree farms, plantations and nurseries. The approval has been in existence since before the National Registration Authority.

Spinosad is registered for use in all states for forestry situations, specifically eucalyptus and tea tree plantations. (Product No.s 51014 and 59303).

Tebufenozide is registered for use in all States for forestry/eucalyptus plantations (Product No. 48462).

When a product is used in a situation or way that is not approved, it becomes a matter for the relevant state authority to investigate and determine whether state control of use laws were contravened. The subsequent action taken is a matter for the state department to enforce.

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Question: APVMA09

Division/Agency: Australian Pesticides and Veterinary Medicines Authority **Topic: Regarding Atrazine, Simazine and similar chemicals (please list) in Tasmania Hansard Page:** Written

Senator Brown asked:

Senator BOB BROWN–Regarding Atrazine, Simazine and similar chemicals (please list) in Tasmania:

- 1. What volume or weight of each was used in each of the last five years?
- 2. To what area (hectares) was each applied?
- 3. In which catchments were the chemicals used? Where?, and
- 4. by whom (please specify)?

In each case, please specify what proportion of the chemical was applied by aerial spraying.

Answer:

The Australian Pesticides and Veterinary Medicines Authority does not collect information on the use of pesticides as our legislated responsibility only extends to the supply of chemicals, not the use of chemicals.

The Tasmanian Department of Primary Industries and Water, through the River Catchment Water Quality Initiative, conducts monitoring of pesticides in Tasmanian water ways, which includes some information on the nature and extent of pesticide usage by region and catchment. The Department also investigates chemical spraying incidents. A link to the Department website is provided below: http://www.dpiw.tas.gov.au/inter.nsf/WebPages/SSKA-7JA425?open

And Appendix B in the relevant document (The Tasmanian River Catchment Water Quality Initiative) contains some of the information requested and is at the following link:

http://www.dpiw.tas.gov.au/inter.nsf/Attachments/SSKA-7JA8UW/\$FILE/DPIW_rpt.pdf