Submission to the Inquiry into the Agricultural and Veterinary Chemicals Legislation Amendment (Streamlining Regulation) Bill 2018.

Ian F. Musgrave, Adelaide Medical School, The University of Adelaide, Adelaide, SA, 5005, Australia

Address for Correspondence:

Dr. Ian F. Musgrave

School of Medicine,

Level 3 Medical School North Building,

The University of Adelaide,

Frome Road,

Adelaide 5005, Australia

Declaration:

I declare that I am completely independent to theAustralian Pesticides and Veterinary Medicines Authority(APVMA), agricultural chemical manufacturers and suppliers and the agricultural industry generally. I have received no funding from agricultural chemical manufacturers and suppliers and the agricultural industry generally (I have some funding for the Australian Pork Limited for toxicology studies). This submission is in my personal capacity and is not the official position of either the Australasian Society of Experimental Pharmacology and Toxicology or the University of Adelaide. My qualifications and expertise are listed in the appendix.

INTRODUCTION

Our food supply rests critically on a variety of chemicals we use, amongst other things, to kill or discourage pests, prevent disease and fortify our soils. The chemical landscape this occurs in is rapidly changing, as we learn more about the ecology of our farmland and native landscapes and with the rise of pest resistance and the introduction of new pest species.

It is important that we have new and/or improved agents (be they chemical or biological) to deal with these challenges. Our ideal agents would be selective for diseases and pests without impact on other species (and most especially to human health either directly through exposure or indirectly though changes to our foods or ecosystems). The impact of any agent's residues in foods stuffs for export markets is an important consideration as millions of dollars of export earning rely on our food exports being free from contamination with these agents.

Any regulatory agency faces a number of issues with potential conflicts. The need to bring new agents to the market as quickly as possible, needs to be balanced against the potential harms they may cause, which may require substantial evaluation and significant post marketing surveillance.

The work of the AVPMA is made more complex than that of the equivalent drug and medical device regulatory authority in Australia, the Therapeutic Goods Administration, due to the wider variety of environments and border range of species that will be exposed to agricultural agents.

Further consideration is that many of these agents will be far more widely spread in the environment than exposures to therapeutic medicines; having potential for far more serious outcomes if adverse events are found in post marketing and withdrawing them from the environment is problematic (the situation with Per- and poly-fluoroalkyl substances is but one example). Thus the diligence of any regulatory agency must be high and will make rapid approvals not feasible.

The aims of the Agricultural and Veterinary Chemicals Legislation Amendment (Streamlining Regulation) Bill 2018 which is to amend the Agricultural and Veterinary Chemicals Code Act 1994 include:

enable the use of new, simpler regulatory processes for low risk chemical products (to simplify the approval of active constituents and labels, and the registration of certain products);

provide the Australian Pesticides and Veterinary Medicines Authority (APVMA) and industry with more flexibility to deal with certain types of new information provided when the APVMA is considering an application;

provide for extensions to limitation periods and protection periods as an incentive for chemical companies to register certain new uses of chemical products – particularly those uses (minor uses) with insufficient commercial return for chemical companies to normally add to the product label;

optimise risk communication about chemical products by improving the transparency of voluntary recalls;

simplify the APVMA's corporate reporting requirements; and

make minor and machinery changes including removal of unnecessary and redundant provisions.

I will make comments on some of the proposals where my areas of expertise are relevant.

Proposed amendments as part of the Agricultural and Veterinary Chemicals Legislation Amendment (Streamlining Regulation) Bill 2018

Proposal 1–Provisional registration or variation with conditions for efficacy (provisional registration of chemical products)
Provide the APVMA with discretion to provisionally register products, or provisionally register new uses of existing chemical products(vary product registrations), by allowing information about the efficacy of a product to be provided after registration, as a condition of registration.

While efficacy is claimed the issue here and, one of the issues that must be considered is safety (after all Lead Arsenate is an effective pesticide, but has inimical safety issues) the idea that you would register something without knowing its efficacy is a path to wasting time and resources on something that has not been shown to work.

In the consultation the example given is a compound that was registered for use on wheat with provision licencing for use in other cereals. While this is a plausible example, given the ranges of environmental conditions and inter species variation the efficacy under these circumstances is not

given, and the wait for actual efficacy data would be a minor inconvenience compared to using an agent that doesn't work for up to 3 years. This is particularly so for weeds of national significance where no existsing agents are available, applying an agent of unknown efficacy has the potential for biot wasting resources and producing adverse events.

While the draft legislation has a period of three years for efficacy data to be submitted, this is probably too long. A tighter time frame should be investigated with the input from expert scientists (both field and regulatory).

Proposal 2–An accreditation scheme for assessors in the future (accreditation of assessors)

Provide for a disallowable APVMA legislative instrument to prescribe an accreditation scheme for assessors in the future, including charges for accreditation, and provide for sanctions for contravening conditions of accreditation

The AVMPA not only must be independent, but must been seen to be independent for there to be public trust in the registration process. The evaluation process must be at arm's length from the sponsors (as with the TGA approval of medicines) and they should not be paid by the sponsors. Given the recent publicity over the potential conflicts of interests of the AVMPA itself for funding its assessment activities via sponsor payment, the perceived conflict of interest in the case will be substantial (even though the assessors are professionals of the highest integrity, it is the perceived conflict of interest that is the issue).

Providing for formal accreditation, with formal requirements fro data handling, conflict of interest would be a good approach.

Further details on the natures of the offences which will incur sanction, and how this will be determined is required.

Proposal 3 –Prescribed approvals and registrations
(approval and registration for active constituents, chemical products or labels)

Provide for prescribed approvals and registrations to simplify the approval of active constituents and labels, and the registration of certain products (to be set out in regulations or other instruments)

The purpose of this proposal is unclear. "This new process would apply for those active constituents, chemical products and labels where minimal or no assessment of technical information was required. " It is hard to imagine a circumstance where minimal or no assessment of technical information is required for a new approval.

Proposal 5–Prescribe certain information that can be taken into account if provided during an assessment (information to be taken into account in determining applications)

Provide the APVMA and industry with more flexibility to deal with certain prescribed types of information (to be set out in regulations or other instruments) given while the APVMA is determining an application.

This will only serve to make the application process more piecemeal and complicated, not flexible. The example given is providing Good Manufacturing Practice certification after the registration process has begun. But this is precisely the certification that **must** be in place before application proceeds (see for example the TGA regulations over approvals, even low risk agents must have GMP in place before application).

Proposal 6 –Provide for computerised decision-making (computerised decision-making)

Modernise the Agvet Code by providing for the APVMA to use computerised decision-making

While computerised decision making can speed up certain processes (like checking if all boxes are ticked and all attachments attached), this section gives no useful idea of how this will be accomplished. Given the high profile failures of several computerised systems it would have been good to have some more detail about what exactly the decisions that would be computerised are. As it stands this section allows no useful comment to be made beyond "rethink this".

Proposal 9 – Standards for registered chemical product constituents (definition of registered chemical product)

Reduce the regulatory burden on industry and the APVMA by allowing defined variations to the constituents in chemical products.

While the idea that there can be some degree of variation in the chemical constituents of a product (with in manufacturing tolerances) is attractive, this section needs more clarity while a ± 5% concentration of an active ingredient is not problematic, these tolerances should be carefully defined (the Pan Pharmaceuticals issue came about because of large excursions in product concentration). Non active ingredients might be assumed to be less of a problem, but the human health literature is replete with examples where supposed non-active excipient substitution caused severe health issues. The current proposal lacks appropriate detail.

CONCLUSION

Timey registration of new agents (including new chemical entities) for agricultural and veterinary purposes is vital for the agricultural industry. However, it should not be at the expense of careful consideration of the risks, including risks to human health) and benefits, and the need for the process to be seen to be independent by the general public so as not to erode trust in the regulators.

Several of the proposals in the proposed legislation fail to do this, and have the potential to erode both trust and safety without any concomitant benefits.

REFERENCES

1. Current legislation https://www.legislation.gov.au/Details/C2016C01012

2. proposed legislation: http://www.agriculture.gov.au/SiteCollectionDocuments/ag-food/agvet/reforms/exp-draft-agvet-leg-streamlining-reg-bill-2018.pdf

3. Consultation document: http://www.agriculture.gov.au/SiteCollectionDocuments/ag-food/agvet/reforms/consultation-streamlining-reg-agvet.pdf

I certify that I have no competing interests or conflicts of interest.

Yours Sincerely,

IAN MUSGRAVE

Senior Lecturer

26/11/2018

APPENDIX:

Qualifications, accreditations and experience

I hold the following formal qualifications:

Bachelor of Applied Science (Queensland Institute of Technology)

Masters of Science (University of Queensland)

Doctor of Philosophy (Pharmacology, University of Melbourne)

I have the following experience:

I am a research scientist of 29 years standing in pharmacology and toxicology with 74 peer-reviewed publications and 4 book chapters. My research includes work on venoms, defense peptides cyanobacterial toxins and the toxicity of herbal medicines (including anaphylactic reactions) as well as contaminants and adulterants in herbal medicines, with particular reference to hepatotoxicity.

I also have 17 years of experience teaching and coordinating the second and third year courses in pharmacology and toxicology to science and nursing students on the toxicology, with 10 years of focus on herbal medicines.

I am currently the chair of the Toxicology Special Interest Group of the Australasian Society of Experimental Pharmacology and Toxicology (ASCEPT), the peak pharmacology/toxicology body in Australia. I am also on the Nominating Committee of the International Union of Toxicologists.

I have organized symposia on the toxicology of herbal medicines and organised a symposium on regulatory toxicology for the ASCEPT national meeting in 2014. I have been an invited speaker on Contamination, adulteration and side effects of Chinese and herbal medicines to an international conference of the British Pharmacological society in 2015. I have also been an invited speaker on toxicology to national meetings in 2015 and 2016.

In my capacity of chair of the Toxicology Special Interest Group I have been co-author of submissions from ASCEPT on the following TGA Consultations: “The regulatory framework for advertising therapeutic goods”. Co-author of submission from ASCEPT on TGA Consultation: “Scheduling of 1,3-dimethylamylamine (DMAA)”. Co-author submission to the “Review of Pharmacy Remuneration and Regulation” Co-author of submission from ASCEPT on draft document “Evidence Required to Support Indications for Listed Medicines”.

Of additional relevance to this submission is that I have been an external reviewer for the TGA for a preclinical portfolio for a new drug.