

Comments from the Victorian Departments of Health and Human Services, and Economic Development, Jobs, Transport and Resources

Due date – 10 February 2015

The Victorian Departments of Health and Human Services and Economic Development, Jobs, Transport and Resources (the Departments) welcome the opportunity to provide comments on Proposal P1027 and to provide specific examples of cases of unexpected agvet chemical residues in foods as requested by Food Standards Australia New Zealand (FSANZ).

The Consultation Paper proposes an approach to manage the presence of low-level residues of agricultural and veterinary chemicals (agvet chemicals) in foods without specific maximum residue limits (MRLs).

It is understood that the key principles underpinning Proposal P1027 are that:

- FSANZ proposes to create low MRLs for certain listed agvet chemicals for 'other foods' to address issues associated with the current zero tolerance requirement in the Code;
- highly toxic products such as rodenticides will not be considered;
- the proposal would not affect the current 'nil detectable' requirement around the presence of non-listed agvet chemical residues in food; and
- the proposal is consistent with the principles provided by the Ministerial Policy Guideline on the Regulation of Residues of Agricultural and Veterinary Chemicals in Food.

The Departments support these principles, noting that there may also be cases and justification for the inclusion of some veterinary medicines in the scope of P1027. This is discussed in more detail below.

The Departments have long held concerns around the wording of Standard 1.4.2 cl 2 (2) of the Code, which states, *If a MRL for a chemical is not listed in this Standard there must be no detectable residue of that chemical in that food*. This prohibition has become increasingly problematic as the sensitivity of analytical methodologies continues to improve. Decades ago the limit of detection for many chemicals was in parts per million. Modern techniques can now detect below parts per trillion for some chemicals. Many products that were considered compliant only a few years ago (i.e. contained undetectable traces of a chemical) would now be non-compliant, even though the trace levels fall well below those of any public health or safety concern.

Spray drift of legitimately used chemicals can contaminate crops kilometres away, where no MRL exists for that chemical. The residues will in these cases be very low and will not present a public health or safety concern, but will render that crop non-compliant with the Food Standards Code. Such adventitious contamination places a significant burden on industry and regulators and has been used as a barrier to trade, both domestically and internationally. It is costly for farmers, particularly the horticulture sector, to have product rejected due to adventitious presence of extremely low levels of listed chemicals. The sensitivity of testing also means that contact with produce handling equipment may be sufficient to cross contaminate 'clean' product and render it non-compliant.

The Departments support FSANZ's proposed approach, as the levels set will be underpinned by risk assessments (which include dietary exposure considerations) and will result in certainty and national consistency for industry and regulators.

The Departments support the current arrangement of encouraging applications to FSANZ for MRLs for imported products where there is a need to accommodate different legitimate chemical usage based on the specific country's conditions.

Timely introduction of priority chemical assessments for 'all other foods' will be important. It would be expected that all new chemical registrations and amendments to the Food Standards Code would assess the need for an 'all other foods' MRL and undertake the necessary risk assessment at that time.

The Department of Economic Development, Jobs, Transport and Resources, as the regulator in Victoria for control of use of agvet chemicals, supports the introduction of tolerance levels as proposed, which would allow food with low level residues **that do not present a public health or safety concern** to be marketed, but would allow agvet chemical control of use regulators to take action to improve chemical use practices and to prevent recurrence. Thus, the Departments support the inclusion of the 'all other foods' MRL, set under P1027, in the Food Standards Code only. This will enable the APVMA MRL standard to continue to be used as the primary reference for good agricultural practice.

Response to request for information

In response to the invitation made by FSANZ to present specific examples of cases where unexpected agvet chemical residues were identified in foods and the reasons why this has occurred, the Departments provide the following examples.

Veterinary Medicines

Residues of nicarbazin (a coccidiostat) found in eggs are usually due to cross-contamination from nicarbazin that has been used in a broiler feed. It has been found that trucks carrying broiler feed treated with nicarbazin are subsequently used to transport layer feed resulting in cross contamination. The cleaning process used between each of the loads is problematic as the product is electrostatic, making it difficult to completely remove.

Spray Drift

The two most common herbicides detected in foods as a result of spray drift are 2,4-D and glyphosate. The commodity most commonly affected in these instances is grapes. Whilst there is currently a temporary MRL for 2,4-D in grapes it is set at or about the analytical limit of detection of 0.05 mg/kg. There is no MRL for glyphosate in grapes. As these are both widely used herbicides, the potential for spray drift resulting in low concentration contamination of other horticulture crops is high and should be considered.

Fungicide contamination

Oxadixyl is a fungicide that is used to control downy mildew in lettuce. It has been found that rotational crops, in particular celery, grown in the same soil after lettuce may have detectable residues of oxadixyl. The rotation crop is taking up residual oxadixyl from the soil causing the unacceptable residues. Oxadixyl is registered for use on lettuce, for which there is a MRL, but there is no MRL for oxadixyl in celery.

In the pome and stone fruit industries, the post-harvest treatment of produce with fungicides is common. There are a number of cases where untreated fresh produce either stored in the same coolroom or crates previously used for treated produce has contained residues for which there is no MRL.

The fungicides iprodione and thiabendazole are commonly applied to pome and stone fruits as post harvest treatments. Residues of these fungicides have been detected in other commodities including quince, fig, broccoli, lemons and chestnuts to which the fungicides were not directly applied. These inadvertent residues were due to cross

contamination from packing and storage infrastructure that had been used for treated produce and then subsequently used for untreated produce.

Carbendazim is a fungicide previously registered for use on a number of commodities, but subsequent to a review has had its registration reduced and relevant MRLs withdrawn. There is evidence that earlier use of this chemical has contaminated some farm infrastructure, in particular packing crates, and is now resulting in detectable residues in produce coming into contact with this infrastructure. Such residues have been detected in chestnuts and lemons.

Other

Diphenylamine (DPA) is a scald inhibitor used to treat apples and pears. This chemical has been detected in other commodities to which it was not directly applied. These commodities have included quince, plums, cherries and lemons. The cause of these residues has most likely been cross contamination from volatilisation in a coolroom or from packing lines used for both treated and untreated fruit.