Public Consultation on the Proposed Amendments to the Poisons Standard

Notice under subsections 42ZCZL of the Therapeutic Goods Regulations 1990 (the Regulations)

A delegate of the Secretary to the Department of Health publishes herein all valid public submissions made in response to the invitation for public submissions on the interim decisions regarding the proposed amendments to the Poisons Standard (commonly referred to as the Standard for the Uniform Scheduling of Medicines and Poisons - SUSMP). These submissions were considered by the chemicals scheduling delegate.

In accordance with the requirements of subsection 42ZCZL of the Regulations these submissions have had confidential information removed.

Material claimed to be commercial-in-confidence was considered against the guidelines for the use and release of confidential information set out in Chapter 6 of the Scheduling Policy Framework for Medicines and Chemicals (SPF, 2015), issued by the Australian Health Ministers Advisory Council (AHMAC). The SPF is accessible at: http://www.tga.gov.au/publication/ahmac-scheduling-policy-framework-medicines-and-chemicals.

accord
hygiene, cosmetic & specialty products industry

The Secretary
Scheduling Secretariat
GPO Box 9848
CANBERRA ACT 2601

Email: chemicals.scheduling@health.gov.au

Dear Sir/Madam

Public Comment Submission to the November 2014 meeting of the Advisory Committee on Chemicals Scheduling (ACCS)

We refer to the notice published on 29 January 2015 inviting public submissions, with respect to certain substances, addressing a matter raised in s.52E of the *Therapeutic Goods Act 1989*.

Accord Australasia Limited is the peak national industry association that represents the hygiene, cosmetic & specialty products industry.

Accord wishes to provide information on:

- 2-ethylhexanoic acid;
- 2-hydroxyethyl methacrylate;
- 4,7-methano-1H-indene-5-acetaldehyde, octahydro-;
- Ammonium cocoyl isethionate; and
- Babassuamido propyl betaine;

for consideration at the March 2015 meeting of the ACCS.

Please see the attached submission for details.

Accord is an interested party and stakeholder with regard to the nominated substances and would appreciate being advised of the Committees' considerations and the Delegate's interim decision, with the opportunity for further submission, if appropriate.

We look forward to further advice from the ACCS and the Delegate. Should the Committee or the Delegate require any additional information from Accord at this stage please do not hesitate to contact me on [redacted].

Yours faithfully

[unsigned for electronic submission]

[redacted]

27 February 2015

Accord Australasia Limited ACN 117 659 168 ABN 83 205 141 267
Fusion C4.02, 22 – 36 Mountain Street, Ultimo NSW 2007
PO Box 290 BROADWAY NSW 2007

Tel: [redacted] **Fax:** [redacted] **Website:** www.accord.asn.au

ACCS meeting: March 2015

2-ethylhexanoic acid

From the proposal in the invitation for public comments, we understand that the scheduling proposal is as a result of issues raised in the NICNAS IMAP report for 2-ethylhexanoic acid. We are however unsure of the scheduling proposal.

Under "Public Risk Characterisation" it is stated that while there are no restrictions on the use of the chemical in products available to the public, "*an approximate margin of exposure (MOE) calculated by Canada (2011) based on domestic use of the chemical in similar types of products identified in this report (alkyd paints), using similar levels of bioavailability, and LOAELs. The calculations resulted in the determination that the MOE was acceptable, particularly given the expected episodic exposure of the general population to the chemical from normal use of these products*."

There is only one recommendation under NICNAS Recommendation, Public Health, which states "Products containing the chemical should be labelled in accordance with state and territory legislation".

From reading the IMAP report for 2-ethylhexanoic acid, Accord has been unable to ascertain the rationale for this item being included in the scheduling agenda or what the proposal may be.

However, Accord notes that this scheduling consideration has the potential to address the one of the Administrative Appeals Tribunal (AAT) recommendation in the AAT Appeal case Accord Australasia Limited and Director, Chemicals Notification and Assessment Scheme, ([2014] AATA 504)[1].

The AAT recommendation which relates to 2-ethylhexanoic acid is at paragraph 72 and is as follows:

> *"The Tribunal recommends that Chemical 11 Cet(e)aryl Octanoate be referred to the Australian Chemical Scheduling System (ACSS) along with other chemicals that can be metabolised to 2-ethylhexanoic acid."*

In 2013, the Cosmetic Ingredient Review (CIR) released an amended safety assessment of alkyl ethylhexanoates as used in cosmetics.[2] The CIR concluded that alkyl ethylhexanoates are safe in current practices of use and concentration when formulated to be non-irritating. The main consideration in the CIR safety assessment was potential metabolism of alkyl ethylhexanoates to 2-ethylhexanoic acid and its reproductive and developmental toxicity.

Based on the CIR report, it is our view that esters of 2-ethylhexanoic acid do not require scheduling i.e. any decision to include the substance in a schedule should exclude esters.

However, we also understand that it is important to consider past scheduling decisions and promote consistency where possible. In March 2014, the Delegate considered a derivative of 2-ethylhexanoic acid, 2-ethylhexyl-2-ethylhexanoate (2-EHEH). The final decision reached (in August 2014) was to schedule 2-EHEH except when present in products at 10% or less with

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[1] The full AAT decision can be found at http://www.austlii.edu.au/au/cases/cth/AATA/2014/504.html
[2] http://www.cir-safety.org/sites/default/files/ethylh032013rep.pdf

appropriate safety and warning statements. At the time, Accord proposed that broader groups of esters be considered to address concerns raised with 2-ethylhexanol and 2-ethylhexanoic acid. Unfortunately, based on the published decision, it appears that our submission was potentially misunderstood and our proposal was not taken on board.

2-EHEH is an ester: a reaction product of 2-ethylhexanol and 2-ethylhexanoic acid. As noted in the CIR report, it is expected that alkyl ethylhexanoates will metabolise to form 2-ethylhexanoic acid. The other metabolic product is the alkanol. In the case of 2-EHEH, the alkanol is 2-ethylhexanol. Also as noted in the CIR report, 2-ethylhexanol will hydrolyse to form 2-ethylhexanoic acid.

To summarise the information above, each 2-EHEH will yield two molecules of 2-ethylhexanoic acid. This is unlike other alkyl ethylhexanoates that will yield one molecule of 2-ethylhexanoic acid per molecule of alkyl ethylhexanoate.

This is an important consideration if scheduling of 2-EHEH was based on its reproductive toxicity potential of 2-ethylhexanoic acid as we understand it was.

In order to provide scheduling decision for 2-ethylhexanoic acid and its derivatives that is consistent with 2-EHEH, we must consider what percentage of 2-ethylhexanoic acid is equivalent to 2-EHEH. This is a rather simple calculation. As all of 2-EHEH yields 2-ethylhexanoic acid, approximately 10% of 2-ethylhexanoic acid is equivalent to 10% of 2-EHEH.

Therefore, to provide consistent scheduling decision, 2-ethylhexanoic acid should be included in schedule 6, except when in concentrations of 10% or less.

As different esters of 2-ethylhexanoic acid will contain different percentages of 2-ethylhexanoic acid to the molecular weight of the ester (dependent on the size of the alkyl group), we propose that the schedule entry clarify that the percentage of derivatives of 2-ethylhexanoic acid in a product be considered only for the 2-ethylhexanoic acid yielding moiety.

For consistency with 2-EHEH entry, the following schedule entry could be considered:

Schedule 6 - New entry
2-ETHYLHEXANOIC ACID including salts and derivatives except in preparations containing 10 per cent or less of 2-ethylhexanoic acid calculated as 2-ethylhexanoic acid.

Appendix E and F statements used for 2-EHEH is also relevant for 2-ethylhexanoic acid and should be maintained.

While we have approached this calculation as though the derivatives of 2-ethylhexanoic acid will yield all of its theoretical amount of 2-ethylhexanoic acid, in practice, it is unlikely that derivative of 2-ethylhexanoic yield the full theoretically calculated amount of 2-ethylhexanol. We are therefore not completely comfortable with the approach of scheduling the acid and it derivatives together.

We would prefer to see a schedule entry for esters of 2-ethylhexanoic acid to address the AAT recommendation i.e. alkyl ethylhexanoates. As noted earlier, the IMAP report did not appear to recommend scheduling of 2-ethylhexanoic acid.

We therefore propose the following schedule entry:

ALKYL ETHYLHEXANOATES (excluding derivatives) in preparations containing 10 per cent or more alkyl ethylhexanoate calculated as 2-ethylhexanoate

ACCS meeting: March 2015

2-hydroxyethyl methacrylate

Accord notes that 2-hydroxyethyl methacrylate is an ingredient used in nail care products. In Australia, 2-hydroxyethyl methacrylate is used in nail polishes that are cured through a LED or UV light process. The ingredient is present in products at up to 30%. 2-hydroxyethyl methacrylate is a monomer that starts to polymerise once painted on to the nail and is not expected to be available as the monomer for more than the initial few minutes after application.

A review of the EU Cosmetic Ingredients database shows that it is in use in the EU in cosmetics without restrictions. We also understand that 2-hydroxyethyl methacrylate is used in USA in nail care products without restrictions.

In 2005, the Cosmetics Ingredient Review Expert Review Panel reviewed the safety of methacrylate esters including 2-hydroxyethyl methacrylates and concluded that the methacrylate esters considered are safe as used in nail enhancement products when skin contact is avoided".[3]

In 2001, 2-hydroxyethyl methacrylate was also considered through the OECD Screening Information Data Set (SIDS), a voluntary testing programme for international high production volume chemicals. The final recommendation was the substance was of low priority for further work[4].

Given that there are no restrictions on the use of the substance in cosmetics internationally and there has been no demonstration of harm from the use of the substance in Australia or in other economies with comparable safety standards, we do not believe that the substance should be scheduled for cosmetics.

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[3] http://www.cir-safety.org/sites/default/files/118_memrpt_suppl.pdf
[4] http://www.inchem.org/documents/sids/sids/868779.pdf

ACCS meeting: March 2015

4,7-methano-1H-indene-5-acetaldehyde, octahydro-

Accord notes that this substance is a fragrance ingredient. Fragrances are generally present in final product in small concentrations. We also note that to date, neither the scheduling committee nor the Delegate has recommended scheduling fragrance ingredients that have not been considered to pose special risk e.g. citral based on high frequency/volume of use, sensitisation potential, etc. Even in these cases, the scheduling decisions aligned with the controls imposed through the International Fragrance Association (IFRA) through their standard. It is our understanding that all companies comply with IFRA standard for fragrances.

Given the history of scheduling of fragrances and noting that there is an international standard that applies to fragrances that companies internationally comply with, we do not believe that scheduling of 4,7-methano-1H-indene-5-acetaldehyde, oactahydro- is required.

ACCS meeting: March 2015

Ammonium cocoyl isethionate

Accord notes that ammonium cocoyl isethionate is a surfactant used in cosmetics. Like lauryl sulfates, cocoyl isethionates are anionic surfactants.

It has been our long held view that these surfactants do not require scheduling as the risks of using surfactants (skin irritation from defatting and eye irritation) are well known to consumers.

Neither the EU nor the USA apply any restrictions on the use of these surfactants.

However importantly, it is our understanding that cocoyl isethionates are used as milder alternatives to lauryl sulfates. It is Accord's view therefore that ammonium cocoyl isethionate should remain unscheduled.

ACCS meeting: March 2015

Babassuamidopropyl betaine

In our submission to the Delegate's Interim Decisions to July 2014 ACCS meeting, Accord noted that while babassuamidopropyl betaine contains a quaternary ammonium segment, it is a zwitterion and should not be treated in the same manner as other quaternary ammonium copounds.

We also noted that amidopropyl betaines are used in cosmetics as a milder alternative for sodium lauryl sulfates and sodium lauryl ether sulfates, and that it may be more appropriate to separately schedule amidopropyl betaines and align the schedule entry with lauryl sulfates, if scheduling was deemed to be required.

Accord suggested the following schedule entry.

Schedule 6

AMIDOPROPYL BETAINES ***except:***

(a) in cosmetic wash-off preparations containing 30 per cent or less of amidopropyl betaine and, if containing more than 5 per cent of amidopropyl betaine, when labelled with a warning to the following effect:

IF IN EYES WASH OUT IMMEDIATELY WITH WATER;

(b) in cosmetic leave-on preparations containing 1.5 per cent or less of amidopropyl betaine.

(c) in other preparations containing 30 per cent or less of amidopropyl betaine and, if containing more than 5 per cent of amidopropyl betaine, when labelled with warnings to the following effect:

IF IN EYES WASH OUT IMMEDIATELY WITH WATER; and

IF SKIN OR HAIR CONTACT OCCURS, REMOVE CONTAMINATED CLOTHING AND FLUSH SKIN AND HAIR WITH RUNNING WATER.

The reason for the proposal to schedule amidopropyl betaines as a group rather than specifically babassuamidopropyl betaine is that the chemical properties of amidopropyl betaines are very similar, whether they contain fatty acid moiety from babassu, coconut or any other source of long chain fatty acids.

In order to ensure clarity that it is alkyl chains that are of interest, it is also possible to consider a schedule entry for alkyl amidopropyl betaines.

In our last submission, we also highlighted two reports, one from the Human and Environmental Risk Assessment (HERA) on ingredients of household cleaning products which concluded that household laundry and containing cocamidopropyl betaines raise no safety concerns for the consumers[5], and another by the Cosmetic Ingredient Review (CIR) which concluded that

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[5] http://www.heraproject.com/files/45-HH-E101023F-D12F-6A30-DEB0770E9BF8E4D0.pdf

amidopropyl betaines are safe for use in cosmetics when formulated to be non-sensitising (noting that sensitisation potential was likely due to an impurity rather than the substance itself)[6].

In addition to the information already provided, we have additional information from Members which indicates that alkyl amidopropyl betaines are used as a replacement in the phase out of fatty acid diethanolamides (e.g. cocamide DEA, lauramide DEA, linoleamide DEA and oleaide DEA).

While fatty acid diethanolamides themselves are considered safe for use in cosmetics, there is a potential for nitrosamine contamination and potential reaction with nitrosating agents to form nitrosamine[7]. In order to remove this potential risk, it is our understanding that cosmetic companies have been investigating safer alternatives and having found them in alkyl amidopropyl betaines, have been altering their formulations.

We have previously raised concerns with scheduling of surfactants as we believe that surfactants in general pose a low risk to public health. The scheduling consideration of babassuamidopropyl betaine which has been used by industry to replace potentially higher risk ingredient highlights the need to ensure that industry continues to have access to ingredients for innovation.

Fatty acid diethanolamides are not scheduled, nor should they be, as the ingredient itself does not pose a safety concern – the concern is with potential contamination and potential for reacting with nitrosating agents.

It is Accord's view that alkyl amidopropyl betaines should remain unscheduled.

[6] http://online.personalcarecouncil.org/ctfa-static/online/lists/cir-pdfs/pr518.pdf
[7] http://www.cir-safety.org/sites/default/files/118_draft_dea_suppl1.pdf

[redacted]

24 February 2015

The Secretary
Chemicals Scheduling Secretariat (MDP 88)
Office of Chemical Safety
Department of Health
GPO Box 9848
CANBERRA ACT 2601
(email: chemicals.scheduling@health.gov.au)

Dear Sir/Madam

Re. Proposal to include 4-aminopropiophenone in Schedule 7.

I refer to the invitation for public comment on the above proposal dated 29 January 2015. I also refer to the applications before the APVMA to:

i. Approve 4-aminopropiophenone as an active constituent [redacted]
ii. Register two products containing 4-aminopropiophenone, [redacted] for the control of Wild Dogs and foxes respectively; and
iii. The Office of Chemical Safety Health Risk Assessment Technical Report related to these applications [redacted]

The OCS has recommended that 4-aminopropiophenone (PAPP) be listed in Schedule 7 of the SUSMP without cut-off, based on its high acute oral toxicity, genotoxicity potential and the applicability of the mechanism of action for PAPP (induction of methaemoglobinaemia) to humans, with serious clinical symptoms identified at methaemoglobin levels which can be induced by low dose exposure to PAPP.

This response agrees with the general proposal to include **PAPP technical material** in Schedule 7 (i.e. the concentrate), but **proposes that the use of PAPP in baits as proposed in the above mentioned applications presents sufficiently low risks to public health such that Schedule 6 is appropriate.** The reasons are explained as per the risk / benefit analysis set out in the published Scheduling Factors[1] as follows.

[1] https://www.tga.gov.au/book/chapter-3-classification-medicines-and-chemicals-schedules

1. What is the hazard?

The mechanism of action for PAPP involves the oxidation of haemoglobin to methaemoglobin (MetHb), causing a reduction in oxygen-carrying capacity of blood, resulting in death by metabolic hypoxia at elevated methaemoglobin levels. PAPP produces a range of toxicity in mammals depending on the species (marsupial carnivores being most susceptible): high acute oral toxicity in dogs (LD50 30-50 mg/kg bw); moderate acute oral toxicity in rats (LD50 177-221 mg/kg bw) and mice (LD50 168-233 mg/kg bw) and low acute oral toxicity in the guinea pig (1020 mg/kg bw). Repeat dose studies (14 day oral rats and monkeys) showed increase in MetHb from 20 mg/kg upwards. Human studies showed increase in MetHb from doses as low as 0.78 mg/kg bw however no other toxicological findings were observed. Genotoxicity studies (in vitro and in vivo) suggested that PAPP was an in vitro and in vivo genotoxicant.

[redacted]

Standard toxicity studies were not presented on the baits as they consisted mostly of food grade substances and PAPP. A dermal pharmacokinetics study dosing at 2000 mg/kg of PAPP [redacted]and 40% w/w PAPP paste applied directly to shin of shaved mice did not result in detectable absorption of PAPP transdermal or induce any signs of toxicity. The study did not lead to a detectable blood level of PAPP (LOQ 1 mg/L) at 24 hours after administration and with continuous exposure over that period.

The OCS report considered both bait products were of low acute oral toxicity. The baits were also not expected to be acutely toxic from other routes, or to be of high irritancy or sensitisation potential. Directions for the use of simple protective equipment (gloves) will prevent user contamination given the solid form of the bait. The hazard from handling baits will be negligible as PAPP has not been found to be absorbed from baits through skin. While PAPP is considered to be genotoxic by AMES and Mouse micronucleus tests the only possible route of exposure for this hazard is oral.

Both baits are a hard sausage type construction with a firm rubbery consistency, cut to the necessary length to provide the desired amount of PAPP per bait (the critical requirement for efficacy against the target pest). They also have visible plastic beads within the bait. Wild Dog baits are 50 mm diameter x 22 mm length. Fox baits are slightly smaller but include less PAPP [redacted]. The baits need to be tough and durable because they are placed into the environment where they need to maintain form and function for a number of weeks. As a result the baits are not easily consumed by people.

The hazard presented by baits is certainly not worse than many products to be found around the home such as bleach and drain cleaner.

2. How widespread is the hazard?

The hazard is confined to consumption of baits and the chance of accidental exposure will be very low. Users are instructed to not store PAPP [redacted]baits in a position accessible to children, and in a storage which is required to be lockable. With respect to use of the baits they are only applied at a rate of 1 bait per 5 to 10 hectares (20 baits per square kilometre). Baits are required to be buried and must be placed at least 150m from a dwelling; 20m from permanent or flowing water bodies; 5m from boundary fences; and 5m from the edge of formed public roadways.

As such the likelihood of a bait being found and consumed by any person is extremely low.

3. In what circumstances will the hazard arise?

The hazard will only occur if the baits are deliberately consumed. For MetHb related toxicity to occur a sufficient number of baits will need to be consumed quickly to enable sufficient MetHb to reach a toxic level before the body quickly metabolises MetHb via NADH-MetHb reductase back to Hb. Baits will need to be taken from containers from locked areas or following application, where they are buried in the ground.

4. What is the likelihood of the hazard occurring?

The hazard will only occur if the baits are consumed. The likelihood of this is low because:

i. The baits are required to be kept in a locked area;
ii. The baits are not palatable to humans, contain plastic beads and are not easily consumed;
iii. Once applied in the field they will be very difficult to locate and covered in dirt.

5. Who or what is at risk?

Dogs are most at risk as PAPP is highly acutely toxic to dogs, hence the purpose of the product. Children and adults are also at risk, children more so due to the lower body weight and therefore toxic dose level. Risks to adults are managed by appropriate label warnings and adult sensibility to not eat something that is clearly not a food. Risks to children are managed by the requirement to keep product away from children in locked areas and that label use restrictions and instructions require that baits be buried in the ground and away from areas likely to be frequented by children.

6. What are the consequences of the hazard in terms of severity (morbidity and mortality) and duration?

The consequences of the hazard are high if exposure reaches the required level.

The following applies the criteria as it relates to schedule 7 and 6 poisons.

Factors for dangerous poisons (schedule 7)

1. The substance has a high to extremely high toxicity.

Requirement:	PAPP [redacted] Baits:
Acute oral LD_{50} (rat) is 50 mg/kg or less.	Far greater than 50 mg/kg
Acute dermal LD_{50} is 200 mg/kg or less.	Likely far greater than 2000 mg/kg
Acute inhalation LC_{50} (rat) is 500 mg/m^3 (4 hours) or less.	Not relevant to product type and PAPP in not volatilised from solid baits
Dermal irritation is corrosive. Eye irritation is corrosive.	Not considered likely due to product type

2. The substance has a high health hazard.

Requirement: The substance presents a severe hazard from repeated and unprotected use or a significant risk of producing irreversible toxicity, which may involve serious, acute or chronic health risks or even death if it is inhaled, taken internally or penetrates the skin.

PAPP [redacted] Baits: Repeated exposure is not considered to present any significantly greater hazards as the substance is rapidly metabolised and excreted, and use is intermittent. Genotoxic hazard is not considered to be a significant risk given bait consumption is required.

3. The dangers of handling the poison are such that special precautions are required in its manufacture, handling or use.

Requirement: The dangers associated with handling the substance are too hazardous for domestic use or use by untrained persons and warrant restrictions on its availability, possession or use.

PAPP [redacted] Baits: Baits are very easy to handle safely with simple label instructions with respect to safety to people. Special training is not required. Use around domestic residences or the home garden is not allowed and baits must be stored away from children and in locked areas.

4. The substance has a high potential for causing harm at low exposure.

Requirement: The substance should be available only to specialised or authorised users who have the skills necessary to handle the substance safely. Restrictions on their availability, possession, storage or use may apply.

PAPP [redacted] Baits: The baits are a commercial use product and will only be available via standard rural agricultural chemical suppliers. Baits are very easy to handle safely with simple label instructions with respect to safety to people. Restrictions on availability are not considered necessary as special training is not required to enable safe handling and use. Use around domestic residences is not allowed and baits must be stored away from children in locked areas.

Factors for label use of "Poison" (schedule 6)

1. The substance has a moderate to high toxicity, which may cause death or severe injury (including destruction of living tissue) if inhaled, taken internally, or in contact with skin or eyes.

Requirement:	PAPP [redacted] Baits:
Acute oral LD_{50} (rat) is between 50 mg/kg - 2000 mg/kg.	~1322 mg/kg bw and 1731 mg/kg bw respectively
Acute dermal toxicity is between 200 mg/kg and 2000 mg/kg.	Expected to be negligible
Acute inhalation LC_{50} (rat) is between 500 mg/m^3 and 3000 mg/m^3 (4 hours).	Not relevant to product type
Dermal irritation is severe. Eye irritation is severe. Skin sensitisation is moderate to severe.	Not considered likely due to product type

2. The substance has a moderate health hazard.

Requirement: The substance presents a moderate hazard from repeated use and moderate risk of producing irreversible toxicity.

PAPP [redacted] Baits: Repeated exposure is not considered to present any significantly greater hazards than the acute hazard given the mode of action and as such can be considered moderate. Genotoxic hazard is not considered to be a significant risk given bait consumption is required.

3. Reasonably foreseeable harm to users can be reduced through strong label warnings, extensive safety directions and child-resistant packaging (where appropriate).

Requirement: Adequate packaging and labelling protects the consumer from the known danger(s) of the substance. Potential harm is reduced through labelling which informs the consumer about the safety measures to apply during handling and use (including safety directions) and child resistant packaging.

PAPP [redacted] Baits: Both products are to be stored in HDPE pails with tamper evident closures. The proposed label text includes considerable labelling advising of the hazards and suitable safety directions that adequately protect the user. The product is to be stored in a locker area away from children. Note the only expected route of exposure for toxicity is from oral consumption.

4. The substance has a moderate potential for causing harm.

Requirement: Potential harm is reduced through the use of distinctive packaging with strong warnings and safety directions on the label.

PAPP [redacted] Baits: Both products are supplied in strong packaging with labelling clearly identifying the purpose of the product and the hazards involved. The baits are considered to have low to moderate acute oral toxicity and be genotoxic if consumed at sufficient quantity. Removing opportunities for children to access baits is key to reducing risks of access and harm. Product is required to be kept in locked areas and is supplied in tamper evident pail containers. Baits applied to the environment are spaced far apart and are required to be buried.

This response is not attempting to request the risks be ignored but rather they be considered with regards to what is required to minimise the risks to appropriate levels. Appropriate packaging, label warning and instructions for safe storage and use are the most important means of reducing risks. Mandatory licensing and training of users, a likely result of a Schedule 7 classification, will not provide significant increases in safety, as the product is simple to handle and use, and will still be stored and used in the same manner regardless.

Adequate access to pest control products is creating a significant problem with vertebrate pest control in Australia. Considerable losses are occurring with respect to farm livestock and native animals and the peri urban fringe areas provide

reservoirs of important pests that prevent area wide eradication programs. There is a need to increase participation in pest animal management and access to baits is an important pre-requisite for this. In considering issues related to access of these products:

1 Foxes and wild dogs are an increasing problem in all areas of Australia and including the peri rural-urban fringe, where 1080 baits are not preferred. PAPP based baits provide a reduced hazard compared to 1080 baits.

2 Access to pest animals control products has reached a stage where programs are failing as fewer and fewer property owners participate due to the costs in time and high cost to undertake the necessary licensing courses.

3 This will lead to a serious reinfestation problem if not addressed. The PAPP project was designed to overcome the limitation to access for 1080 in sensitive areas

4 Many poisonous compounds are in everyday use and cause no or minimal problems if used correctly. The correct storage and use of PAPP baits will not present any greater risks than these everyday use products such as bleach, drain cleaner and pool chlorine.

5 Chemicals such as pindone can be toxic to many animals at high doses but are approved as S6 when supplied as a bait and have also had minimal problems over many years of use.

6 The PAPP baits proposed are not attractive to humans and are used at very low (per area) rates in the rural and semi-rural landscape.

7 There will be no supply of bait products via supermarkets nor recommendation for use in urban areas (a restriction NOT FOR USE IN THE HOME GARDEN may be used).

8 The specific human safety risks for PAPP are not great when it is bound throughout a solid bait. Though the dose in baits may be sufficient to kill a human via methaemoglobinaemia it requires an act of deliberate mis-use to achieve this. Appropriate packaging, storage and labelling can manage this risk.

9 Appropriate storage and disposal directions and packaging (sturdy pails with tamper evident lids and clear instruction) prevent access to children.

10 The baits will only be supplied to three groups: Rural agricultural chemical merchants (not urban hardware groups), government and semi government agencies and licensed pest animal contactors.

11 PAPP is not easily extracted from the baits and the baits incorporate plastic beads that will deter consumption by a human in addition to the baits not being attractive for humans to eat.

12 Overuse or mis-use of PAPP baits is not expected as the product is significantly more expensive that 1080 based products. Experience over 25 years in the field is that people are rarely careless with a product that is as valuable as PAPP baits are.

13 The requirement for obtaining a State Government authorisation, which accompanies a schedule 7 poison, takes considerable time and resources and often doesn't address the specific needs of the risks identified, as in this case. Risks with PAPP baits is simply to keep away from children.

14 Ready access to baits (without the need for prior authorisation) will enhance quick response capability at all levels of vertebrate pest control (essential if we have an exotic disease outbreak such as rabies) or to address immediate stock losses as quickly as possible. Ready access will also enable on call access and discourage the potential for storage of stockpiles if access is limited.

15 Comprehensive instructions and user information is being developed [redacted] and will be adapted into industry and IA-CRC communications channels direct to users and accompanied by appropriate stewardship instructions

16 An antidote for humans and animals (methylene blue) is available if required so treatment for misadventure if it is possible to treat quickly. Vets and users are being briefed on this.

17 Sub lethal exposures to PAPP may cause partial methaemoglobinaemia which is transient and followed by rapid and full recovery without intervention. This was proven in human clinical trials.

18 PAPP is used intermittently, is non-cumulative, metabolised quickly and not absorbed through the skin via handling, especially with the use of gloves and protective clothing.

In order for PAPP baits to be able to fulfil the national requirement for pest management in both rural areas and the peri rural-urban fringe it is imperative that the prepared manufactured baits containing PAPP are able to be distributed without the constraints attached to an S7 scheduling.

A schedule 7 classification for PAPP active constituent and other formulations above 1000 mg total PAPP content in a single package is considered appropriate. A cut-off to schedule 6 is considered appropriate and necessary for baits with 1000 mg PAPP or less, to allow appropriate action for important vertebrate pest management activities in Australia.

[redacted] is willing to consider other risk mitigation measures in order to achieve the S6 classification.

[redacted]

GICA
Goat Industry Council of Australia

DAIRY | MEAT | FIBRE | RANGELAND

The Secretary
Chemicals Scheduling Secretariat (MDP 88)
Office of Chemical Safety
Department of Health
GPO Box 9848
CANBERRA ACT 2601

Email: chemicals.scheduling@health.gov.au(link sends e-mail)

Public consultation on the proposed amendments to the Poisons Standard Advertised 29 January 2015

Proposed amendments to the poisons standard relating to the proposal to include 4-aminopropiophenone in Schedule 7.

The Goat Industry Council of Australia views with concern the proposal to list para-aminopropiophenone (PAPP) baits for wild dogs as a schedule 7, dangerous poison.

Foxes and wild dogs are an increasing problem throughout Australia. The impact on the Goat industry has been catastrophic in some areas. This recent impact has been particularly severe in, but by no means limited to, Western Australia where wild dogs have decimated wild goat populations. In many parts of Australia wild dogs are so severe that they prevent the raising of domestic or farmed goats without adequate dog fencing and continual control. This is impacting on our export and domestic markets affecting availability of supply and some cases viability of the industry.

Whilst 1080 poison commonly used for baiting, restrictions on its use and availability are limiting its effectiveness for wild dog and fox control. As a Schedule 7 poison 1080 is only available to authorised users who have completed a recognised course of training and have the skills necessary to handle it effectively. While most rural land owners and managers regularly complete chemical handling course to maintain accreditation under livestock product assurance programs many are not accredited to handle 1080.

Para-aminopropiophenone offers a very viable and much safer alternative to 1080. 1080 is extremely dangerous, there is no antidote and it is rightly classified as a schedule 7 poison with appropriate restrictions on its provision, storage and use. Para-aminopropiophenone is a much safer option with a readily available antidote should it be ingested by humans or domestic animals. It is thus a preferred option over 1080.

We understand para-aminopropiophenone is a more costly than 1080 and if it requires the same level of control over its use it will not be the wild dog poison of choice by many landholders. This will be a disappointing outcome for landholders who need to control wild dogs.

If para-aminopropiophenone is to be widely adopted as the dog poison of choice by landholders, the preferred option by the goat industry as para-aminopropiophenone presents considerably less risk than 1080, then it must be listed as a ***schedule 6 NOT a schedule 7*** poison.

Yours sincerely

[redacted]

[redacted]

27 February 2015

The Secretary
Chemicals Scheduling Secretariat (MDP 88)
Office of Chemical Safety
Department of Health
GPO Box 9848
CANBERRA ACT 2601
(email: chemicals.scheduling@health.gov.au)

Dear Sir/Madam

Re. Proposal to include 4-aminopropiophenone in Schedule 7.

In 2003 Australian wool growers recommended that Australian Wool Innovation invest in the development of a new chemical so that that industry wasn't reliant on a single poison for fox and wild dog control. That innovation was the first in this field for over 5 decades and was co-led by the [redacted].

Two criteria were critical to the choice of which chemical was selected:

1. that it could be accessed and used with less regulation than 1080 so that participation in control programs was higher and they were more effective, and
2. that it could be used where other control options (shooting/1080 baits) couldn't for the same reasons.

The Office of Chemical Safety has recently recommended that 4-aminopropiophenone (PAPP) technical active and all products containing PAPP be listed in Schedule 7 of the SUSMP.

Our organisation agrees that PAPP technical material belongs in Schedule 7 (i.e. PAPP technical active and pre-formulated PAPP concentrate), but counter to the recommendation by OCS we strongly submit that manufactured bait products containing PAPP do not present a significant public health risk and belong in Schedule 6.

PAPP bait products belong in Schedule 6 because:

1. they satisfy the criteria for Schedule 6 and fail the criteria for Schedule 7 set out in the published Scheduling Factors[1], and
2. they have an effective antidote to administer in the event of accidental consumption, which is consistent with requirement 2 S6 Schedule and comparable to other poison baits eg snail and slug baits that are generally included in a lower Schedule 5 category.

Adequate access to pest control products is creating a significant problem with vertebrate pest control in Australia.

In order for PAPP baits to be able to fulfil the national requirement for pest management in both rural areas and the peri rural-urban fringe it is appropriate that the prepared manufactured baits containing PAPP are able to be supplied and used consistent with S6 Scheduling.

[1] https://www.tga.gov.au/book/chapter-3-classification-medicines-and-chemicals-schedules

Yours sincerely,

[redacted]

[redacted]

[redacted]

on behalf of [redacted] CEO

Submission to ACCS Meeting, March 2015

Flupyradifurone

Presented by [redacted]
27 February, 2015

The ACCS is to consider the proposal to create a new schedule 5 or 6 entry for flupyradifurone with or without a scheduling cut-off for preparations with low concentrations.

This submission, [redacted] for flupyradifurone and the end use product [redacted] respectively, provides comment on the draft OCS evaluation report dated 12 December 2014 in relation to this matter. In this report OCS proposed listing the active constituent flupyradifurone in **Schedule 6** of the SUSMP without exemptions or cut-offs.

In reference to an earlier comment from [redacted] the report noted;

"*The OCS has noted* [redacted] *comments regarding the skin sensitization response observed in the* [redacted] *product, and acknowledges that part of the consideration for scheduling revolves around the definition of 'slight' vs 'moderate/severe' skin sensitization response. In noting that there is a clear sensitization response for the neat formulation, and that the product would be classified as a sensitizer (Category 1B by GHS; R43 by the Approved Criteria), the OCS has also taken into account the other SPF criteria, including a broader consideration of whether a sensitizing substance would be considered a low or moderate health hazard from repeated use and what the irreversible toxicity risks may be. With this in mind, the OCS remains of the view in this case that no cut-off to Schedule 5 should apply for* [redacted]*, containing* [redacted] *Flupyradifurone. However, acknowledging the points raised by* [redacted]*, the* [redacted] *argument above will be forwarded in full to the Delegate for his deliberation as part of the Scheduling submission, and* [redacted] *is also encouraged to provide a submission during the public consultation process*."

[redacted] disagrees with the OCS claim that "*there is a clear sensitization response for the neat formulation*," and believes that the skin sensitization potential for [redacted] is questionable. A closer examination of the stimulation index (SI) values for the animals exposed to the neat formulation shows that the actual mean SI (carried to three decimal places) is 2.956, yielding an overall SI for the undiluted formulation that is less than the minimum value of 3.0 needed for classification as a skin sensitizer, and less than half of that achieved by the positive control (i.e. 30% HCA, SI = 6.4). Moreover, while there is a dose-responsive increasing trend in the calculated SI values, the increase is not linear (i.e. SI at 100% concentration is only 0.66 higher than that at 50%), and the variability increases with concentration. Based on these characteristics, [redacted] believes that the sensitization potential for [redacted] is borderline, or very slight, which qualifies for Schedule 5 according to SPF guidelines.

OCS also expressed concern over "*whether a sensitizing substance would be considered a low or moderate health hazard from repeated use and what the irreversible toxicity risks may be*." It should first be noted that based on the nature of chemical sensitizers (i.e. repeated chemical exposure can elicit a slight sensitization response just as it can a severe sensitization response), the concern over repeated use raised by OCS would apply equally to skin sensitization potential in both Schedule 5 and Schedule 6, and therefore, is not justification for elevation of a substance into Schedule 6. [redacted] believes that "irreversibility" in the traditional sense (e.g. whether

increases in liver weight are no longer observed after a period of no chemical exposure) does not apply to skin sensitization as it does to other forms of toxicity. Skin sensitization, by definition, is the induction of increased immunologic responsiveness to a chemical allergen, facilitating the elicitation of contact dermatitis. It is well known that many forms of immunity lack longevity (Siegrist, 2013). Allergies, for example, can and do resolve, in some cases due to a lack of exposure and in some cases due to tolerance induction via exposure (Van Hove et al., 2007). Therefore, it may not be appropriate to interpret an immunological response in terms of reversibility.

In addition to having low acute toxicity and being non-corrosive, [redacted] meets the remaining criteria for a label use of "Caution" (Schedule 5). The extensive data package for the technical active ingredient, flupyradifurone, shows that the substance has a low health hazard. There is no evidence of mutagenicity, carcinogenicity, or immunotoxicity, and as noted in the OCS Health Risk Assessment Technical Report, flupyradifurone is not a reproductive toxicant, has only weak acute neurotoxicity potential, and is not considered to be a repeat dose neurotoxicant. These conclusions were made based on the results of toxicity tests conducted on the technical material. In an occupational situation, humans will be exposed to the formulated product containing low levels of the active ingredient. Moreover, the U.S. EPA determined that the toxicity was sufficiently low to justify granting the reduced risk 4-hour REI under the Worker Protection Standard as opposed to the shortest (12-hour) REI ordinarily based on acute toxicity category III for dermal toxicity, skin irritation, and eye irritation. Thus, the formulated product and the active ingredient have a low potential for causing harm or injury to humans, and specialized equipment is not required for safe use of the formulated product. The label, which instructs workers to wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow-length chemical resistant gloves when opening the product container and preparing spray, adequately protects workers from any direct contact with the product.

[redacted] believes that the weight of the evidence and supporting data justify placement of [redacted] into **Schedule 5** of the SUSMP. The acute toxicity of the substance is low, and the results of the dermal sensitization study support the conclusion of having very slight sensitizing potential. The favorable toxicology profile of the active ingredient, flupyradifurone, further supports the formulated product, [redacted], as having a low health hazard and unlikely to cause harm or injury to humans.

References:

Siegrist, C. (2013). 2 - Vaccine immunology, In Vaccines (Sixth Edition). Edited by Plotkin, S.A., Orenstein, W.A., Offit, P.A., Saunders, W.B. London, p. 14-32, ISBN 9781455700905.

Van Hove, C.L., Maes, T., Joos, G.F., and Tournoy, K.G. (2007). Prolonged inhaled allergen exposure can induce persistent tolerance. American Journal of Respiratory Cell and Molecular Biology, **36**(*5*):573-584.

[redacted]