

**12 December 2001**  
**06/02**

**INITIAL/DRAFT ASSESSMENT**  
**[PRELIMINARY ASSESSMENT - S.13 AND FULL ASSESSMENT -**  
**S.15] S.36**

**APPLICATION A447**

**MAXIMUM RESIDUE LIMITS**

**DEADLINE FOR PUBLIC SUBMISSIONS** to the Authority in relation to this matter: **23 JANUARY 2002** (See 'Invitation for Public Submissions' for details)

## EXECUTIVE SUMMARY

- On 24 November 2000, the Australia New Zealand Food Standards Council (ANZFSC) adopted the *Australia New Zealand Food Standards Code* (published as Volume 2 of the *Food Standards Code*). Subsequently all applications to amend maximum residue limits (MRLs) will now also be incorporated into Volumes 1 and 2 of the *Food Standards Code* (Standard A14 and Standard 1.4.2 respectively). Consequently all references throughout this document to the *Food Standards Code* are references to both Volumes 1 and 2 of the *Food Standards Code*.
- The agreement between the Commonwealth of Australia and the Government of New Zealand to establish a system for the development of joint food standards (the Treaty) excluded MRLs for agricultural and veterinary chemicals in food. Australia and New Zealand separately develop MRLs for agricultural and veterinary chemicals in food.
- The current Application (**A447**) is a routine application from the National Registration Authority for Agricultural and Veterinary Chemicals (NRA), to update the *Food Standards Code* in order to reflect current registration status of chemicals in agricultural and veterinary use in Australia.
- There are no MRLs for antibiotic residues in this application.
- The Therapeutic Goods Administration (TGA) of the Commonwealth Department of Health and Aged Care has undertaken an appropriate toxicological assessment of the chemicals and where appropriate has set an acceptable daily intake (ADI).
- ANZFA is satisfied from the accompanying dietary modelling performed that the residues associated with the proposed MRLs do not represent an unacceptable risk to public health and safety.
- None of ANZFA's section 10 objectives are compromised by the proposed changes.
- The Regulatory Impact Assessment supports the requested MRLs. ANZFA considers that this does constitute a potential Sanitary and Phytosanitary matter and will raise a World Trade Organization (WTO) notification.

### 1. ISSUES

An application has been received from the National Registration Authority for Agricultural and Veterinary Chemicals (NRA) on 18 July 2001 seeking to amend Standards A14 and 1.4.2 of the *Food Standards Code*. The proposed amendments to Schedule 1 of the Standards would align Maximum Residue Limits (MRL) for non-antibiotic agricultural and veterinary chemicals in the *Food Standards Code* with the MRLs in the *NRA MRL Standard*.

The NRA has registered or varied the registration of specific chemical products, and as a result their application seeks to:

- include MRLs for the new chemical, carfentrazone-ethyl;
- include MRLs for certain foods for azoxystrobin, bifenthrin, carbendazim, chlorfenvinphos, chlorpyrifos, dimethomorph, diquat, dithiocarbamates, emamectin, endosulfan, fipronil, fluazifop-butyl, fluquinconazole, fluvalinate, glyphosate, haloxyfop, indoxacarb, methomyl, metolachlor, naled, phosphine, pirimicarb, propiconazole, pymetrozine, pyrimethanil, spinosad, sulfosulfuron and tebuconazole;
- change MRLs for certain foods for chlorfenapyr, chlorfenvinphos, chlorpyrifos, endosulfan, glyphosate, haloxyfop, imidacloprid, ivermectin, methidathion, methomyl, pyrimethanil and uniconazole-p;
- amend the residue definitions for disulfoton, emamectin and ivermectin, zinc phosphide; and
- delete some MRLs for bifenthrin, chlorfenvinphos, chlorpyrifos, endosulfan, fenoxycarb, fluazifop-butyl, fluquinconazole, glyphosate, haloxyfop, methidathion, metolachlor, pirimicarb, pyrimethanil and spinosad.

More specific details of the proposed MRL changes are provided in the Summary of Proposed MRLs for A447 (Attachment 1).

### **1.1 Antibiotic MRLs**

There are no MRLs for antibiotic residues in this application.

## **2. BACKGROUND**

In Australia, the NRA is responsible for registering agricultural and veterinary chemical products, granting permits for use of chemical products and regulating the sale of agricultural and veterinary chemical products. Following the sale of these products, the use of the chemicals is then regulated by State and Territory ‘control of use’ legislation.

Before registering such a product, the NRA must be satisfied that the use of the product will not result in residues that would be an undue risk to the safety of people, including people using anything containing its residues. When a chemical product is registered for use or a permit for use granted, the NRA includes MRLs in their *NRA MRL Standard*.

These MRLs are then adopted into ‘control of use’ legislation in some jurisdictions and assist States and Territories in regulating the use of agricultural and veterinary chemicals.

### **2.2 Maximum Residue Limits**

The MRL is the highest concentration of a chemical residue that is legally permitted or accepted in a food. The MRL does not indicate the amount of chemical that is always present in a treated food but it does indicate the highest residue that could possibly result from the registered conditions of use. The concentration is expressed in milligrams per kilogram (mg/kg) of the food.

MRLs assist in indicating whether an agricultural or veterinary chemical product has been used according to its registered use and if the MRL is exceeded then this indicates a likely misuse of the chemical product. MRLs are also used as standards for the international trade in food. Additionally, MRLs assist in ensuring that residues are no higher than is necessary for effective control of pests and disease.

As stated above, the NRA includes MRLs in their *NRA MRL Standard* when they register a chemical product for use or grant a permit for use. The NRA then notifies ANZFA of these MRLs so that ANZFA may consider them for inclusion into the *Food Standards Code*.

In relation to MRLs, ANZFA's role is to ensure that the potential residues in treated food do not represent an unacceptable risk to public health and safety. ANZFA will not recommend MRLs for inclusion in the *Food Standards Code* where the dietary exposure to the residues of a chemical could represent an unacceptable risk to public health and safety. In assessing this risk, ANZFA conducts dietary exposure assessments in accordance with internationally accepted practices and procedures.

In summary, the MRLs in the *NRA MRL Standard* are used in some jurisdictions to assist in regulating the use of agricultural and veterinary chemical products under State and Territory 'control-of-use' legislation. Whereas the MRLs in the *Food Standards Code* apply in relation to the sale of food under State and Territory food legislation and the inspection of imported foods by the Australian Quarantine and Inspection Service.

### **2.3 Maximum Residue Limits applications**

After registering the agricultural or veterinary chemical products, based on their scientific evaluations, the NRA makes applications to ANZFA to include MRLs in the *Food Standards Code*. ANZFA reviews the information provided by the NRA and validates whether the dietary exposure is within agreed safety limits. If satisfied that the residues do not represent an unacceptable risk to public health and safety and following consultation, ANZFA makes recommendations to ANZFA to adopt a draft variation to the *Food Standards Code* and include the MRLs in the *Food Standards Code*. The inclusion of the MRLs in the *Food Standards Code* has the effect of allowing treated produce to be legally sold, provided that the residues in the treated produce do not exceed the MRL.

Changes to Australian MRLs reflect the changing patterns of agricultural and veterinary chemicals available to farmers. These changes include both the development of new products and crop uses, and the withdrawal of older products following review.

### **2.4 Food Standards-Setting in Australia and New Zealand**

The *Agreement between the Commonwealth of Australia and the Government of New Zealand to establish a system for the development of joint food standards* (the Treaty), excluded MRLs for agricultural and veterinary chemicals in food from the joint food standards setting system. Australia and New Zealand separately and independently develop MRLs for agricultural and veterinary chemicals in food.

## **2.5 Trans Tasman Mutual Recognition Arrangement**

Following the commencement of the Trans Tasman Mutual Recognition Arrangement (TTMRA) between Australia and New Zealand on 1 May 1998:

- food produced or imported into Australia, which complies with Standard A14 or Standard 1.4.2 of the *Food Standards Code* can be legally sold in New Zealand; and
- food produced or imported into New Zealand, which complies with the *New Zealand (Maximum Residue Limits of Agricultural Compounds) Mandatory Food Standard, 1999* can be legally sold in Australia.

## **2.6 Food Standards Code**

On 24 November 2000, the Australia New Zealand Food Standards Council (ANZFSC) adopted the *Australia New Zealand Food Standards Code* (published as Volume 2 of the *Food Standards Code*). Subsequently all applications to amend MRLs will now also be incorporated into Volumes 1 and 2 of the *Food Standards Code* (Standard A14 and Standard 1.4.2 respectively). Consequently all references throughout this document to the *Food Standards Code* are references to both Volumes 1 and 2 of the *Food Standards Code*.

## **2.7 MRLs for Permits**

Some of the proposed MRLs in this application are temporary and are indicated by a ‘T’ in the Summary of the Requested MRLs for A447 (Attachment 1). These MRLs may include uses associated with:

- the minor use program;
- off-label permits for minor and emergency uses; or
- trial permits for research.

ANZFA does not issue permits or grant permission for the temporary use of agricultural and veterinary chemicals. Further information on MRLs for permits can be found on the website of the NRA at <http://www.nra.gov.au> or by contacting the NRA on +61 2 6272 5158.

## **2.8 Limit of quantification**

Some of the proposed MRLs in this application are at the limit of quantification, that is the lowest concentration of a pesticide residue contaminant than can be identified and quantitatively measured in a specified food, agricultural commodity or animal feed with an acceptable degree of certainty by a regulatory method of analysis.

## **3. OBJECTIVE**

The objective of the proposed amendment in this application is to allow the legal sale under food legislation of legally treated produce. The NRA has already registered or varied the registration of specific chemical products under the NRA’s legislation, and now seeks, by way of this application to include the relevant MRLs in to the *Food Standards Code*.

## 4. DIETARY EXPOSURE ASSESSMENT

Before an agricultural or veterinary chemical is registered, the *Agricultural and Veterinary Chemicals Code, 1994* requires the NRA to be satisfied that there will not be any appreciable risk to the consumer, to the person handling, applying or administering the chemical, to the environment, to the target crop or animal, or to trade in an agricultural commodity. ANZFA's responsibility is to ensure that the residues in food resulting from the use of agricultural and veterinary chemical products do not represent an unacceptable risk to public health and safety.

The potential public health implications are assessed by comparing the dietary exposure with the relevant health standard. There are a number of methods for estimating dietary exposure based on the type of information that is available. The three that were considered in this application were the National Theoretical Maximum Daily Intake (NTMDI), the National Estimated Daily Intake (NEDI) and the National Estimated Short Term Intake (NESTI).

### 4.1 Acceptable Daily Intake

The Acceptable Daily Intake (ADI) is the daily intake of an agricultural or veterinary chemical, which, during the consumer's entire lifetime, appears to be without appreciable risk to the health of the consumer. This is on the basis of all the known facts at the time of the evaluation of the chemical. It is expressed in milligrams of the chemical per kilogram of body weight.

ANZFA considers that the dietary exposure to the residues of a chemical is acceptable where the best estimate of dietary exposure does not exceed the ADI.

### 4.2 National Estimated Daily Intake

The NEDI may represent a more realistic estimate of dietary exposure if the data are available and it is the preferred calculation. It may incorporate more refined food consumption data including that for specific sub-groups of the population. The NEDI calculation may take into account such factors as the proportion of the crop or commodity treated; residues in edible portions and the effects of processing and cooking on residue levels; and may use median residue levels from supervised trials rather than the MRL to represent pesticide residue levels. When adequate information is available, monitoring and surveillance data or total diet studies, such as the Australian Total Diet Survey (ATDS), may also be used.

### 4.3 National Theoretical Maximum Daily Intake

The NTMDI is a prediction of the long-term daily intake of a pesticide and is calculated by multiplying the MRLs established and proposed for a chemical by the average daily consumption for each food commodity across the whole population and summing the products.

$$\text{NTMDI} = \sum \text{MRL}_1 \times F_1, \text{ where}$$

$\text{MRL}_1$  = Maximum Residue Limit for a given food commodity (mg/kg)  
 $F_1$  = National consumption of that food commodity per person (kg/day)

The NTMDI is calculated in milligrams of residue per person and expressed as a percent of the ADI, adjusting for the average bodyweight of the population.

The NTMDI is an overestimate of the true pesticide residue intake because it assumes that the entire national crop is treated with a pesticide and that the entire national crop contains residues equivalent to the MRL. In reality, only a portion of a specific crop is treated with a pesticide; most treated crops contain residues well below the MRL at harvest; and residues are usually reduced during storage, preparation, commercial processing and cooking. It is also unlikely that every food for which an MRL is proposed will have been treated with the same pesticide over the lifetime of consumers.

As the NTMDI is a gross overestimate of dietary exposure, it is commonly used as a screening calculation. If the NTMDI does not exceed the ADI, it is highly unlikely that the ADI would ever be exceeded, even for high intake consumers.

#### **4.4 Food Consumption Data**

The NRA and ANZFA have agreed that all dietary exposure assessments for agricultural and veterinary chemicals undertaken by the NRA will be based on food consumption data for raw commodities, derived from individual dietary records from the latest 1995 National Nutrition Survey (NNS). The Australian Bureau of Statistics with the Commonwealth Department of Health and Aged Care undertook the NNS survey over a 12-month period (1995-early 1996). The sample of 13,858 respondents aged 2 years and older was a representative sample of the Australian population and, as such, a diversity of food consumption patterns was reported.

A computer program developed by ANZFA derives raw commodity consumption data used in the NRA dietary exposure assessments. The program accesses the 13 858 individual dietary records from the 1995 NNS, and applies recipes to all mixed foods consumed by each individual to enable the total amounts of raw commodity equivalents consumed per individual person to be calculated. Population statistics (mean consumption, all respondents) are then derived from these individual raw commodity totals for use in NRA dietary exposure assessments.

For all new chemicals, review chemicals and those where the initial dietary exposure assessment based on mean consumption data appears to approach or exceed the ADI, the ANZFA computer program is used to calculate the total dietary exposure to a given chemical for each individual in the survey. Population statistics such as mean chemical exposure are then derived, thus taking into account as much as possible, individual dietary patterns from a diverse and representative sample of the Australian population.

This program also enables high consumers of a given chemical to be identified, as well as the major foods contributing to total dietary exposure for that chemical.

#### **4.5 National Estimated Short Term Intake**

The NESTI is used to estimate acute dietary exposure. Acute (short term) dietary exposure assessments are undertaken when an acute reference dose (ARfD) has been determined for a chemical.

Acute dietary exposures are normally only estimated based on consumption of raw unprocessed commodities (fruit and vegetables) but may include consideration of meat, offal, cereal, milk or dairy product consumption on a case-by-case basis.

The NESTI calculation incorporates the large portion (97.5 percentile) food consumption data and can take into account such factors as:

- the highest residue on a composite sample of an edible portion;
- the supervised trials median residue (STMR) that represents typical residues in an edible portion resulting from the maximum permitted pesticide use pattern;
- processing factors which affect changes from the raw commodity to the consumed food; and
- the variability factor.

ANZFA has used ARfDs set by the TGA and Joint FAO/WHO Meeting on Pesticide Residues, the consumption data from the 1995 NNS and the MRL when the STMR is not available to calculate the NESTIs. The ARfD of a chemical is the estimate of the amount of a substance in food, expressed on a body weight basis, that can be ingested over a short period of time, usually during one meal or one day, without appreciable health risk to the consumer, on the basis of all the known facts at the time of evaluation. ANZFA considers that the acute dietary exposure to the residues of a chemical is acceptable where the acute dietary exposure does not exceed the ARfD.

## 5. CHANGES TO RESIDUE DEFINITIONS IN STANDARD 1.4.2

### 5.1 Amended residue definitions in Standard 1.4.2

The NRA proposed the following changes to the residue definition in Standard 1.4.2:

<b>Disulfoton</b> Sum of disulfoton and demeton-S and their sulfoxides and sulfones, expressed as disulfoton <i>see</i> also Demeton-S-methyl	Delete
<b>Disulfoton</b> Sum of disulfoton and demeton-S and their sulfoxides and sulfones, expressed as disulfoton	Add
<b>Emamectin benzoate</b> no residue definition	Delete
<b>Emamectin</b> EmamectinB <sub>1a</sub> , plus its 8,9-Z isomer and emamectin B <sub>1b</sub> , plus its 8,9-Z isomer	Add
<b>Ivermectin</b> Ivermectin, sum of isomers	Delete
<b>Ivermectin</b> H <sub>2</sub> B <sub>1a</sub>	Add
<b>Zinc phosphide</b> See Phosphine	Add

## **6. REGULATORY IMPACT ASSESSMENT**

This Regulatory Impact Assessment (RIA) is preliminary only and based on information provided by the applicant. The RIA identifies the affected parties, any alternative regulatory options and the potential impacts of any regulatory or non-regulatory provisions. The information needed to make an assessment of this Application will include the information from public submissions. This preliminary RIS invites public comment on these areas.

### **6.1 Objective**

To ensure that the residues associated with the proposed MRLs do not represent an unacceptable risk to public health and safety and to ensure that current standards permit the legal sale of food that has been legally treated.

### **6.2 Options**

Option 1: - to accept the requests made by the NRA and vary the *Food Standards Code*.  
Option 2: - to reject the requests and make no changes to the *Food Standards Code*.

### **6.3 Affected parties**

The parties affected by this application are consumers, government, producers, food manufacturers and importers of primary produce and foods into Australia.

### **6.4 Costs and benefits**

#### *6.4.1 Costs of accepting the application*

- there will be a cost of disposal, replacement and dissemination of information about proscribed agricultural and veterinary chemicals;
- initially enforcement agencies, food manufacturers and importers may have costs associated with compliance and enforcement of MRLs following the proposed amendments;
- importers will no longer be able to rely on existing MRLs; and
- some consumers may consider that any residues of agricultural and veterinary chemicals in food are not in the public interest and may regard the presence of any chemical residues in foods as a cost.

#### *6.4.2 Benefits of accepting the application*

- food producers will be legally able to sell produce legally treated with chemicals intended to improve stock and yields as well as controlling diseases and pests;
- it will ensure consistency between the health and agricultural regulations; and
- consumers may receive the potential benefits of improved crop and stock production through cheaper or better quality produce.

#### 6.4.3 *Costs of not accepting the application*

- producers will not be able to sell produce legally treated with chemicals intended to increase productivity and/or control disease and pests. This will have costs for primary producers with consequent potential impacts on regional Australia;
- there may be increased production costs for manufacturers and ultimately increased costs to consumers if commodities which have been legally treated to improve productivity and/or control pests and disease cannot be legally sold; and
- the discrepancies between the *Food Standards Code* and the NRA MRL Standard would become greater leading to confusion for producers, consumers and government agencies.

#### 6.4.4 *Benefits of not accepting the application*

- importers may potentially benefit by filling a possible domestic production shortfall if domestic agricultural productivity is reduced; and
- products complying with the existing MRLs could continue to be legally sold.

### 6.5 **Conclusion and recommended option**

The inclusion of the proposed MRLs is consistent with the current registered uses of the chemical products. The dietary exposure calculations indicate that the residues associated with the proposed MRLs do not represent an unacceptable risk to public health and safety. The NRA has already registered the chemical products and rejection of the MRLs would result in legally treated food not being able to be legally sold. Therefore the requested changes (Option 1) will benefit all stakeholders by maintaining public health and safety while permitting the legal sale of food treated with agricultural and veterinary chemicals to control pests and diseases and improve agricultural productivity.

## 7. **CONSIDERATION OF ISSUES UNDER SECTION 13 OF THE AUSTRALIA NEW ZEALAND FOOD AUTHORITY ACT 1991**

Subsection 13(1) of the *Australia New Zealand Food Authority Act 1991* (ANZFA Act) requires ANZFA to make an initial assessment (preliminary assessment s.13) of an application. In making that initial assessment (preliminary assessment s.13), subsection 13(2) requires ANZFA to have regard to a number of matters set out in paragraphs 13(2)(a) to (e). Each of these matters is discussed below.

### 7.1 **Paragraph 13(2)(a)**

This application relates to a matter that may warrant a variation to a food regulatory measure, because the application seeks an amendment of a standard. Under the ANZFA Act, a standard, by definition, is a food regulatory measure.

## **7.2 Paragraph 13(2)(b)**

This Application is not so similar to a previous application that it ought not be accepted.

## **7.3 Paragraph 13(2)(c)**

The application does not suggest that the proposed amendment would present any further costs to the community, Government or industry. ANZFA has reviewed the application and has not identified any adverse health effects that would result from the variations being made.

## **7.4 Paragraph 13(2)(d)**

The nature of the application is such that only an amendment to a standard (i.e. a food regulatory measure) can bring about what the applicant is seeking. No other measures appear to be available.

## **7.5 Paragraph 13(2)(e)**

Other relevant matters for consideration by ANZFA are as follows.

*7.5.1 Consideration of issues under Regulation 12 of the Australia New Zealand Food Authority Regulations 1994 Consideration of issues under Regulation 12 of the Australia New Zealand Food Authority Regulations 1994 which prescribes matters for the purpose of paragraph 13(2) (e) of the ANZFA Act.*

### 7.5.1.1 Regulation 12(a)

Because it is a simple variation of a food regulatory matter requiring only the updating of standards methods of analysis set out in the *Food Standards Code*, this matter will be in category 2.

### 7.5.1.2 Regulation 12(b)

ANZFA considers that this Application will not confer an exclusive capturable commercial benefit on the Applicant.

### *7.5.2 World Trade Organization Notification*

As a member of the World Trade Organization (WTO) Australia is obligated to notify WTO member nations where proposed mandatory regulatory measures are inconsistent with any existing or imminent international standards and the proposed measure may have a significant effect on trade.

The MRLs prescribed in the *Australia New Zealand Food Standards Code* constitute a mandatory requirement applying to all food products of a particular class whether produced domestically or imported. Food products exceeding their relevant MRL set out in the *Food Standards Code* cannot legally be supplied in Australia.

In administrative terms and consistent with international practice, MRLs assist in regulating the use of agricultural and veterinary chemical products. MRLs indicate whether agricultural and veterinary chemical products have been used in accordance with the registered conditions of use, and it is the registered conditions of use that protect human, animal and plant health and the environment.

MRLs also ensure that the residues of chemicals are minimised consistent with the effective use of chemical products to control pests and diseases, and act as trading standards.

This application contains variations to MRLs that are included in the international Codex standard. MRLs in this application also relate to chemicals used in the production of heavily traded agricultural commodities that may indirectly have a significant effect on trade of derivative food products between WTO members.

This application will be notified as a Sanitary and Phytosanitary (SPS) measure in accordance with the WTO SPS agreement because the primary objective of the measure is to support the regulation of the use of agricultural and veterinary chemical products to protect human, animal and plant health and the environment.

### 7.5.3 Codex MRLs

The standards of the Codex Alimentarius Commission are used as the relevant international standards or basis as to whether a new or changed standard requires a WTO notification. The following table sets out the MRLs proposed in the NRA application that are more restrictive than the relevant Codex MRL.

Chemical Food	Proposed MRL	Codex MRL	Comment
<b>Chlorpyrifos</b> Citrus fruits Eggs Meat (mammalian) (in the fat) Pome fruits	T0.5 T*0.01 T0.5 0.5	1 *0.05 2 1	The proposed MRLs are more restrictive than the Codex MRLs. The Codex MRL is for Cattle meat (in the fat). The Codex MRL is for Apple.
<b>Glyphosate</b> Barley	10	20	The proposed MRL is more restrictive than the Codex MRL.
<b>Pirimicarb</b> Vegetables [except leafy vegetables, lupin (dry)]	1	2	The Codex MRL is for chilli peppers. All other Codex MRLs for vegetables are equal to, or less than the proposed MRL.

Comment is requested on the significance of these differences for imported foods.

### 7.5.4 Imported Foods

The following are the quantities of foods that have been imported into Australia in 1999 and 2000. This data are for foods for which reductions and deletions of MRLs are proposed.

Chemical Food	1999	2000
<b>Chlorfenapyr</b> Edible offal (Mammalian) Meat (Mammalian) (in the fat) Poultry meat	419 tonnes 2,627 tonnes 14 tonnes	484 tonnes 4,817 tonnes 14 tonnes
<b>Chlorpyrifos</b> Sheep meat (in the fat)	33 tonnes	46 tonnes
<b>Chlorfenvinphos</b> Cauliflower Cattle, Edible offal of Milks	402 kg 146 tonnes 2,345 tonnes	None 184 tonnes 1,805 tonnes
<b>Diquat</b> Lentil	193 tonnes	142 tonnes

<b>Endosulfan</b> Cattle, Edible offal of Garlic Shallot	146 tonnes 613 tonnes 49 tonnes	184 tonnes 813 tonnes 211 tonnes
<b>Fenoxycarb</b> Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas	423kg	1369 kg
<b>Glyphosate</b> Barley	2 tonnes	4 tonnes
<b>Fluazifop-butyl</b> Turmeric root	31tonnes	27 tonnes
<b>Fluquinconazole</b> Apple Pear	33 tonnes 137 tonnes	16 tonnes 11 tonnes
<b>Haloxyfop</b> Cattle, edible offal of Cattle meat Cattle milk <sup>†</sup> Edible offal (Mammalian) Eggs Poultry, meat and edible offal	146 tonnes 138 tonnes 2,345 tonnes 419 tonnes 67 tonnes 14 tonnes	184 tonnes 111 tonnes 1,805 tonnes 484 tonnes 35 tonnes 14 tonnes
<b>Ivermectin</b> Sheep meat	33 tonnes	46 tonnes
<b>Methidathion</b> Cattle, Edible offal of Edible Offal (mammalian) [except cattle, edible offal of]	146 tonnes 273 tonnes	184 tonnes 300 tonnes
<b>Pyrimethanil</b> Apple Pear	33 tonnes 137 tonnes	16 tonnes 118 tonnes
<b>Spinosad</b> Sweet corn (kernels)	1,375 tonnes	1,291 tonnes

Comment is requested on the significance for imported foods of the proposed MRL amendments.

## **8. CONSIDERATION OF ISSUES UNDER SECTION 15 OF THE AUSTRALIA NEW ZEALAND FOOD AUTHORITY ACT 1991**

Subsection 15(1) of the *Australia New Zealand Food Authority Act 1991* requires ANZFA to make a Draft Assessment (Full Assessment s.15) of an application. In making that Draft Assessment (Full Assessment s.15), subsection 15(3) requires ANZFA to have regard to a number of matters set out in paragraphs 15(3)(a) to (e). Each of these matters is discussed below.

### **8.1 Paragraph 15(3)(a)**

As this application raises issues of minor significance and complexity only, ANZFA has not invited written submissions for the purposes of making the Initial/Draft Assessment. However, ANZFA will invite written submissions for the purpose of the Inquiry under s.17(3)(c) of the ANZFA Act and will have regard to any submissions received.

<sup>†</sup> data for all milks only was available

## 8.2 Paragraph 15(3)(b)

Section 10 (1), paragraphs (a) to (c) of the *Australia New Zealand Food Authority Act 1991* sets out the objectives of food regulatory measures and variations to food regulatory measures. Each of these is discussed below.

### 8.2.1 *Paragraph 10(1)(a) the protection of public health and safety*

The Chemicals and Non-prescription Medicines Branch of the TGA establish the ADI for the agricultural and veterinary chemicals. The NRA and ANZFA carry out estimations of dietary exposure to agricultural and veterinary chemicals and compare them to the TGA standards. On the basis of the dietary exposure assessments, the residues associated with the proposed MRLs do not represent an unacceptable risk to public health and safety.

### 8.2.2 *Paragraph 10(1)(b) the provision of adequate information relating to food to enable consumers to make informed choices*

This is not relevant for this application.

### 8.2.3 *Paragraph 10(1)(c) the prevention of misleading or deceptive information*

This is not relevant for this application.

In addition to these objectives, subsection 10(2) requires ANZFA to have regard to a number of matters set out in paragraphs 10(2)(a) to (d). Each of these matters is discussed below.

### 8.2.4 *Paragraph 10(2)(a) the need for standards to be based on risk analysis using the best available scientific evidence*

The procedures used by ANZFA, the TGA and the NRA rely on the comprehensive examination of detailed scientific information, including a rigorous toxicological assessment. Dietary exposure assessments are undertaken in accordance with international protocols.

### 8.2.5 *Paragraph 10(2)(b) the promotion of consistency between domestic and international food standards*

This is addressed in section 7.5.3 of this document.

### 8.2.6 *Paragraph 10(2)(c) the desirability of an efficient and internationally competitive food industry*

The inclusion of the requested MRLs would assist in permitting the legal sale of legally treated food. Varying the *Food Standards Code* to include the proposed MRLs would promote trade and commerce and allow food industries to continue to be efficient and competitive.

### 8.2.7 *Paragraph 10(2)(d) the promotion of fair trading in food*

As the MRLs in the *Food Standards Code* apply to all food whether produced domestically or imported, the inclusion of the MRLs would benefit all producers equally.

### **8.3 Paragraph 15(3)(c)**

ANZFA has undertaken a regulatory impact assessment process, which also fulfils the requirement in New Zealand for an assessment of compliance costs. That process concluded that the amendment to the *Food Standards Code* is necessary, cost effective and of benefit to both producers and consumers.

### **8.4 Paragraph 15(3)(d)**

The nature of the application is such that only an amendment to a standard (i.e. a food regulatory measure) can bring about what the applicant is seeking. No other measures appear to be available.

### **8.5 Paragraph 15(3)(e)**

This is addressed in section 7.5 of this document.

## **9. NRA EXISTING CHEMICAL REVIEW PROGRAM**

The NRA is carrying out reviews of chlorfenvinphos, chlorpyrifos and endosulfan.

The NRA review documents for these chemicals are available at:

[www.nra.gov.au/nra/chemrev.html](http://www.nra.gov.au/nra/chemrev.html)

### **9.1 Chlorfenvinphos**

This chemical is an insecticide and acaricide used to control:

- ectoparasites in mammalian livestock;
- a variety of insects which infest pastures, lucerne, mushrooms and potato crops; and
- flies in and around buildings.

The NRA's interim report has proposed cancelling its agricultural use and restricting its veterinary applications. The NRA review of chlorfenvinphos is at the interim stage and in the meantime all MRLs for chlorfenvinphos have been made temporary, pending the presentation to the NRA of satisfactory Australian residue data, or where appropriate scientific argument.

### **9.2 Chlorpyrifos**

The NRA review of chlorpyrifos is at the interim stage and in the meantime all MRLs for chlorpyrifos have been made temporary until specific uses on product labels are supported and the appropriate data generated and assessed. The NRA have advised that the use pattern for chlorpyrifos on food producing crops has not changed in any way that would increase dietary exposure to chlorpyrifos residues. The NRA has also stated that any changes to the MRLs are to facilitate the monitoring of good agricultural practice and prevent unnecessary violation. The NRA has stated that the addition of the MRL for mammalian meat (in the fat) to replace the MRLs for specific meat products is to take into account legitimate grazing by sheep without the fear of causing inadvertent and unnecessary residue violations. The acute dietary exposure for chlorpyrifos will be addressed in a later phase of the review.

A temporary MRL has been proposed by the NRA to monitor and control the use of this chemical on pome fruits.

### **9.3 Endosulfan**

The NRA review of endosulfan is at the interim stage and in the meantime all MRLs for endosulfan have been made temporary. The use pattern for endosulfan on food producing crops has not changed in any way that would increase dietary exposure to endosulfan residues. The NRA has stated that changes to the MRL for endosulfan are to facilitate the monitoring of good agricultural practice and prevent unnecessary violations. The acute dietary exposure for endosulfan will be addressed in a later phase of the review.

## **10. CONCLUSION**

The dietary exposure calculations indicate that the residues associated with the proposed MRLs do not represent an unacceptable risk to public health and safety. The NRA has already registered the chemicals in this application and rejection of the MRLs would result in legally treated food not being able to be legally sold. Therefore the requested changes will benefit all stakeholders by maintaining public health and safety while permitting the legal sale of food treated with agricultural and veterinary chemicals to control pests and diseases and improve agricultural productivity.

## **11. INVITATION FOR PUBLIC SUBMISSIONS**

The Authority decided, pursuant to section 36 of the *Australia New Zealand Food Authority Act 1991*, to omit to invite public submissions in relation to the Application prior to making a Draft Assessment. However, ANZFA now invites written submissions for the purpose of the Inquiry under s.17(3)(c) of the ANZFA Act and will have regard to any submissions received. The Authority was satisfied that omitting to invite public submissions prior to making a draft assessment was warranted as the Application raises matters of a mechanical nature that are of minor significance or complexity. Furthermore, the Authority considered that omitting to invite public submissions prior to making a draft assessment, would not significantly adversely affect the interests of any person or body.

### **Further Information**

Further information on this and other matters should be addressed to the Standards Liaison Officer at the Australia New Zealand Food Authority at one of the following addresses:

Australia New Zealand Food Authority  
PO Box 7186  
Canberra BC ACT 2610  
AUSTRALIA  
Tel (02) 6271 2258  
Fax (02) 6271 2278  
email: [slo@anzfa.gov.au](mailto:slo@anzfa.gov.au)

Australia New Zealand Food Authority  
PO Box 10559  
The Terrace WELLINGTON 6036  
NEW ZEALAND  
Tel (04) 473 9942  
Fax (04) 473 9855  
email: [anzfa.nz@anzfa.gov.au](mailto:anzfa.nz@anzfa.gov.au)

Assessment reports are available for viewing and downloading from the ANZFA website [www.anzfa.gov.au](http://www.anzfa.gov.au). Alternatively paper copies of reports can be requested from the Authorities Information Officer at [info@anzfa.gov.au](mailto:info@anzfa.gov.au).

**Submissions should be received by the Authority by: 23 JANUARY 2002**

Submissions may also be sent electronically through the submission form on the ANZFA website [www.anzfa.gov.au](http://www.anzfa.gov.au). Electronic submissions should also include the full contact details of the person making the submission on the main body of the submission so that the contact details are not separated.

## **ATTACHMENTS**

1. Summary of proposed MRLs for A447
2. Draft Variation to the *Food Standards Code*.
3. Statement of Reasons.

**A SUMMARY OF THE REQUESTED MRLS FOR EACH CHEMICAL AND AN OUTLINE OF THE INFORMATION SUPPORTING THE REQUESTED CHANGES TO THE *FOOD STANDARDS CODE*.**

The Full Evaluation Reports for individual chemicals / MRLs are available upon request from the Project Manager at ANZFA.

**The Summary of Proposed MRLs – Explanatory Notes and Diagrams**

**ADI – Acceptable Daily Intake** - The ADI is the daily intake of an agricultural or veterinary chemical, which, during the consumer's entire lifetime, appears to be without appreciable risk to the health of the consumer. This is based on all the known facts at the time of the evaluation of the chemical. The ADI is expressed in milligrams of the chemical per kilogram of body weight.

**ARfD – Acute Reference Dose** - The ARfD is the estimate of the amount of a substance in food, expressed on a body weight basis, that can be ingested over a short period of time, usually during one meal or one day, without appreciable health risk to the consumer, on the basis of all the known facts at the time of evaluation.

**LOQ - Limit of Quantification** - The LOQ is the lowest concentration of a pesticide residue contaminant that can be identified and quantitatively measured in a specified food, agricultural commodity or animal feed with an acceptable degree of certainty by a regulatory method of analysis.

**NEDI - National Estimated Dietary Intake** - The NEDI represents a more realistic estimate of dietary exposure and is the preferred calculation. It may incorporate more refined food consumption data including that for specific sub-groups of the population. The NEDI calculation may take into account such factors as the proportion of the crop or commodity treated; residues in edible portions; the effects of processing and cooking on residue levels; and may use median residue levels from supervised trials other than the MRL to represent pesticide residue levels. **In most cases the NEDI is still an overestimation because the above data is often not available and in these cases the MRL is used.**

**NESTI - National Estimated Short Term Intake** - The NESTI is used to estimate acute dietary exposure. Acute (short term) dietary exposure assessments are undertaken when an acute reference dose (ARfD) has been determined for a chemical. Acute dietary exposures are normally only estimated based on consumption of raw unprocessed commodities (fruit and vegetables) but may include consideration of meat, offal, cereal, milk or dairy product consumption on a case-by-case basis. ANZFA has used ARfDs set by the TGA and Joint FAO/WHO Meeting on Pesticide Residues, the consumption data from the 1995 NNS and the MRL when the data on typical residues is not available to calculate the NESTIs.

The NESTI calculation incorporates the large portion (97.5 percentile) food consumption data and can take into account such factors as the highest residue on a composite sample of an edible portion; the supervised trials median residue (STMR), representing typical residue in an edible portion resulting from the maximum permitted pesticide use pattern; processing factors which affect changes from the raw commodity to the consumed food and the variability factor.

Name of the Chemical (in bold)	Food for which the proposed MRL is to apply.	Whether the proposed MRL is being added or deleted.	The 'T' means the MRL is temporary and under review. The '*' means that the MRL is at the limit of quantification and detectable residues should not occur.	
<b>Fipronil</b> Berries and other small fruits [except grapes and strawberry]	Delete	T*0.01	The NRA has extended the trial permit for this chemical to control Western Flower Thrip in strawberry. An MRL for fipronil on strawberry is required to accommodate the use as a bait for fruit fly. This use is not expected to result in residues and so the MRL is proposed at the LOQ.  NESTI = <1% of ARfD for berries NEDI = 60% of ADI	
Berries and other small fruits [except wine grapes]	Add	T*0.01		
Strawberry	Delete	T0.5		

The NESTI is an assessment of the acute exposure which is compared to the acute reference dose (ARfD). More information is in the glossary on the NESTI and the ARfD. To be acceptable to ANZFA, the NESTI must be less than 100% of the ARfD because the ARfD is considered the 'safe' level.

The NEDI is an assessment of the chronic exposure which is compared to the acceptable daily intake (ADI). More information is in the glossary on the NEDI and the ADI. To be acceptable to ANZFA, the NEDI must be less than 100% of the ADI because the ADI is considered the 'safe' level.

Acute Reference Dose (ARfD)  
more information on this  
term is in the glossary

Acceptable Daily Intake (ADI)  
more information on this  
term is in the glossary

Information about the use of the chemical is provided so consumers can see the reason why the residues may occur in food.

Data from the Australian Total Diet Survey (ATDS) is provided when available because it provides an indication of the typical exposure to chemicals in table ready foods. The ATDS results are more realistic because the NEDI and NESTI calculations are theoretical calculations that conservatively overestimate exposure.

<p><b>Chlorpyrifos</b> Coffee beans</p>	<p>Add</p>	<p>T0.5</p>	<p><i>NRA extension of use</i> for the control of pests. The 18<sup>th</sup> ATDS (1996) dietary exposure estimate for chlorpyrifos, as a percentage of the ADI is equivalent to 0.53% of ADI for adult males and up to 1.42% for 2 year olds. The 19<sup>th</sup> ATDS (1998) dietary exposure estimate for chlorpyrifos, as a percentage of the ADI is equivalent to 0.51% of ADI for adult males and up to 2.55% of ADI for 2 year olds. NEDI = 83% of ADI</p>
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Small variations may be noted in the exposure assessment between different ATDSs. These variations are minor and typically result because of the different range of foods in the individual surveys.

## **Glossary of Acronyms:**

1. ADI Acceptable Daily Intake.
2. ATDS Australian Total Diet Survey.
3. ARfD Acute Reference Dose.
4. LOQ Limit of Quantification.
5. NEDI National Estimated Dietary Intake.
6. NNS National Nutritional Survey.
7. NESTI National Estimated Short Term Intake.
8. NTMDI National Theoretical Maximum Daily Intake.
9. \* MRL is set at or about the limit of quantification.
10. T Indicates the MRL is temporary for a period of time and subject to revision following review of additional data.
11. WHP Withholding Period

<b>Chemical Food</b>	<b>MRL (mg/kg)</b>	<b>Information</b>
<b>Azoxystrobin</b> Passion fruit	Add                      T0.5	The NRA has granted an emergency permit for the control of Scab disease. NEDI = 1% of ADI
<b>Bifenthrin</b> Barley Cereal grains Cereal grains [except barley and wheat] Pulses Pulses [except field pea (dry) and lupin (dry)] Wheat	Delete                      *0.02 Add                              T2 Delete                              T2 Delete                              *0.02 Add                                *0.02 Delete                              *0.01	The chemical is used to control various insect pests in cereal grains, pulses and lupin.  NEDI = 87.28% of ADI.
<b>Carbendazim</b> Macadamia nuts	Add                              T0.1	The chemical is used to control various fungal diseases. This is a request for a renewal of an off- label permit. In the 19 <sup>th</sup> (1998) ATDS the estimated dietary exposure to Benomyl/carbendazim was less than 1% of the ADI for the whole population. On the basis of the level of consumption of macadamia nuts, the results from the 1998 ATDS and that this is an off the label permit, ANZFA considers that the residues associated with the MRL would not represent an unacceptable risk to public health and safety. NEDI = 73.17% of ADI
<b>Carfentrazone-ethyl</b> Cereal grains Edible offal (Mammalian) Eggs Meat (mammalian) Milks Poultry meat Poultry, Edible offal of	Add                              *0.05 Add                              *0.05 Add                              *0.05 Add                              *0.05 Add                              *0.025 Add                              *0.05 Add                              *0.05	The chemical is used to control annual broad leaf weeds in cereal crops and rice.  NEDI = 1.5% ADI

<b>Chlorfenapyr</b> Cotton seed	Delete	T0.5	The chemical is used to control <i>Heliothis</i> spp on cotton.
	Substitute	0.5	
	Delete	T0.1	
	Substitute	*0.05	
	Delete	T*0.01	
	Substitute	*0.01	
	Delete	T0.1	
	Substitute	0.05	
Edible offal (Mammalian)	Delete	T0.1	
	Substitute	*0.05	
Eggs	Delete	T*0.01	
	Substitute	*0.01	
Meat (mammalian) (in the fat)	Delete	T0.1	
	Substitute	0.05	
Milks	Delete	T*0.01	
	Substitute	*0.01	
Poultry, Edible offal of	Delete	T*0.01	
	Substitute	*0.01	
Poultry meat (in the fat)	Delete	T0.02	NEDI = 2.37% of ADI
	Substitute	*0.01	
<b>Chlorfenvinphos</b>			
Broccoli	Delete	0.05	Please see the heading NRA Existing Chemical Review Program in the Assessment Report.
	Substitute	T0.05	
Brussels sprouts	Delete	0.05	
	Substitute	T0.05	
Cabbages, Head	Delete	0.05	
	Substitute	T0.05	
Carrot	Delete	0.4	
	Substitute	T0.4	
Cattle, Edible offal of	Delete	0.2	
	Substitute	T*0.1	
Cattle meat (in the fat)	Delete	0.2	
	Substitute	T0.2	
Cattle milk (in the fat)	Delete	0.2	
	Substitute	T0.2	
Cauliflower	Add	T0.2	
	Delete	0.1	
Celery	Delete	0.1	
	Substitute	T0.1	
Cotton seed	Delete	0.4	
	Substitute	T0.4	
Egg plant (aubergine)	Delete	0.05	
	Substitute	T0.05	
	Delete	0.05	
	Substitute	T0.05	

<b>Chlorfenvinphos (Cont)</b>		
Goat meat (in the fat)	Delete	0.2
	Substitute	T0.2
Goat, Edible offal of	Delete	0.2
	Substitute	T*0.1
Horseradish	Delete	0.1
	Substitute	T0.1
Leek	Delete	0.05
	Substitute	T0.05
Maize	Delete	0.05
	Substitute	T0.05
Milks (in the fat)	Delete	0.2
Mushrooms	Delete	0.05
	Substitute	T0.05
Onion, Bulb	Delete	0.05
	Substitute	T0.05
Peanut	Delete	0.05
	Substitute	T0.05
Potato	Delete	0.05
	Substitute	T0.05
Radish	Delete	0.1
	Substitute	T0.1
Rice	Delete	0.05
	Substitute	T0.05
Sheep, Edible offal of	Delete	0.2
	Substitute	T*0.1
Sheep meat (in the fat)	Delete	0.2
	Substitute	T0.2
Swede	Delete	0.05
	Substitute	T0.05
Sweet potato	Delete	0.05
	Substitute	T0.05
Tomato	Delete	0.1
	Substitute	T0.1
Turnip, Garden	Delete	0.05
	Substitute	T0.05
Wheat	Delete	0.05
	Substitute	T0.05

Please see the heading NRA Existing Chemical Review Program in the Assessment Report.

NEDI = 15.4% of ADI

<b>Chlorpyrifos</b>			Please see the heading NRA Existing Chemical Review Program in the Assessment Report.
Asparagus	Delete	0.5	
	Substitute	T0.5	
Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas	Delete	0.5	
	Substitute	T0.5	
Cassava	Delete	*0.02	
	Substitute	T*0.02	
Cattle, Edible offal of	Delete	2	
	Delete	2	
Cattle meat (in the fat)	Delete	0.1	
	Substitute	T0.1	
Cereal grains [except sorghum]	Delete	0.1	
	Substitute	T0.1	
Citrus Fruits	Delete	0.5	
	Substitute	T0.5	
Dried fruits	Delete	2	
	Substitute	T2	
Edible offal (Mammalian)	Add	T0.1	
	Delete	*0.01	
Eggs	Substitute	T*0.01	
	Delete	1	
Grapes	Substitute	T1	
	Add	T0.5	
Meat (Mammalian) (in the fat)	Delete	0.2	
	Substitute	T0.2	
Milks (in the fat)	Delete	0.2	
	Substitute	T0.2	
Oilseed	Delete	0.01	
	Substitute	T0.01	
Pig, Edible offal of	Delete	0.1	
	Delete	0.1	
Pig meat (in the fat)	Delete	0.5	
	Substitute	T0.5	
Pineapple	Delete	0.5	
	Substitute	T0.5	
Pome fruits	Delete	0.2	
	Substitute	T0.5	
Poultry, Edible offal of	Delete	0.1	
	Substitute	T0.1	
Poultry meat (in the fat)	Delete	0.1	
	Substitute	T0.1	
Sheep, Edible offal of	Delete	0.1	
	Delete	0.1	
Sheep meat (in the fat)	Delete	3	
	Substitute	T3	
Sorghum	Delete	0.1	
	Delete	0.1	
Stone fruits	Delete	3	
	Substitute	T3	
	Delete	1	
	Substitute	T1	

<p><b>Chlorpyrifos (Cont)</b> Sugar cane</p> <p>Tomato</p> <p>Vegetables [except asparagus, brassica vegetables, cassava, celery, leek, potato and tomato]</p>	<p>Delete            0.1 Substitute        T0.1</p> <p>Delete            0.5 Substitute        T0.5</p> <p>Delete            *0.01 Substitute        T*0.01</p>	<p>Please see the heading NRA Existing Chemical Review Program in the Assessment Report.</p>
<p><b>Dimethomorph</b> Poppy seed</p>	<p>Add                *0.02</p>	<p>The chemical is used in combination with mancozeb to control downy mildew in poppy seed. NTMDI = 3.32% of ADI</p>
<p><b>Diquat</b> Lentil (dry)</p>	<p>Add                T0.5</p>	<p>The NRA has granted a minor use permit for the use of diquat on lentils for pre-harvest desiccation and weed control. Sunset date: 1 November 2002 NEDI = 49% of ADI</p>
<p><b>Disulfoton</b> Sum of disulfoton and demeton-S and their sulfoxides and sulfones, expressed as disulfoton <i>see also Demeton-S-methyl</i> <b>Disulfoton</b> Sum of disulfoton and demeton-S and their sulfoxides and sulfones, expressed as disulfoton</p>	<p>Delete</p> <p>Add</p>	<p>This is a change to the residue definition</p>
<p><b>Dithiocarbamates (mancozeb, metham, metiram, propineb, thiram, zineb and ziram)</b> Lentil (dry)</p>	<p>Add                T0.5</p>	<p>Trial for mancozeb to be used to control a variety of fungal diseases in pulse crops. In the 19<sup>th</sup> (1998) ATDS the estimated dietary exposure to thiram (the dithiocarbamate with the lowest ADI) was at 63% of the ADI. This MRL is for the use of the dithiocarbamate mancozeb, which has a higher ADI than thiram. Given the consumption of lentils, the results from the 1998 ATDS, the fact that the trial permit is for the chemical mancozeb and on the basis of the ATDS and data from several Australian trials, the additional exposure to dithiocarbamates from lentil (dry) seed would not result in an unacceptable risk to public health.</p>

Poppy seed	Add	*0.2	Mancozeb is used in combination with dimethomorph to control downy mildew in poppy seed for trial purposes. The intake from poppy seed is equivalent to < 0.005% of the ADI, using an intake figure of 0.1g/kg bw/day. On the basis of data from previous ATDS and Tasmanian field trials where no residues of mancozeb were found above the LOQ of 0.2 mg/kg in poppy seeds, the additional exposure to dithiocarbamates from poppy seed would not result in an unacceptable risk to public health.
<b>Emamectin benzoate</b> no residue definition	Delete		This is a change to the residue definition
<b>Emamectin</b> EmamectinB <sub>1a</sub> , plus its 8,9-Z isomer and emamectin B <sub>1b</sub> , plus its 8,9-Z isomer	Add		
<b>Emamectin</b> Grapes	Add	T*0.0 02	The NRA has granted a permit for a large scale field trial for the use of emamectin for the control of light brown apple moth in grapes. NEDI = 3% of ADI
<b>Endosulfan</b> Assorted tropical and sub-tropical fruits – edible peel Assorted tropical and sub-tropical fruits – inedible peel Berries and other small fruits Brassicas (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas Carrot Cattle, Edible offal of Cattle meat (in the fat) Cereal grains  Citrus fruits Common bean (dry) (navy bean) Cotton seed oil, crude  Edible offal (Mammalian)  Eggs  Fruits Fruiting vegetables, Cucurbits Fruiting vegetables, other than Cucurbits	Add Add Add Add Delete Delete Delete Delete Substitute Add Delete Delete Substitute Add  Delete Substitute  Delete Add Delete Substitute	T2 T2 T2 T2 0.2 0.2 0.2 0.2 T0.2 T2 1 0.5 T0.5 T0.2  *0.05 T*0.0 5 2 2 T2	Please see the heading NRA Existing Chemical Review Program in the Assessment Report.

<b>Endosulfan (Cont)</b>			Please see the heading NRA Existing Chemical Review Program in the Assessment Report.
Goat, Edible offal of	Delete	0.2	
Goat meat (in the fat)	Delete	0.2	
Leafy vegetables (including Brassica leafy vegetables)	Add	T2	
Legume vegetables	Add	T2	
Lupin (dry)	Delete	1	
Meat (mammalian) (in the fat)	Add	0.2	
Milks (in the fat)	Delete	0.5	
	Substitute	T0.5	
Mung bean (dry)	Delete	1	
Oilseed	Delete	1	
	Substitute	T1	
Onion, Bulb	Delete	0.2	
	Substitute	T0.2	
Peanut	Delete	1	
Pome fruits	Add	T2	
Potato	Delete	0.2	
Pulses	Add	T1	
Rice	Delete	0.1	
	Substitute	T0.1	
Root and tuber vegetables	Add	T2	
Sheep, Edible offal of	Delete	0.2	
Sheep meat (in the fat)	Delete	0.2	
Shallot	Add	T2	
Soya bean (dry)	Delete	1	
Stalk and stem vegetables	Add	T2	
Stone fruits	Add	T2	
Sweet corn (corn-on-the-cob)	Delete	0.2	
Sweet potato	Delete	0.2	
Tea, Green, Black	Delete	30	
	Substitute	T30	
Tree nuts	Delete	0.2	
	Substitute	T2	
Tomato	Delete	2	
Vegetables [except carrot, common bean, lupin (dry), mung bean (dry), onion bulb, potato, soya bean (dry); sweet corn (corn-on-the-cob) and sweet potato]	Delete	2	
	Delete	2	
<b>Fenoxycarb</b>			The permit has expired.
Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas	Delete	T0.5	

<b>Fipronil</b> Assorted tropical and sub-tropical fruit - inedible peel [except banana] Berries and other small fruits [except wine-grapes and strawberry] Citrus fruits Pome fruits	Add Add Add Add	T*0.01 T*0.01 T*0.01 T*0.01	The NRA has granted a permit for a field trial to evaluate the efficacy of fipronil as a bait spray for the control of fruit fly on berry row crops, and on citrus, tropical and pome fruit trees. The acute dietary exposure assessments are for less than 2% of the ARfD for adults and less than 5% of ARfD for children from 2 to 6 years old. The MRLs are at the LOQ and are effectively continuing the existing standard requirements of no detectable residues. NEDI = 65.61% of ADI
<b>Fluazifop-butyl</b> Chervil Galangal, rhizomes Kaffir lime leaves Lemon balm Lemon grass Lemon Verbena Mizuna Pulses Rucola (rocket) Turmeric root	Delete Delete Delete Delete Delete Delete Delete Delete Add Delete Delete	T1 T1 T1 T1 T1 T1 T1 T1 0.5 T1 T1	This chemical used for the control of volunteer sugar cane and couch in mung beans. The deletions are to take into account the expiration of a permit NEDI = 68% of ADI.
<b>Fluquinconazole</b> Apple Pear Pome fruits	Delete Delete Add	T0.5 T0.5 *0.05	The chemical is used for the control of black spot in apples and pears and powdery mildew in apples. NEDI = 30.5% of ADI.
<b>Fluvalinate</b> Peach Plums (including Prunes)	Add Add	T0.1 T0.1	Temporary permit for the control of plague thrips. NEDI = 14.54% of ADI
<b>Glyphosate</b> Barley Broad bean (dry) Edible offal (Mammalian) Field pea (dry) Hops, dry Pulses [except adzuki bean, chick-pea and mung bean] Pulses [except adzuki bean, chick-pea, broad bean (dry), field pea (dry) and mung bean]	Delete Substitute Add Delete Substitute Add Add Delete Add	T20 10 2 T2 2 5 *0.1 *0.1 *0.1	The chemical is used to control weeds. NEDI = 4.3% of ADI.

<b>Glyphosate (cont)</b>			
Poultry, Edible offal of	Delete Substitute	*0.1 1	The chemical is used to control weeds.
Wheat	Delete Substitute	T5 5	NEDI = 4.3% of ADI.
Wheat bran, unprocessed	Delete Substitute	T20 20	
<b>Haloxypop</b>			
Cattle, Edible offal of	Delete	0.5	Chemical used to control annual and perennial weeds.
Cattle fat	Delete	0.1	
Cattle meat	Delete	0.02	Animal MRLs amended subsequent to new studies submitted for beef and dairy cattle and revision of poultry studies in view of new crop data.
Cattle milk	Delete	0.02	
Cotton seed oil, crude	Add	0.2	
Edible offal (Mammalian)	Add	0.5	
Eggs	Delete Substitute	0.05 *0.01	
Meat (mammalian) (in the fat)	Add	0.02	
Milks	Add	0.02	
Poultry, Edible offal of	Delete Substitute	0.5 0.05	
Poultry fats	Delete	0.5	
Poultry meat	Delete	0.2	
Poultry meat (in the fat)	Add	*0.01	Pulse MRLs adjusted to account for late applications in the growing season.
Pulses	Delete Substitute	0.05 0.1	
Sugar cane	Delete Substitute	T*0.01 T0.03	
Sunflower seed	Delete Substitute	*0.02 *0.05	Increased MRL in sugar cane for commercial scale trial of a reduced WHP from 70 days to 28 days. The use of haloxypop is for a trial permit and given that the proportion of the treated cane is estimated to be <10% of the total milled cane on any given day, the human dietary exposure will be considerably less than that calculated. NEDI = 89.6% of ADI

<b>Imidacloprid</b> Sugar cane	Delete Substitute	T*0.02 T*0.05	The NRA has granted a permit to control Greyback Grub in sugar cane. NEDI = 3.56% of ADI
<b>Indoxacarb</b> Chick-pea (dry)	Add	T0.2	Trial of the chemical to control moths NEDI = 59.42% of ADI
<b>Ivermectin</b> Ivermectin, sum of isomers  <b>Ivermectin</b> <b>H<sub>2</sub>B<sub>1a</sub></b>	Delete  Insert		This is a change to the residue definition.
<b>Ivermectin</b> Sheep meat (in the fat)	Delete Substitute	0.05 0.02	The chemical is used to control intestinal worm infestations, nasal bot and itch mite in sheep NEDI = 45.6% of ADI
<b>Methidathion</b> Cattle meat (in the fat)  Litchi Longan  Meat (mammalian) Meat (mammalian) (in the fat)	Delete  Add Delete Substitute  Delete Add	0.5  T0.1 T0.5 0.1  *0.05 0.5	The chemical is used to control a wide range of sucking and chewing insects.  The NRA has granted a permit for methidathion to control scale insects on litchi. Litchis were not recorded as being consumed in the 1995 NNS. The consumption figure for rambutan was used as an estimate for litchi consumption.  As the consumption figure for fat is 10% of the consumption of meat the increase in the MRL for the 'in the fat' entry effectively means that there is little change to the dietary exposure to this chemical. NEDI = 63% of ADI
<b>Methomyl</b> Guava  Herbs	Delete Substitute  Add	T0.1 T0.5  T1	The NRA has granted a permit to control various insect pests on guava.  The NRA has granted a permit to control western flower thrip in herbs. NEDI = 69.2% ADI

<b>Metolachlor</b> Cereal grains Cereal grains [except maize and sorghum]	Delete Add	*0.01 *0.02	The chemical is used to suppress annual rye grass in barley and oat crops. NEDI = 0.86% of ADI
<b>Naled</b> Cotton seed Edible offal (Mammalian) Meat (mammalian) Milks	Add Add Add Add	T*0.02 T*0.05 T*0.05 T*0.05	Temporary MRL for the control of insects on cotton.  NEDI = 26.84% of ADI
<b>Phosphine (zinc phosphide)</b> Melons, except Watermelon Pulses Sugar cane	Add Add Add	T*0.01 *0.01 T*0.01	The NRA has granted a permit to control heavy infestations of mice and rats in agricultural situations. Trial data showed residues to be below the LOQ of 0.01 mg/kg. The risk to human health from the use of zinc phosphide is considered to be small. Zinc phosphide is converted into phosphine and no residues are expected in food. The NRA has stated that an ADI has not been deemed necessary on the basis of that there will be no residues in food. The Therapeutic Goods Administration, Codex Alimentarius Commission and the United States Environmental Protection Agency have not set an ADI.
<b>Pirimicarb</b> Leafy vegetables Vegetables [except lupin (dry)] Vegetables [except leafy vegetables, lupin (dry)]	Add Delete Add	T3 1 1	The chemical is used to control aphids on vegetables. In the 19 <sup>th</sup> (1998) ATDS the estimated dietary exposure to pirimicarb was at less than 1% of the ADI. NEDI = 86% of ADI
<b>Propiconazole</b> Mushrooms	Add	*0.05	The chemical is used for the treatment of timber trays used for mushroom production. NEDI = 4.7% of ADI
<b>Pymetrozine</b> Pumpkins	Add	T0.02	The NRA has granted a permit to control of plant-sucking insects. NEDI = 3% of ADI

<b>Pyrimethanil</b> Apple Pear Pome fruits Potato Strawberry	Delete T1 Delete T1 Add *0.05 Add T*0.01 Delete T5 Substitute 5	The chemical is used to control black spot in apples and pears, powdery mildew in apples and grey mould in strawberry. The NRA has granted a trial permit to control the fungus Target spot in potato.  NTMDI = 3% ADI NEDI = 3% of ADI
<b>Spinosad</b> Citrus fruits  Pulses Sorghum Strawberry Sweet corn (corn-on-the-cob) Sweet corn (kernels)	Add T0.1  Add T*0.01 Add T*0.01 Add T0.5 Add 0.02 Delete T0.1	The NRA has granted a trial permit to control fruit flies on citrus, <i>Heliothis</i> spp, lucerne leaf roller, bean fly and sorghum midge in pulses and sorghum.  The NRA has granted an off-label permit to control Western flower thrip on strawberries. This chemical is used to control caterpillar pests in sweet corn. The MRL for sweet corn (kernels) was deleted following new residue trials. The new trials, conducted in the field, resulted in reduction of the MRL for this chemical at 0.02 mg/kg in sweet corn (corn-on-the-cob). NEDI = 10.81% of the ADI
<b>Sulfosulfuron</b> Triticale	Add *0.01	The chemical is used to control weeds. NEDI = 0.04% ADI
<b>Tebuconazole</b> Sugar cane	Add T0.1	Emergency permit to allow the chemical to be used to control fungus on sugar cane. NEDI = 15% of ADI
<b>Uniconazole-p</b> Avocado	Delete T*0.02 Substitute *0.02	The chemical is to be used to reduce vegetative growth and enhance and improve the fruit shape of avocados. NEDI = 0.003% of ADI
<b>Zinc Phosphide</b> See Phosphine		This is a new chemical and residue definition.

DRAFT VARIATIONS TO THE *FOOD STANDARDS CODE*

## APPLICATION A447 - MAXIMUM RESIDUE LIMITS

**To commence:** On gazettal

The *Food Standards Code* is varied by -

[1] *inserting in columns 1 and 2 respectively of Schedule 1 in Standard A14 in Volume 1, each chemical shown in bold type below and its associated food and maximum residue limit for that food, listed below -*

<b>Chemical</b>	<b>MRL</b>
<b>Food</b>	
<b>Carfentrazone-ethyl</b>	
Cereal grains	0.05
Edible offal (Mammalian)	0.05
Eggs	0.05
Meat (mammalian)	0.05
Milks	0.025
Poultry meat	0.05
Poultry, Edible offal of	0.05

Explanatory Note: These are new MRLs for new chemicals and foods that are not currently listed.

[2] *inserting in columns 1 and 2 respectively of Schedule 1 in Standard A14 in Volume 1, in relation to each chemical shown in bold type below, the food and the maximum residue limit for that food listed below -*

<b>Chemical</b>	<b>MRL</b>
<b>Food</b>	
<b>Azoxystrobin</b>	
Passion fruit	0.5
<b>Bifenthrin</b>	
Cereal grains	2
Pulses [except field pea (dry) and lupin (dry)]	0.02
<b>Carbendazim</b>	
Macadamia nuts	0.1
<b>Chlorfenvinphos</b>	
Cattle milk (in the fat)	0.2
<b>Chlorpyrifos</b>	
Edible offal (Mammalian)	0.1
Meat (mammalian) (in the fat)	0.5
<b>Dimethomorph</b>	
<i>Poppy seed</i>	0.02

**Diquat**

Lentil (dry)

**Dithiocarbamates (mancozeb, metham, metiram, propineb, thiram, zineb and ziram)**

Lentil 0.5

Poppy seed 0.2

**Emamectin**

Grapes 0.002

**Endosulfan**

Assorted tropical and sub-tropical fruits - edible peel 2

Assorted tropical and sub-tropical fruits - inedible peel 2

Berries and other small fruits 2

Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas 2

Citrus fruits 2

Edible offal (Mammalian) 0.2

Fruiting vegetables, Cucurbits 2

Leafy vegetables (including Brassica leafy vegetables) 2

Legume vegetables 2

Meat (mammalian) (in the fat) 0.2

Pome fruits 2

Pulses 1

Root and tuber vegetables 2

Shallot 2

Stalk and stem vegetables 2

Stone fruits 2

**Fipronil**

Assorted tropical and subtropical fruits – inedible peel [except banana] 0.01

Berries and other small fruits [except wine-grapes and strawberry] 0.01

Citrus fruits 0.01

Pome fruits 0.01

**Fluazifop-butyl**

Pulses 0.5

**Fluquinconazole**

Pome fruits 0.05

**Fluvalinate***Peach* 0.1*Plums* 0.1**Glyphosate**

Broad bean (dry) 2

Field pea (dry) 5

Hops, dry 0.1

Pulses [except adzuki bean, chick-pea, broad bean (dry), field pea (dry) and mung bean]	0.1
<b>Haloxyfop</b>	
Cotton seed oil, crude	0.2
Edible offal (Mammalian)	0.5
Meat mammalian (in the fat)	0.02
Milks	0.02
Poultry meat (in the fat)	0.01
<b>Methidathion</b>	
Litchi	0.1
Meat (mammalian) (in the fat)	0.5
<b>Methomyl</b>	
Herbs	1
<b>Metolachlor</b>	
Cereal grains [except maize and sorghum]	0.02
<b>Naled</b>	
Cotton seed	0.02
Edible offal (Mammalian)	0.05
Meat (mammalian)	0.05
Milk	0.05
<b>Phosphine</b>	
Melon, except watermelons	0.01
Pulses	0.01
Sugar cane	0.01
<b>Pirimicarb</b>	
Leafy vegetables	3
Vegetables [except leafy vegetables and lupin (dry)]	1
<b>Propiconazole</b>	
Mushrooms	0.05
<b>Pymetrozine</b>	
Pumpkins	0.02
<b>Pyrimethanil</b>	
Pome fruits	0.05
Potato	0.01
<b>Spinosad</b>	
Citrus fruits	0.1
Pulses	0.01
Sorghum	0.01
Strawberry	0.5
Sweet corn (corn-on-the-cob)	0.02
<b>Sulfosulfuron</b>	
Triticale	0.01
<b>Tebuconazole</b>	
Sugar cane	0.1

**Zinc phosphide**

See Phosphine

Explanatory Note: These are new MRLs for existing chemicals but are for foods that are not currently listed.

[3] *omitting from columns 1 and 2 respectively of Schedule 1 in Standard A14 in Volume 1, in relation to each chemical shown in bold type below, the food and the maximum residue limit for that food listed below -*

<b>Chemical</b>	<b>MRL</b>
<b>Food</b>	
<b>Bifenthrin</b>	
Barley	0.02
Cereal grains [except barley and wheat]	2
Pulses	0.02
Wheat	0.01
<b>Chlorfenvinphos</b>	
Milks (in the fat)	0.2
<b>Chlorpyrifos</b>	
Cattle, Edible offal of	2
Cattle meat (in the fat)	2
Pig, Edible offal of	0.1
Pig meat (in the fat)	0.1
Sheep, Edible offal of	0.1
Sheep meat (in the fat)	0.1
<b>Endosulfan</b>	
Carrot	0.2
Cattle, Edible offal of	0.2
Cattle meat (in the fat)	0.2
Common bean (dry)(navy bean)	1
Fruits	2
Goat, Edible offal of	0.2
Goat meat (in the fat)	0.2
Lupin (dry)	1
Mung bean (dry)	1
Peanut	1
Potato	0.2
Sheep, Edible offal of	0.2
Sheep meat (in the fat)	0.2
Soya bean (dry)	1
Sweet corn (corn-on-the-cob)	0.2
Sweet potato	0.2
Tomato	2
Vegetables [except carrot, common bean, lupin (dry), mung bean (dry), onion bulb, potato, soya bean (dry), sweet corn (corn-on-the-cob) and sweet potato]	2
<b>Fenoxycarb</b>	
Brassica (cole or cabbage) vegetables, Head cabbages, Flowerhead brassicas	0.5

<b>Fluazifop-butyl</b>	
Chervil	1
Galangal, rhizomes	1
Kaffir lime leaves	1
Lemon balm	1
Lemon grass	1
Lemon Verbena	1
Mizuna	1
Rucola (rocket)	1
Turmeric, root	
<b>Fluquinconazole</b>	
Apple	0.5
Pear	0.5
<b>Glyphosate</b>	
Pulses [except adzuki bean, chick-pea and mung bean]	0.1
<b>Haloxypop</b>	
Cattle, Edible offal of	0.5
Cattle fat	0.1
Cattle meat	0.02
Cattle milk	0.02
Poultry fats	0.5
Poultry meat	0.2
<b>Methidathion</b>	
Cattle meat (in the fat)	0.5
Meat (mammalian)	0.05
<b>Metolachlor</b>	
Cereal grains	0.01
<b>Pirimicarb</b>	
Vegetables [except lupin (dry)]	1
<b>Pyrimethanil</b>	
Apple	1
Pear	1
<b>Spinosad</b>	
Sweet corn (kernels)	0.1

Explanatory Note: Permission for a residue of the specified chemical in these foods is being repealed.

[4] *omitting from column 2 of Schedule 1 in Standard A14 in Volume 1, the maximum residue limit in relation to each chemical shown in bold type and each food shown below, and substituting the maximum residue limit shown below -*

<b>Chemical</b>	<b>MRL</b>
<b>Food</b>	
<hr/>	
<b>Chlorfenapyr</b>	
Edible offal (Mammalian)	0.05
Meat (mammalian) (in the fat)	0.05
Poultry meat (in the fat)	0.01

<b>Chlorfenvinphos</b>	
Cattle, Edible offal of	0.1
Goat, Edible offal of	0.1
Sheep, Edible offal of	0.1

<b>Chlorpyrifos</b>	
Pome fruits	0.5

<b>Endosulfan</b>	
Tree nuts	2

<b>Glyphosate</b>	
Barley	10
Poultry, Edible offal of	1

<b>Haloxyfop</b>	
Eggs	0.01
Poultry, Edible offal of	0.05
Pulses	0.1
Sugar cane	0.03
Sunflower seed	0.05

<b>Imidacloprid</b>	
Sugar cane	0.05

<b>Ivermectin</b>	
Sheep meat (in the fat)	0.02

<b>Methidathion</b>	
Longan	0.1

<b>Methomyl</b>	
Guava	0.5

Explanatory Note: Permission for a residue of the specified chemical in these foods is being changed.

[5] inserting in columns 1 and 2 respectively of Schedule 1 in Standard 1.4.2 in Volume 2, each chemical shown in bold type below and its associated food and maximum residue limit for that food, listed below –

<b>CARFENTRAZONE-ETHYL</b>	
CARFENTRAZONE-ETHYL	
CEREAL GRAINS	*0.05
EDIBLE OFFAL (MAMMALIAN)	*0.05
EGGS	*0.05
MEAT (MAMMALIAN)	*0.05
MILKS	*0.025
POULTRY MEAT	*0.05
POULTRY, EDIBLE OFFAL OF	*0.05

Explanatory Note: These are new MRLs for new chemicals and food that are not currently listed

**[6]** inserting in columns 1 and 2 respectively of Schedule 1 in Standard 1.4.2 in Volume 2, in relation to each chemical shown in bold type below, the food and the maximum residue limit for that food listed below -

<b>AZOXYSTROBIN</b> AZOXYSTROBIN	
PASSION FRUIT	T0.5
<b>BIFENTHRIN</b> BIFENTHRIN	
CEREAL GRAINS	T2
PULSES [EXCEPT FIELD PEA (DRY) AND LUPIN (DRY)]	*0.02
<b>CARBENDAZIM</b> SUM OF CARBENDAZIM AND 2- AMINOBENZIMIDAZOLE, EXPRESSED AS CARBENDAZIM	
MACADAMIA NUTS	T0.1
<b>CHLORFENVINPHOS</b> CHLORFENVINPHOS, SUM OF E AND Z ISOMERS	
CATTLE MILK (IN THE FAT)	T0.2
<b>CHLORPYRIFOS</b> CHLORPYRIFOS	
EDIBLE OFFAL (MAMMALIAN)	T0.1
MEAT MAMMALIAN (IN THE FAT)	T0.5
<b>DIMETHOMORPH</b> SUM OF E AND Z ISOMERS OF DIMETHOMORPH	
POPPY SEED	*0.02
<b>Diquat</b> DIQUAT CATION	
LENTIL (DRY)	T0.5
<b>DITHIOCARBAMATES</b> TOTAL DITHIOCARBAMATES, DETERMINED AS CARBON DISULPHIDE EVOLVED DURING ACID DIGESTION AND EXPRESSED AS MILLIGRAMS OF CARBON DISULPHIDE PER KILOGRAM OF FOOD	
LENTIL (DRY)	T0.5
POPPY SEED	*0.2
<b>EMAMECTIN</b> EMAMECTIN B <sub>1A</sub> , PLUS ITS 8,9-Z ISOMER AND EMAMECTIN B <sub>1B</sub> , PLUS ITS 8,9-Z ISOMER	
GRAPES	T*0.002
<b>ENDOSULFAN</b> SUM OF A- AND B- ENDOSULFAN AND ENDOSULFAN SULPHATE	
ASSORTED TROPICAL AND SUB- TROPICAL FRUITS - EDIBLE PEEL	T2
ASSORTED TROPICAL AND SUB- TROPICAL FRUITS - INEDIBLE PEEL	T2

BERRIES AND OTHER SMALL FRUITS	T2
BRASSICA (COLE OR CABBAGE) VEGETABLES, HEAD CABBAGES, FLOWERHEAD BRASSICAS	T2
CITRUS FRUITS	T2
EDIBLE OFFAL (MAMMALIAN)	T0.2
FRUITING VEGETABLES, CUCURBITS	T2
LEAFY VEGETABLES (INCLUDING BRASSICA LEAFY VEGETABLES)	T2
LEGUME VEGETABLES	T2
MEAT (MAMMALIAN) (IN THE FAT)	0.2
POME FRUITS	T2
PULSES	T1
ROOT AND TUBER VEGETABLES	T2
SHALLOT	T2
STALK AND STEM VEGETABLES	T2
STONE FRUITS	T2
<b>FIPRONIL</b>	
SUM OF FIPRONIL, THE SULPHENYL METABOLITE (5-AMINO-1-[2,6-DICHLORO-4-(TRIFLUOROMETHYL)PHENYL]-4-[(TRIFLUOROMETHYL)SULPHENYL]-1H-PYRAZOLE-3-CARBONITRILE), THE SULPHONYL METABOLITE (5-AMINO-1-[2,6-DICHLORO-4-(TRIFLUOROMETHYL)PHENYL]-4-[(TRIFLUOROMETHYL)SULPHONYL]-1H-PYRAZOLE-3-CARBONITRILE), AND THE TRIFLUOROMETHYL METABOLITE (5-AMINO-4-TRIFLUOROMETHYL-1-[2,6-DICHLORO-4-(TRIFLUOROMETHYL)PHENYL]-1H-PYRAZOLE-3-CARBONITRILE)	
ASSORTED TROPICAL AND SUB-TROPICAL FRUIT - INEDIBLE PEEL [EXCEPT BANANA]	T*0.01
BERRIES AND OTHER SMALL FRUITS [EXCEPT WINE-GRAPES AND STRAWBERRY]	T*0.01
CITRUS FRUITS	T*0.01
POME FRUITS	T*0.01
<b>FLUAZIFOP-BUTYL</b>	
FLUAZIFOP-BUTYL	
PULSES	0.5
<b>FLUQUINCONAZOLE</b>	
FLUQUINCONAZOLE	
POME FRUITS	*0.05

<b>FLUVALINATE</b>	
FLUVALINATE, SUM OF ISOMERS	
PEACH	T0.1
PLUMS (INCLUDING PRUNES)	T0.1
<b>GLYPHOSATE</b>	
GLYPHOSATE	
BROAD BEAN (DRY)	2
FIELD PEA (DRY)	5
HOPS, DRY	*0.1
PULSES [EXCEPT ADZUKI BEAN, CHICK-PEA, BROAD BEAN (DRY), FIELD PEA (DRY), AND MUNG BEAN]	*0.1
<b>HALOXYFOP</b>	
SUM OF HALOXYFOP, ITS ESTERS AND CONJUGATES, EXPRESSED AS HALOXYFOP	
COTTON SEED OIL, CRUDE	0.2
EDIBLE OFFAL (MAMMALIAN)	0.5
MEAT (MAMMALIAN) (IN THE FAT)	0.02
MILKS	0.02
POULTRY MEAT (IN THE FAT)	*0.01
<b>INDOXACARB</b>	
INDOXACARB	
CHICK-PEA (DRY)	T0.2
<b>Methidathion</b>	
METHIDATHION	
LITCHI	T0.1
MEAT (MAMMALIAN) (IN THE FAT)	0.5
<b>METHOMYL</b>	
SUM OF METHOMYL AND METHYL HYDROXYTHIOACETIMIDATE ('METHOMYL OXIME'), EXPRESSED AS METHOMYL <i>SEE ALSO THIODICARB</i>	
HERBS	T1
<b>METOLACHLOR</b>	
METOLACHLOR	
CEREAL GRAINS [EXCEPT MAIZE AND SORGHUM]	*0.02
<b>NALED</b>	
SUM OF NALED AND DICHLORVOS, EXPRESSED AS NALED	
COTTON SEED	T*0.02
EDIBLE OFFAL (MAMMALIAN)	T*0.05
MEAT (MAMMALIAN)	T*0.05
MILKS	T*0.05
<b>PHOSPHINE</b>	
ALL PHOSPHIDES, EXPRESSED AS HYDROGEN PHOSPHIDE (PHOSPHINE)	
MELONS [EXCEPT WATERMELON]	T*0.01

PULSES	*0.01
SUGAR CANE	T*0.01
<b>PIRIMICARB</b>	
SUM OF PIRIMICARB, DIMETHYL-PIRIMICARB AND N-FORMYL-(METHYLAMINO) ANALOGUE AND DIMETHYLFORMAMIDO-PIRIMICARB, EXPRESSED AS PIRIMICARB	
LEAFY VEGETABLES	T3
VEGETABLES [EXCEPT LEAFY VEGETABLES, LUPIN (DRY)]	1
<b>PROPICONAZOLE</b>	
PROPICONAZOLE	
MUSHROOMS	*0.05
<b>PYMETROZINE</b>	
PYMETROZINE	
PUMPKINS	T0.02
<b>PYRIMETHANIL</b>	
PYRIMETHANIL	
POME FRUITS	*0.05
POTATO	T*0.01
<b>SPINOSAD</b>	
SUM OF SPINOSYN A AND SPINOSYN D	
CITRUS FRUITS	T0.1
PULSES	T*0.01
SORGHUM	T*0.01
STRAWBERRY	T0.5
SWEET CORN (CORN-ON-THE-COB)	0.02
<b>SULPHOSULFURON</b>	
SUM OF THE SULFOSULFURON AND ITS METABOLITES WHICH CAN BE HYDROLYSED TO 2-(ETHYLSULFONYL)IMIDAZO[1,2-A]PYRIDINE, EXPRESSED AS SULFOSULFURON	
TRITICALE	*0.01
<b>TEBUCONAZOLE</b>	
TEBUCONAZOLE	
SUGAR CANE	T0.1

Explanatory Note: These are new MRLs for existing chemicals but for foods that are not currently listed.

[7] omitting from columns 1 and 2 respectively of Schedule 1 in Standard 1.4.2 in Volume 2, in relation to each chemical shown in bold type below, the food and the maximum residue limit for that food listed below -

<b>BIFENTHRIN</b> BIFENTHRIN	
BARLEY	*0.02
CEREAL GRAINS [EXCEPT BARLEY AND WHEAT]	T2
PULSES	*0.02
WHEAT	*0.01
<b>CHLORFENVINPHOS</b> CHLORFENVINPHOS, SUM OF E AND Z ISOMERS	
MILKS (IN THE FAT)	0.2
<b>CHLORPYRIFOS</b> CHLORPYRIFOS	
CATTLE, EDIBLE OFFAL OF	2
CATTLE MEAT (IN THE FAT)	2
PIG, EDIBLE OFFAL OF	0.1
PIG MEAT, IN THE FAT	0.1
SHEEP, EDIBLE OFFAL OF	0.1
SHEEP MEAT (IN THE FAT)	0.1
<b>ENDOSULFAN</b> SUM OF A- AND B- ENDOSULFAN AND ENDOSULFAN SULPHATE A	
CARROT	0.2
CATTLE, EDIBLE OFFAL OF	0.2
CATTLE MEAT (IN THE FAT)	0.2
COMMON BEAN (DRY) (NAVY BEAN)	1
FRUITS	2
GOAT, EDIBLE OFFAL OF	0.2
GOAT MEAT (IN THE FAT)	0.2
LUPIN (DRY)	1
MUNG BEAN (DRY)	1
PEANUT	1
POTATO	0.2
SHEEP, EDIBLE OFFAL OF	0.2
SHEEP MEAT (IN THE FAT)	0.2
SOYA BEAN (DRY)	1
SWEET CORN (CORN-ON-THE- COB)	0.2
SWEET POTATO	0.2
TOMATO	2
VEGETABLES [EXCEPT CARROT, COMMON BEAN, LUPIN (DRY), MUNG BEAN (DRY), ONION BULB, POTATO, SOYA BEAN (DRY), SWEET CORN (CORN-ON- THE-COB) AND SWEET POTATO]	2
<b>FENOXYCARB</b> FENOXYCARB	
BRASSICA (COLE OR CABBAGE) VEGETABLES, HEAD CABBAGES, FLOWERHEAD BRASSICAS	T0.5

<b>FLUAZIFOP-BUTYL</b> FLUAZIFOP-BUTYL	
CHERVIL	T1
GALANGAL, RHIZOMES	T1
KAFFIR LIME LEAVES	T1
LEMON BALM	T1
LEMON GRASS	T1
LEMON VERBENA	T1
MIZUNA	T1
RUCOLA (ROCKET)	T1
TURMERIC ROOT	T1
<b>FLUQUINCONAZOLE</b> FLUQUINCONAZOLE	
APPLE	T0.5
PEAR	T0.5
<b>Glyphosate</b> GLYPHOSATE	
PULSES [EXCEPT ADZUKI BEAN, CHICKPEAS AND MUNG BEAN]	*0.1
<b>HALOXYFOP</b> SUM OF HALOXYFOP, ITS ESTERS AND CONJUGATES, EXPRESSED AS HALOXYFOP	
CATTLE, EDIBLE OFFAL OF	0.5
CATTLE FAT	0.1
CATTLE MEAT	0.02
CATTLE MILK	0.02
POULTRY FATS	0.5
POULTRY MEAT	0.2
<b>METHIDATHION</b> METHIDATHION	
CATTLE MEAT (IN THE FAT)	0.5
MEAT (MAMMALIAN)	*0.05
<b>METOLACHLOR</b> METOLACHLOR	
CEREAL GRAINS	*0.01
<b>PIRIMICARB</b> SUM OF PIRIMICARB, DIMETHYL-PIRIMICARB AND N-FORMYL-(METHYLAMINO) ANALOGUE AND DIMETHYLFORMAMIDO-PIRIMICARB, EXPRESSED AS PIRIMICARB	
VEGETABLES [EXCEPT LUPIN (DRY)]	1
<b>PYRIMETHANIL</b> PYRIMETHANIL	
APPLE	T1
PEAR	T1
<b>SPINOSAD</b> SUM OF SPINOSYN A AND SPINOSYN D	
SWEET CORN (KERNELS)	T0.1

Explanatory Note: Permission for a residue of the specified chemical in these foods is being repealed.

**[8]** *omitting from column 2 of Schedule 1 in Standard 1.4.2 in Volume 2, the maximum residue limit in relation to each chemical shown in bold type and each food shown below, and substituting the maximum residue limit shown below -*

<b>CHLORFENAPYR</b>	
CHLORFENAPYR	
COTTON SEED	0.5
EDIBLE OFFAL (MAMMALIAN)	*0.05
EGGS	*0.01
MEAT (MAMMALIAN) (IN THE FAT)	0.05
MILKS	*0.01
POULTRY, EDIBLE OFFAL OF	*0.01
POULTRY MEAT (IN THE FAT)	*0.01
<b>CHLORFENVINPHOS</b>	
CHLORFENVINPHOS, SUM OF E AND Z ISOMERS	
BROCCOLI	T0.05
BRUSSELS SPROUTS	T0.05
CABBAGES, HEAD	T0.05
CARROT	T0.4
CATTLE, EDIBLE OFFAL OF	T*0.1
CATTLE MEAT (IN THE FAT)	T0.2
CAULIFLOWER	T0.1
CELERY	T0.4
COTTON SEED	T0.05
EGG PLANT (AUBERGINE)	T0.05
GOAT, EDIBLE OFFAL OF	T*0.1
GOAT MEAT (IN THE FAT)	T0.2
HORSERADISH	T0.1
LEEK	T0.05
MAIZE	T0.05
MUSHROOMS	T0.05
ONION, BULB	T0.05
PEANUT	T0.05
POTATO	T0.05
RADISH	T0.1
RICE	T0.05
SHEEP, EDIBLE OFFAL OF	T*0.1
SHEEP MEAT (IN THE FAT)	T0.2
SWEDE	T0.05
SWEET POTATO	T0.05
TOMATO	T0.1
TURNIP, GARDEN	T0.05
WHEAT	T0.05
<b>CHLORPYRIFOS</b>	
CHLORPYRIFOS	
ASPARAGUS	T0.5
BRASSICA (COLE OR CABBAGE) VEGETABLES, HEAD	T0.5
CABBAGES, FLOWERHEAD	
BRASSICAS	
CASSAVA	T*0.02
CEREAL GRAINS [EXCEPT SORGHUM]	T0.1
CITRUS FRUITS	T0.5

DRIED FRUITS	T2
EGGS	T*0.01
GRAPES	T1
MILKS (IN THE FAT)	T0.2
OILSEED	T0.01
PINEAPPLE	T0.5
POME FRUITS	T0.5
POULTRY, EDIBLE OFFAL OF	T0.1
POULTRY MEAT (IN THE FAT)	T0.1
SORGHUM	T3
STONE FRUIT	T1
SUGAR CANE	T0.1
TOMATO	T0.5
VEGETABLES [EXCEPT, ASPARAGUS, BRASSICA VEGETABLES, CASSAVA, CELERY, LEEK, POTATO AND TOMATO)	T*0.01
<b>ENDOSULFAN</b> SUM OF A- AND B- ENDOSULFAN AND ENDOSULFAN SULPHATE	
CEREAL GRAINS	T0.2
COTTON SEED OIL, CRUDE	T0.5
EGGS	T*0.05
FRUITING VEGETABLES, OTHER THAN CUCURBITS	T2
MILKS (IN THE FAT)	T0.5
OILSEED	T1
ONION, BULB	T0.2
RICE	T0.1
TEA, GREEN, BLACK	T30
TREE NUTS	T2
<b>Glyphosate</b> GLYPHOSATE	
BARLEY	10
EDIBLE OFFAL (MAMMALIAN)	2
POULTRY, EDIBLE OFFAL OF	1
WHEAT	5
WHEAT BRAN, UNPROCESSED	20
<b>HALOXYFOP</b> SUM OF HALOXYFOP, ITS ESTERS AND CONJUGATES, EXPRESSED AS HALOXYFOP	
EGGS	*0.01
POULTRY, EDIBLE OFFAL OF	0.05
PULSES	0.1
SUGAR CANE	T0.03
SUNFLOWER SEED	*0.05
<b>IMIDACLOPRID</b> SUM OF IMIDACLOPRID AND METABOLITES CONTAINING THE 6-CHLOROPYRIDINYMETHYLENE MOIETY, EXPRESSED AS IMIDACLOPRID	
SUGAR CANE	T*0.05
<b>IVERMECTIN</b> H <sub>2</sub> B <sub>1A</sub>	
SHEEP MEAT (IN THE FAT)	0.02

<b>METHIDATHION</b> METHIDATHION	
LONGAN	0.1
<b>METHOMYL</b> SUM OF METHOMYL AND METHYL HYDROXYTHIOACETIMIDATE ('METHOMYL OXIME') EXPRESSED AS METHOMYL SEE ALSO THIODICARB	
GUAVA	T0.5
<b>PYRIMETHANIL</b> PYRIMETHANIL	
STRAWBERRY	5
<b>UNICONAZOLE-P</b> SUM OF UNICONAZOLE-P AND ITS Z-ISOMER EXPRESSED AS UNICONAZOLE-P	
AVOCADO	*0.02

Explanatory Note: Permission for a residue of the specified chemical in these foods is being changed.

[9] *altering the chemical name of emamectin benzoate and its residue definition by omitting from Schedule 1 in Standard 1.4.2 in Volume 2, the entry -*

<b>EMAMECTIN BENZOATE</b> NO RESIDUE DEFINITION
--

*and substituting the entry -*

<b>EMAMECTIN</b> EMAMECTIN B <sub>1A</sub> , PLUS ITS 8,9-Z ISOMER AND EMAMECTIN B <sub>1B</sub> , PLUS ITS 8,9-Z ISOMER
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Explanatory Note: The name of the chemical and its residue definition is being changed.

[10] *altering the residue definition of the following chemicals by omitting from Schedule 1 in Standard 1.4.2 in Volume 2, the entry -*

<b>DISULFOTON</b> SUM OF DISULFOTON AND DEMETON-S AND THEIR SULFOXIDES AND SULFONES, EXPRESSED AS DISULFOTON SEE ALSO DEMETON-S-METHYL
<b>IVERMECTIN</b> IVERMECTIN, SUM OF ISOMERS

*and substituting the entry -*

<b>DISULFOTON</b> SUM OF DISULFOTON AND DEMETON-S AND THEIR SULFOXIDES AND SULFONES, EXPRESSED AS DISULFOTON
<b>IVERMECTIN</b> H <sub>2</sub> B <sub>1A</sub>

Explanatory Note: The residue definitions for these chemicals are being changed.

[11] *inserting in column 1 in Schedule 1 in Standard 1.4.2 in Volume 2, the chemical name of zinc phosphide and its residue definition -*

<b>ZINC PHOSPHIDE</b> SEE PHOSPHINE
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Explanatory Note: This is a new chemical and residue definition that is not currently listed.

## STATEMENT OF REASONS

### APPLICATION A447 – MAXIMUM RESIDUE LIMITS

#### FOR RECOMMENDING A VARIATION TO THE *FOOD STANDARDS CODE*

On 18 July 2001, ANZFA received an application from the National Registration Authority for Agricultural and Veterinary Chemicals (NRA) seeking to amend Standards A14 and 1.4.2 for the *Food Standards Code*. The proposed amendments would align the Maximum Residue Limits (MRLs) for agricultural and veterinary chemicals in the *Food Standards Code* with the MRLs in the NRA MRL Standard.

This Application (A447) is a routine application from the NRA, to update the *Food Standards Code* to reflect the current registration status of agricultural and veterinary use in Australia.

The *Agreement between the Commonwealth of Australia and the Government of New Zealand to establish a system for the development of joint food standards*, excluded MRLs for agricultural and veterinary chemicals in food from the joint food standards setting system. Australia and New Zealand separately and independently develop MRLs for agricultural and veterinary chemicals in food.

ANZFA has completed a Draft Assessment (Full Assessment s15) of the Application, and prepared draft variations to Standard A14 of Volume 1 and Standard 1.4.2 of Volume 2 of the *Food Standards Code*.

ANZFA recommends progressing the Application for the following reasons:

- The dietary exposure assessments indicate that the residues associated with the MRLs do not represent an unacceptable risk to public health and safety. The NRA has already registered the chemical products in this application and the rejection of the MRLs would result in legally treated food not being able to be legally sold. Therefore, the requested changes will benefit all stakeholders by maintaining public health and safety while permitting the legal sale of food treated with agricultural and veterinary chemicals to control pests and diseases and improve agricultural productivity.
- The NRA have assessed appropriate toxicology, residue, animal transfer, processing and metabolism studies, in accordance with the *Guidelines for Registering Agricultural and Veterinary Chemicals, the Agricultural and Veterinary Requirements Series, 1997*, to support the use of chemicals on commodities as outlined in this application.
- The Therapeutic Goods Administration (TGA) of the Commonwealth Department of Health and Aged Care has undertaken an appropriate toxicological assessment of the chemical products and has established relevant acceptable daily intakes (ADI).
- None of ANZFA's section 10 objectives of food regulatory measures are compromised by the proposed changes.

- ANZFA has undertaken a regulatory impact assessment process, which also fulfils the requirement in New Zealand for an assessment of compliance costs. That process concluded that the amendment to the *Food Standards Code* is necessary, cost effective and of benefit to both producers and consumers.

A summary of the proposed MRLs is in Attachment 1 of the Initial/Draft Assessment.

## **WORLD TRADE ORGANIZATION (WTO) NOTIFICATION**

As a member of the WTO Australia is obligated to notify WTO member nations where proposed mandatory regulatory measures are inconsistent with any existing or imminent international standards and the proposed measure may have a significant effect on trade.

MRLs prescribed in the *Food Standards Code* constitute a mandatory requirement applying to all food products of a particular class whether produced domestically or imported. Food products exceeding their relevant MRL set out in the *Food Standards Code* cannot legally be supplied in Australia.

In administrative terms and consistent with international practice, MRLs assist in regulating the use of agricultural and veterinary chemical products. MRLs indicate whether agricultural and veterinary chemical products have been used in accordance with the registered conditions of use, and it is the registered conditions of use that protect human, animal and plant health and the environment. MRLs also ensure that the residues of chemicals are minimised consistent with the effective use of chemical products to control pests and diseases and MRLs also act as trading standards.

This Application contains variations to MRLs that are included in the international Codex standard. MRLs in this application also relate to chemicals used in the production of heavily traded agricultural commodities that may indirectly have a significant effect on trade of derivative food products between WTO members.

This Application will be notified as a Sanitary and Phytosanitary (SPS) measure in accordance with the WTO SPS agreement because the primary objective of the measure is to support the regulation of the use of agricultural and veterinary chemical products to protect human, animal and plant health and the environment.

The proposed Draft Variations are in Attachment 2 of the Initial/Draft Assessment.