Australian Food and Grocery Council

APPLICATION

13 MARCH 2013

TO:
FOOD STANDARDS AUSTRALIA NEW ZEALAND (FSANZ)

IN RELATION TO:
APPLICATION TO AMEND STANDARD 1.4.2 MAXIMUM RESIDUE LIMITS IN THE *AUSTRALIA NEW ZEALAND FOOD STANDARDS CODE.*

Australian Food and Grocery Council

The Australian Food and Grocery Council (AFGC) is the leading national organisation representing Australia's food, drink and grocery manufacturing industry.

The membership of AFGC comprises more than 150 companies, subsidiaries and associates which constitutes in the order of 80 per cent of the gross dollar value of the processed food, beverage and grocery products sectors.

With an annual turnover in the 2010-11 financial year of $110 billion, Australia's food and grocery manufacturing industry makes a substantial contribution to the Australian economy and is vital to the nation's future prosperity.

Manufacturing of food, beverages and groceries in the fast moving consumer goods sector[1] is Australia's largest manufacturing industry. Representing 28 per cent of total manufacturing turnover, the sector accounts for over one quarter of the total manufacturing industry in Australia.

This diverse and sustainable industry is made up of over 22,600 businesses and accounts for over $49 billion of the nation's international trade. These businesses range from some of the largest globally significant multinational companies to small and medium enterprises. Industry spends $466.7 million a year on research and development.

The food and grocery manufacturing sector employs more than 296,300 Australians, representing about 3 per cent of all employed people in Australia, paying around $11.3 billion a year in salaries and wages.

Many food manufacturing plants are located outside the metropolitan regions. The industry makes a large contribution to rural and regional Australia economies, with almost half of the total persons employed being in rural and regional Australia[2]. It is essential for the economic and social development of Australia, and particularly rural and regional Australia, that the magnitude, significance and contribution of this industry is recognised and factored into the Government's economic, industrial and trade policies.

Australians and our political leaders overwhelmingly want a local, value-adding food and grocery manufacturing sector.

1 Fast moving consumer goods includes all products bought almost daily by Australians through retail outlets including food, beverages, toiletries, cosmetics, household cleaning items etc.

2 About Australia: www.dfat.gov.au

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EXECUTIVE SUMMARY

The purpose of this Application is to request incorporation of certain maximum residue limits (MRLs) for agricultural chemicals that may legitimately occur in food in Standard 1.4.2 of the *Australia New Zealand Food Standards Code* (the Code).

Standard 1.4.2 lists the MRLs for agricultural and veterinary chemical residues which may occur in foods in Australia. Limits prescribed in the Code constitute a mandatory requirement applying to all food products of a particular class whether produced domestically or imported.

The Application requests consideration of MRLs submitted by Patties Foods Limited (Patties Foods) to further align the Code with Codex and trading partner standards, in this Application, those of Chile, the exporting country.

The commodities for which MRLs are requested are individually quick frozen (IQF) blueberries and raspberries which are imported into Australia from Chile. Patties Foods import IQF blueberries and raspberries to fill a need for competitively priced ingredients in a convenient format for consumers wishing to incorporate blueberries and raspberries into their diets. The importation of IQF blueberries and raspberries allows year round access to these products for consumers.

The chemicals for which the MRLs are requested are Azoxystrobin (blueberry); Fenhexamid (blueberry); Fludioxonil (blueberry) and Bifenthrin (raspberry). These chemicals are already permitted to be used in Australia for other commodities.

Inclusion of the MRLs in the Code will permit the sale of foods containing legitimate residues and protect public health and safety by minimising residues in foods consistent with the effective control of pests and diseases.

This requested amendment will:

- further align the Code with Codex and trading partner standards;
- minimise potential trade disruption;
- ensure continuity of supply; and
- extend consumer choice.

Recognition of MRLS for IQF blueberries and raspberries would not be expected to increase dietary exposure to these chemicals significantly beyond that already in the diet from local use patterns. Consequently, no adverse public health and safety consequences are anticipated, for any population group or sub-group, from the consumption of blueberries or raspberries containing residues of the named chemicals at or below the Codex MRLs.

The Application seeks to address specific anomalies between the Code and Codex which present barriers to trade in IQF blueberries and raspberries. The proposed amendments to the Code would align limits in the Code with international standards and/or standards in the producer country (Chile) and permit the sale in Australia of IQF blueberries and raspberries containing legitimate residues that do not present health or safety concerns. AFGC has concluded that the proposed amendments are necessary, cost-effective and beneficial.

STATUTORY DECLARATION

(As per section 3.1.10 of the Application Handbook 1 August 2011)

I, **Kim Leighton**, of 2-4 Brisbane Avenue Barton ACT, **Director, Policy and Regulation** with the **Australian Food and Grocery Council,** make the following declaration under the *Statutory Declarations Act 1959*:

1. the information provided in this application fully sets out the matters required
2. the information provided in this application is true to the best of my knowledge and belief
3. no information has been withheld that might prejudice this application, to the best of my knowledge and belief

I understand that a person who intentionally makes a false statement in a statutory declaration is guilty of an offence under section 11 of the *Statutory Declarations Act 1959*, and I believe that the statements in this declaration are true in every particular.

[redacted]

Declared at Canberra on 13th of March 2013

Before me,

[redacted] JP #1269

Name [redacted]

Qualifications JUSTICE OF THE PEACE

Address 50 BLACKALL STREET BARTON ACT 2600

1. APPLICANT DETAILS

(As per section 3.1.2 of the Application Handbook 1 August 2011)

Applicant	[redacted], Director – Policy and Regulation
Organisation	Australian Food and Grocery Council (hereafter AFGC)
Address	Level 2, 2-4 Brisbane Avenue
	Barton ACT 2600
	Locked Bag 1
	Kingston ACT 2604
Telephone	02 6273 1466
Email address	[redacted]

1.1.1. Nature of AFGC Business

(As per section 3.1.2(f) of the Application Handbook 1 August 2011)

AFGC is the leading national organisation representing Australia's packaged food, drink and grocery product manufacturers.

AFGC's role is to help shape a business environment that encourages the food and grocery products industry to grow and remain profitable.

AFGC's mandate is to ensure there is a cohesive and credible voice for the industry, advance policies and manage issues to help member companies to grow their businesses in a socially responsible manner.

AFGC's vision for industry is:

- A growing, profitable and sustainable industry - economically, socially and environmentally, providing a secure source of safe food and groceries to Australians and the export market; and
- An industry that partners in educating and empowering consumers, within a best practice regulatory framework that demands the highest standards.

Further details regarding the nature of AFGC business can be found in the Preface to this application on page 1.

1.1.2. Supporters of this Application

(As per section 3.1.2(g) of the Application Handbook 1 August 2011)

Patties Foods Limited[3]

Patties Foods Limited (Patties Foods) is a true Australian success story, growing into a leading Australian manufacturer, supplier and marketer of branded frozen savoury and dessert products.

Patties Foods is listed on the Australian stock exchange and owns a high quality portfolio of iconic Australian brands which include Four'N Twenty®, Patties®, Herbert Adams®, Nanna's®, Creative Gourmet® and Chefs Pride®.

The Creative Gourmet and Chef's Pride brands introduced individually quick frozen (IQF) berries into the Australia retail market. Patties Foods also uses some of these imported IQF berries in the popular Nanna's brand of frozen fruit pies.

These brands have strong market shares and are supported by considerable brand investment by the Company. Specifically, Patties Foods has a #1 market share in the retail frozen savoury segment (which includes pies, sausage rolls, pasties and party goods) and a #2 market share in the retail frozen dessert segment (which includes fruit pies, cold desserts, Danishes /crumbles, berries, snacks and cakes).

Food and Beverage Importers Association[4]

The Food and Beverage Importers Association (FBIA) is a membership based organisation that provides support and direction on all matters pertaining to imported foods and beverages. FBIA works with government to develop manageable and effective regulation and policy for the food and beverage importing industry and champions the value of imported food and beverages in adding diversity to the Australian food supply.

3 http://www.patties.com.au/

4 http://www.fbia.org.au/

2. PURPOSE OF THE APPLICATION

(As per section 3.1.3 of the Application Handbook 1 August 2011)

The AFGC is making this application to seek an amendment to the following section of the *Australia New Zealand Food Standards Code* (the Code):

- Standard 1.4.2 – Maximum Residue Limits (Australia Only) – Schedule 1 Maximum residue limits.

AFGC is seeking inclusion of maximum residue limits (MRLs) for the agricultural chemicals and commodities listed in **Table 1**. There are currently no MRLs listed in Schedule 1 for the chemicals requested for blueberries and raspberries.

The MRLs requested are in line with Codex MRLs for these chemicals and commodities as set out in **Appendix 1** and those of the trading partner country, Chile, as set out in **Appendix 2**.

Table 1: Commodities and Chemicals[5]

COMMODITY	CHEMICAL	MRL requested mg/kg (Codex)	MRL mg/kg (Chile)
Blueberry	Fenhexamid	5.0	5.0
Blueberry	Azoxystrobin	5.0	5.0
Blueberry	Fludioxonil	2.0	2.0
Raspberry	Bifenthrin	1.0	1.0

The MRLs requested will permit the sale of foods containing legitimate residues and protect public health and safety by minimising residues in foods consistent with the effective control of pests and diseases.

This requested amendment will:

- further align the Code with Codex and trading partner standards;
- minimise potential trade disruption;
- ensure continuity of supply; and
- extend consumer choice.

5 http://www.mrldatabase.com/ accessed 23.02.13

AFGC notes that the Agreement between the Government of Australia and the Government of New Zealand concerning a Joint Food Standards System (the Treaty) excludes MRLs for agricultural and veterinary chemicals in food from the system setting joint food standards. Australia and New Zealand independently and separately develop MRLs for agricultural and veterinary chemicals in food.

The scope of this application does not extend to blueberries and raspberries for import into New Zealand.

3. JUSTIFICATION FOR THE APPLICATION

(As per section 3.1.4 of the Application Handbook 1 August 2011)

3.1.1. NEED FOR THE PROPOSED CHANGE

(As per section 3.14(a) of the Application Handbook 1 August 2011)

The proposed change is needed to enable the continued importation of individually quick frozen (IQF) blueberries and raspberries from Chile to ensure continuity of supply in the Australian market.

The current demand for IQF blueberries and raspberries cannot be met by Australian grown berries alone and therefore there is a reliance on imported fruit sourced from overseas trading partners to meet local demand. The importation of IQF blueberries and raspberries allows year round access to these products for consumers.

To support continuity of supply there is a requirement for international alignment of MRLs which will also minimise potential trade disruption.

Each of these will be discussed in the following sections.

3.1.2. Demand for IQF Blueberries and Raspberries

3.1.3. Growing Regions

Due to the mild climate in Australia, there are limited areas suitable for growing good quality blueberries and raspberries. These products grow best in countries with very cold winters and generally colder climates.

Raspberry growing area volume was around 63 000 hectares (ha) globally in 2010. Top growing regions were Serbia (15,500ha), Poland (12,000ha), Chile (11,000ha) and the USA (9,000ha) compared with Australia at 400ha. In 2010, Chile had 52,160 (metric tonnage) of growing volume area for frozen raspberries. Chile is the largest producer of frozen raspberries in the world.[6]

6 IRO Talca Chile, 2010

World acreage for blueberries was 190,983 acres (approx. 77,000ha) in 2010. The top growing regions were North America (110,290 acres); South America (44,000 acres) and Europe (20,780 acres). In comparison, Australia had a total of 1,530 acres in the same year (2010). [7]

3.1.4. Overview of Australian market and demand - fresh and IQF blueberries and raspberries

The majority of good quality Australian grown berries are sold to the fresh market, where they attract a premium price (upwards of $40/kg).[8] The fruit not deemed suitable for the fresh market is sold to manufacturers of jams or fruit purees.

IQF blueberries and raspberries are imported into Australia for retail sale or for use by local industries, such as the baking industry or for sale direct to consumers for home use. These IQF berries are, in the main, currently imported from Chile. There is little, if any, local production of shelf-stable or IQF berry products. In Australia in 2010, total production of blueberries was 6,600,000 American pounds (approx. 300,000kgs). Of this total, 5,700,000 American pounds was directed to the fresh market and the remainder was processed (900,000 American pounds) – approximately 13.6%.[9]

Table 2 sets out the uses of fresh and IQF blueberries and raspberries in Australia.

Patties Foods import IQF blueberries and raspberries to fill a need for competitively priced ingredients in a convenient format for consumers wishing to incorporate blueberries and raspberries into their diets. The importation of IQF blueberries and raspberries allows year round access to these products for consumers.

7 World Blueberry Acreage and Production, February 2011. Brazelton Ag Consulting

8 Coles online as at 8/3/13: $4.90 for 125g ($39/kg); Woolworths online as at 8/3/13 : $4.98 for 125g ($40/kg); Martellis Fruit Market (10/03/13), Cherrybrook, NSW $55.92/kg for blueberries

9 World Blueberry Acreage and Production, February 2011. Brazelton Ag Consulting

Table 2: Uses of Blueberries and Raspberries (fresh and IQF)

Commodity	Use	Use (%)
Fresh blueberries and raspberries	Eat fresh as a snack or addition to other foods. Manufacturing – jams and purees.	
IQF blueberries and raspberries[10]	As is	6.7
	With ice cream	6.7
	Smoothie	19.5
	With yoghurt	17.4
	Baking	16.9
	Cereal topper	16.9
	Cream	5.1
	Custard – 1.5	1.5
	Fruit	2.1
	Make my own	4.1
	Other	2.6
	Alcohol	0.5

In 2012, 7,024 tonnes of natural frozen fruit was sold in supermarkets in Australia, up from 6,317 in 2011 showing strong growth for the category at 11%.[11] This increase in demand cannot be met from Australian sources.

10 Patties own bespoke research study: Frozen Sweets Shoppers: October 2008 by Oblique Research
11 Source: Aztec Scan Data, Feb 2013

3.1.5. International Alignment

Internationally, countries set MRLs according to good agricultural practice (GAP) or good veterinary practice (GVP). Agricultural and veterinary chemicals are used differently in different countries around the world as pests, diseases and environmental factors differ and because product use patterns may differ. This means that residues in imported foods may legitimately differ from those in domestically produced foods.

The proposed change will ensure that IQF blueberries and raspberries which meet Codex and trading partner MRLs for the specified chemicals can be imported into Australia.

This alignment would support Australia's commitment to the World Trade Organisation (WTO) Agreement on the Application of Sanitary and Phytosanitary Measures which states that 'Members shall base their sanitary or phytosanitary measures on international standards, guidelines or recommendations'[12].

3.1.6. Trade Barriers

IQF blueberries and raspberries are imported into Australia primarily from Chile and China, with smaller volumes from the Netherlands. **Table 3** sets out the volumes and countries of origin for IQF blueberries and raspberries imported into Australia.

The commodities for which AFGC is seeking MRL's amendments are imported from Chile. **Tables 4 and 5** show the quantity of raspberries and blueberries imported into Australia from Chile in the period 2006 – 2011. Australia accounted for approximately for 3.1 – 6.1% of Chile's export volume for IQF raspberry and 2.1 – 9.9% of Chile's export volume of IQF blueberry respectively over this time.

Patties Foods currently account for approximately 40% of the total volume of IQF berries imported into Australia annually. The volume imported by Patties Foods represents a trade value of over $30 million annually. Patties Foods imports the bulk the blueberries and raspberries required by their business from Chile.

In 2011, exported Chilean IQF blueberries and raspberries reached 90,381 tonnes (from January-November), making them one of the top exporter countries of frozen berries.[13]

Approval of the proposed amendments to MRLs for IQF blueberries and raspberries would ensure ongoing trade between Australia and Chile for IQF blueberries and raspberries.

12 WTO Agreement on the Application of Sanitary and Phytosanitary Measures, Article 3(1).

13 Source: GTIS

Table 3: IQF Blueberry and Raspberry Imports to Australia

Commodity	Country of Origin	Year	Amount Imported (tonnes)
Raspberry[14]	China	2011	2,793
	Chile	2011	3,442
	Netherlands	2011	764
	Total		**6,999**
Blueberry[15]	China	2011	Not available
	Chile	2011	2,102 (Jan – Sept)

14 Informa UK Ltd 2012 – FOODNEWS® 27 April 2012

15 Informa UK Ltd 2011 – FOODNEWS® 11 November 2011

Table 4: Chilean Frozen Raspberry Exports (Full year, tonnes)[16]

Year	Amount Exported to Australia (tonnes)
2006	1,655 (3.1%)[17]
2007	2,224 (3.7%)
2008	2,377 (3.9%)
2009	2,502 (5.1%)
2010	3,923 (6.1%)
2011	3,442 (5.2%)

Table 5: Chilean Frozen Blueberry Exports (January- September, tonnes)[18]

Year	Amount Exported to Australia (tonnes)
2006	79 (2.1%)[19]
2007	243 (8.1%)
2008	359 (9.9%)
2009	499 (5.8%)
2010	702 (9.1%)
2011	2,102 (8.4%)

16 Informa UK Ltd 2012 – FOODNEWS® 27 April 2012
17 Percentage of export volume from Chile
18 Informa UK Ltd 2011 – FOODNEWS® 11 November 2011
19 Percentage of export volume from Chile

3.1.7. Advantages of the Proposed Change

(As per Section 3.1.4(b) of the Application Handbook 1 August 2011)

The advantages of the proposed change include:

- Ensure continuity of supply of IQF blueberries and raspberries for manufactures and consumers;
- International alignment of MRLs which will support continuity of supply and reduce the potential for creation of trade barriers;
- The proposed amendments will minimise potential costs to importing businesses in terms of permitting the sale of food containing legitimate residues; and
- Benefit stakeholders by maintaining public health and safety while permitting the legal sale of food containing legitimate residues of agricultural and veterinary chemicals used to control pests and diseases and improve agricultural productivity.

The market and demand for IQF blueberries and raspberries in Australia has been addressed under section 3.1.1. Australia is not able to meet the demand for IQF berries from local sources and the market therefore relies on imported fruit to ensure availability of product for consumers.

AFGC considers that the proposed amendment would provide food manufacturers and suppliers with a greater ability to procure supply of IQF blueberries and raspberries for use in a range of food products.

International alignment and reduction in potential for creation of trade barriers has been addressed under sections 3.1.2 and 3.1.3.

3.1.8. Disadvantages

The disadvantages of the proposed change include:

- Establishing new MRLs may draw attention to introduction of further chemicals into the food supply; and
- Drawing consumer attention to imported products which they may perceive as displacing local produce and producers.

The chemicals for which the MRLs are requested are already permitted to be used in Australia for other commodities. **Table 6** sets out the range of MRLs for the chemicals that are the subject of this application that have been approved for other commodities in the Code. Table 6 also lists like commodities for which there is an approved MRL for the chemical.

With respect to consumer concern in relation to imported products – these commodities will be required to be labelled with country of origin so consumers will be aware that these are imported product and will be able to make a choice as to whether they purchase them or not.

Table 6: MRLs set for other commodities

CHEMICAL	Current range of MRLs in the Code[20]	Codex MRL (requested MRL)
Fenhexamid (Blueberry)	0.01 – T20 Blackberries = T20; Raspberries, red, black = T20; Dewberries = T20	5.0mg/kg
Azoxystrobin (Blueberry)	*0.01 – T10	5.0mg/kg
Fludioxonil (Blueberry)	0.01 – 10 Blackberries = T5; Cloudberry = T5; Dewberries = T5; Raspberries, red, black = T5; Strawberry = T5	2.0mg/kg
Bifenthrin (Raspberry)	*0.01 – T10 Cherries = T1	1.0mg/kg

Note 1: an asterisk '*' denotes that the maximum residue limit or the extraneous residue limit is set at or about the limit of determination.

Note 2: 'T' denotes that the maximum residue limit or the extraneous residue limit is a temporary maximum residue limit or extraneous residue limit.

3.1.9. Status of Similar Applications

(As per Section 3.1.4 of the Application Handbook 1 August 2011)

AFGC has no similar applications in other countries.

20 Standard 1.4.2 Australia New Zealand Food Standards Code, start date 18 January 2013

4. REGULATORY IMPACT INFORMATION

(As per section 3.1.4 A of the Application Handbook 1 August 2011)

4.1.1. The significance of the market

The value of blueberry and raspberry exports from Chile to Australia is set out in **Table 7.** In 2011 the total value was $USD15,913,438 (Jan – Nov).

Table 7: Blueberry and Raspberry Exports to Australia - Value

COMMODITY	Year	Value (USD)[21]
Raspberry	2011	7,594,694 (Jan – Nov)
Raspberry	2010	9,507,200 (full year)
Raspberry	2009	8,280,750 (full year)
Blueberry	2011	8,318,744 (Jan – Nov)
Blueberry	2010	2,724,362 (full year)
Blueberry	2009	1,490,855 (full year)

As previously stated, in 2012, 7,024 tonnes of natural frozen (IQF) fruit was sold in supermarkets in Australia, up from 6,317 tonnes in 2011 showing strong growth for the category at 11%.[22]

The frozen fruit/smoothies category grocery value is worth $75.7m (18.7% value change).[23]

4.1.2. Costs and Benefits – Consumer

Consumers may be disadvantaged if the proposed MRLs are not progressed as this will limit sources of IQF blueberries and raspberries and potentially result in reduced availability, leading to increased prices. A reduction in the availability of IQF blueberries and raspberries will mean that consumers wishing to purchase these commodities may have to consider fresh blueberries and raspberries as an alternative. The cost of fresh blueberries and raspberries

21 Source: PriCOmREit Information Services Ltd Chile, EXPORTACIONES CHILENAS DE FRUTA CONGELADA (CHILEAN EXPORTS OF FROZEN FRUIT)

22 Source: Aztec Scan Data, Feb 2013

23 Source: Retail World Annual Report, December 2011

(upwards of $40/kg)[24] is significantly higher than IQF blueberries and raspberries ($9-$18/kg)[25] – consumers will have to pay this premium or chose to go without.

Consumers may be concerned about the introduction of additional residue limits and the long-term safety of residues and residue combinations, and therefore consider the amendments to be detrimental to long term health and safety of the community.

AFGC acknowledge that FSANZ ensures that potential chemical residues in food are within levels that are known to be safe for people to eat. FSANZ, working with the APVMA, reviews the exposure of consumers to chemical residues according to international best practice methods. These assessments examine the total amount of a particular chemical which may be present in foods in Australia, to make sure that the total amount a consumer is exposed to in the diet is safe. FSANZ will not allow chemical residues in food that would pose a risk to public health and safety.

Consumers will benefit from the proposed amendments as this will extend the options that they have to purchase IQF blueberries and raspberries resulting in greater consumer choice and potentially reduced prices.

4.1.3. Costs and Benefits - Industry and Business

Business may benefit or be disadvantaged by the proposed amendments. Additional MRLs will benefit importers in that this will extend the options to source IQF blueberries and raspberries. Conversely, importers may be disadvantaged where proposed MRLs are not progressed as this may unnecessarily limit sources of IQF blueberries and raspberries.

The cost to Patties Foods should the proposed MRLs not be progressed will be loss of sales. [Information to support this statement has been provided separately as confidential commercial information.]

The proposed MRL variations ensure openness and transparency in relation to the residues that could reasonably occur in food. The changes will minimise potential costs to importers in terms of permitting the sale of food containing legitimate residues.

4.1.4. Costs and Benefits - Government

The proposed amendment places no additional regulatory costs on government. As this is a paid application there will be no costs incurred within FSANZ.

The proposed MRL variations benefit the Australian Government in that they serve to further harmonise local food standards with international standards. Achieving further consistency between local and international jurisdictions will minimise compliance costs and assist in efficient enforcement of regulations.

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24 Source: Coles online as at 8/3/13: $4.90 for 125g ($39/kg); Woolworths online as at 8/3/13 : $4.98 for 125g ($40/kg); Martellis Fruit Market (10/03/13), Cherrybrook, NSW $55.92/kg for blueberries

25 Source: Patties Food Limited

4.1.5. Impact on International Trade

AFGC notes that FSANZ must have regard to its WTO obligations; the promotion of consistency between domestic and international food standards; and the promotion of fair trading in food. These matters encompass consideration of international standards and trade issues.

This amendment would bring Australia into line with the Codex Standard.

The Application seeks to address specific anomalies between the Code and Codex which present barriers to trade in IQF blueberries and raspberries. The proposed amendments to the Code would align limits in the Code with international standards and/or standards in the producer country (Chile) and permit the sale in Australia of IQF blueberries and raspberries containing legitimate residues that do not present health or safety concerns.

AFGC has concluded that the proposed amendments are necessary, cost-effective and beneficial.

5. INFORMATION TO SUPPORT THE APPLICATION

(As per section 3.1.5 of the Application Handbook 1 August 2011)

Key issues for FSANZ are the safety, legitimacy and justification for the presence of the residues in food. The assessment will consider whether residues may occur in food as a result of legitimate use of chemical products. That is, whether the active/s are permitted to be used in producing the relevant food in the source country or countries; whether residues are expected to occur as a result of this use; whether the source country and importing countries have determined MRLs or equivalent standards; and whether the food is imported to Australia. The relevant details should be provided to FSANZ. Information on the significance of the market and the cost impacts of the lack of adequate MRLs in the Code for the food should also be included.

FSANZ's assessment will consider other relevant MRLs internationally and whether in the context of the Australian diet, consuming residues of the chemical that may occur in the food is within health-based guidance values set by the Australian Government Department of Health and Ageing. Data requirements for the dietary exposure assessment may include highest residue and supervised trial median residue data accepted by the Joint FAO/WHO Meetings on Pesticide Residues or a regulatory authority in a recognised jurisdiction.

5.2. Description of the Chemicals

5.2.1. Fenhexamid

Fenhexamid is a locally systemic, protectant fungicide. Fenhexamid prevents fungi from infecting plants by inhibiting spore germination and mycelial growth.

5.2.2. Azoxystrobin

Azoxystrobin is a fungicide commonly used in agriculture. The substance is used as an active agent protecting plants and fruit/vegetables from fungal diseases.

5.2.3. Fludioxonil

Fludioxonil is a synthetic compound of the phenylpyrrole group of substances. It can be used to control fungal disease, making it a useful seed treatment as well as a post-harvest treatment for fruit. Fludioxonil is a broad-spectrum fungicide which is non-systemic with a long residual activity.

5.2.4. Bifenthrin

Bifenthrin is a synthetic pyrethroid insecticide with a range of agricultural uses.

The synthetic pyrethroids are synthetic chemicals similar in structure to the naturally- occurring pyrethrums. Like other pyrethroids, bifenthrin kills insects by affecting the salt balance (sodium channels) in nerve cells. It has a broad spectrum of activity against insects with the main toxic effect on the nervous system.

5.2.5. Public Health and Safety Issues

All of the chemicals have been the subject of toxicological evaluation by the Joint FAO/WHO Expert Committee on Pesticides (JMPR) prior to the establishment of the requested MRLs. Copies of the JMPR evaluation for each chemical are attached under **Appendix 1**. The relevant conclusions of the respective JMPR reports are summarised below. The chemicals for which the MRLs are requested are already permitted to be used in Australia for other commodities (refer to Table 6, Section 3.3). Recognition of MRLS for blueberries and raspberries would not be expected to increase dietary exposure to these chemicals significantly beyond that already in the diet from local use patterns. Consequently, no adverse public health and safety consequences are anticipated, for any population group or sub-group, from the consumption of blueberries or raspberries containing residues of the named chemicals at or below the Codex MRLs.

5.2.6. Fenhexamid (JMPR 2005)

An ADI of 0–0.2 mg/kg body weight (bw) was established, on the basis of a NOAEL of 17.4 mg/kg bw per day for increased adrenal weight and the presence of intracytoplasmic vacuoles in the adrenal cortex of females and haematopoietic effects (increase in the number of Heinz bodies, decrease erythrocyte count, haemoglobin concentration and erythrocyte volume fraction) seen at higher doses in both sexes in a 52-week study in dogs fed with fenhexamid, and a 100-fold safety factor.

An Acute Reference Dose (ARfD) for fenhexamid was considered not necessary on the basis of its low acute toxicity (LD50 Rat >5000mg/kg).

An MRL for Fenhexamid in blueberries of 5mg/kg was recommended (adopted by Codex 2006).

5.2.7. Azoxystrobin (JMPR 2009)

An ADI of 0–0.2 mg/kg bw was established, based on a NOAEL of 300 ppm (equal to 18.2 mg/kg bw per day) in a 2-year study of carcinogenicity in rats, identified on the basis of reduced body weights, food consumption and food efficiency, and bile-duct lesions seen at 750 ppm (equal to 34 mg/kg bw per day) and above, and using a safety factor of 100.

An ARfD for Azoxystrobin was not considered necessary because no toxicity could be attributable to a single exposure in the available database. The acute toxicity is very low (LD50 Rat >5000mg/kg).

An MRL for Azoxystrobin in “Berries and other small fruit” of 5mg/kg was recommended (adopted by Codex in 2009).

5.2.8. Fludioxonil (JMPR 2004)

An ADI of 0–0.4 mg/kg bw was established based on a NOAEL of 37mg/kg bw per day in a 2-year dietary study in rats, and a 100-fold safety factor. Although effects on the kidneys occurred after relatively short periods of exposure, the meeting concluded that such effects were unlikely to result from a single exposure and consequently, concluded that an ARfD for Fludioxonil was unnecessary. The acute toxicity is very low (LD50 Rat >5000mg/kg).

An MRL for Fludioxonil in “Blueberries” of 2mg/kg was recommended (adopted by Codex in 2006).

5.2.9. Bifenthrin (JMPR 1993)

An ADI of 0-0.02 mg/kg bw was established based on the NOAEL of 1.5 mg/kg bw/day in the one-year study in dogs using a 100-fold safety factor. The acute toxicity of Bifenthrin is moderate (LD50 Rat 3 mg/kg).

The 2009 JMPR reviewed Bifenthrin within the periodic review programme of CCPR and established an ARfD of 0.01 mg/kg bw based on a threshold dose (an estimate of the highest no-effect level at which treated rats would not display any decrease in motor activity) of 1.3 mg/kg bw in an acute rat gavage study for a decrease in motor activity. The ARfD was subsequently confirmed by JMPR at its 2011 meeting.

An MRL for Bifenthrin in “Raspberries, red, black” 1mg/kg was recommended by JMPR in 2009 meeting and adopted by Codex in 2011.

5.2.10. MRL Analysis Data

Patties Foods have provided analytical data to demonstrate that IQF blueberries and raspberries imported from Chile comply with the proposed MRLs.

This data is provided in **Appendix 3.**

5.2.11. A list of the food groups or foods proposed to contain IQF blueberries and raspberries

A list of potential food groups or foods that may contain IQF blueberries and raspberries is provided in **Table 9** to assist FSANZ with their dietary modelling. These are based on home use, not commercial use.

The food list is based on the food group classification system used in Standard 1.3.1 – Food Additives.

Table 9: Food groups and Foods - Blueberries and Raspberries (IQF)

Standard 1.3.1 Category Number	Standard 1.3.1 Category Description	Use[26]	Amount (g) or % concentration
1.2.2.0	Fermented milk products and rennetted milk products	Yoghurt - topper	Serving size = 100g
3.0.0.0	Ice Cream and Edible Ices	Other frozen dairy - topper	Serving size = 100g
4.0	Fruits and Vegetables	As is	Serving size = 100g
6.3.0.0	Processed cereal and meal products	Hot cereal - topper	Serving size = 100g
6.3.0.0	Processed cereal and meal products	Ready to eat cereal – topper or mix in	Approx. 60 - 100g/serve
7.2.0.0	Biscuits, cakes and pastries	Cakes and muffins	Approx. 10 – 25g/serve
7.2.0.0	Biscuits, cakes and pastries	Pikelets/Pancakes	Approx. 35g/serve (3 pikelets)
20.2	Food other than beverages - dairy and fat based desserts, dips and snacks	Cheesecake/Trifle	Approx. 20 – 50g/serve

26 Serving quantities/amounts were based on recipes available on the Creative Gourmet® website http://www.creativegourmet.com.au/index.htm. This is a brand of Patties Foods Limited

5.2.12. Support for the Proposed Change

Any evidence that the food industry generally or other specific companies have an interest in, or support, the proposed change to the Code.

AFGC has the support of the following organisations in making this application:

1. Patties Foods Limited; and
2. Food and Beverage Importers Association.

6. INTERNATIONAL AND OTHER NATIONAL STANDARDS

(As per section 3.1.9 of the Application Handbook 1 August 2011)

6.1.1. International Standards

The application must contain details of any Codex Alimentarius Commission (Codex) Standards relevant to this application, where available.

Relevant Codex standards are summarised in **Appendix 1**.

6.1.2. Other national standards or regulations

The application should contain details of relevant standards or regulations in other countries with comparable regulatory processes, where available.

Other national standards or regulations are summarised in **Appendix 2.**

6.1.3. Data to demonstrate that the proposed labelling change will assist consumers to make an informed choice and will not mislead them

This is not relevant in the context of this application as there is no labelling requirement for the chemicals which are the subject of this application.

7. ASSESSMENT PROCEDURE

(As per section 3.1.6 of the Application Handbook 1 August 2011)

AFGC seeks to proceed with a paid application that adopts a general assessment procedure up to a maximum of 350 hours.

8. CONFIDENTIAL COMMERCIAL INFORMATION

(As per section 3.1.7 of the Application Handbook 1 August 2011)

This application **does contain** information that is confidential commercial information.

9. EXCLUSIVE CAPTURABLE COMMERCIAL BENEFIT

(As per section 3.1.8 of the Application Handbook 1 August 2011)

This application will not confer an Exclusive Capturable Commercial Benefit for AFGC or any other individual company.

CHECKLIST

(As per section 3.1.11 of the Application Handbook 1 August 2011)

General Requirements

- ☑ Executive Summary
- ☑ Relevant sections of Part 3 identified
- ☑ Pages sequentially numbered
- ☑ Electronic + 2 hard copies
- ☑ Electronic and hard copies identical
- ☑ Hard copies capable of being laid flat
- ☑ All references provided
- ☑ Applicant details
- ☑ Purpose of the application
- ☑ Justification for the application
- ☑ Information to support the application
- ☑ Assessment procedure – General assessment up to 350 hours.
- ☑ Confidential Commercial Information
    - Confidential material separated in both electronic and hard copy
    - Justification provided

- ☑ Exclusive Capturable Commercial Benefit
- ☑ International and other national standards
- ☑ Statutory Declaration
- ☑ Checklist provided with application

APPENDIX 1 – INTERNATIONAL STANDARDS - CODEX MRLS

Chemical	Food commodity requested MRL to harmonise with (mg/kg)	Source of MRL to harmonise with	Reference link to published MRL in source country / Codex where possible	Status in Standard 1.4.2 of the *Australia New Zealand Food Standards Code*	Summary of JMPR toxicology evaluation
Fenhexamid	5mg/kg Blueberry	Codex 5mg/kg *Blueberries* adopted 2006	Codex Pesticides Residues in Food Online Database http://www.codexalimentarius.net/pestres/data/pesticides/details.html?id=215	Listed in Schedule 1 with Australian MRLs for other commodities	JMPR 2005[27] ADI 0–0.2 mg/kg bw on the basis of a NOAEL of 17.4 mg/kg bw per day for increased adrenal weight and the presence of intracytoplasmic vacuoles in the adrenal cortex of females and haematopoietic effects (increase in the number of Heinz bodies, decrease erythrocyte count, haemoglobin concentration and erythrocyte volume fraction) seen at higher doses in both sexes in a 52-week study in dogs fed with fenhexamid, and a 100-fold safety factor.

27 FENHEXAMID 255–301 JMPR 2005

					ARfD for fenhexamid was not necessary on the basis of its low acute toxicity LD50 Rat >5000mg/kg
Azoxystrobin	5mg/kg Blueberry	Codex 5mg/kg *Berries and other small fruit* adopted 2009	Codex Pesticides Residues in Food Online Database http://www.codexalimentarius.net/pestres/data/pesticides/details.html?id=229	Listed in Schedule 1 with Australian MRLs for other commodities	JMPR 2009a[28] ADI 0–0.2 mg/kg bw based on a NOAEL of 300 ppm (equal to 18.2 mg/kg bw per day) in a 2-year study of carcinogenicity in rats, identified on the basis of reduced body weights, food consumption and food efficiency, and bile-duct lesions seen at 750 ppm (equal to 34 mg/kg bw per day) and above, and using a safety factor of 100. ArfD for azoxystrobin was not necessary because no toxicity could be attributable to a single exposure in the available database LD50 Rat >5000mg/kg
Fludioxonil	2mg/kg Blueberry	Codex 2mg/kg *Blueberries* adopted 2006	Codex Pesticides Residues in Food Online Database http://www.codexalimentarius.net/pestres/data	Listed in Schedule 1 with Australian MRLs for other commodities	JMPR 2004[29] ADI 0–0.4mg/kg bw based on a NOAEL of 37mg/kg bw per day in a 2-year dietary study in rats, and

28 JMPR 2009a

29 JMPR 2004

			/pesticides/details.html?id=211		a 100-fold safety factor. Although effects on the kidneys occurred after relatively short periods of exposure, the Meeting concluded that such effects were unlikely to result from a single exposure. Consequently, the Meeting concluded that an ARfD for fludioxonil was unnecessary.LD50 Rat >5000mg/kg
Bifenthrin	1 mg/kg Raspberry,	Codex 1mg/kg *Raspberries, red, black* adopted 2011	Codex Pesticides Residues in Food Online Database http://www.codexalimentarius.net/pestres/data/pesticides/details.html?id=178	Listed in Schedule 1 with Australian MRLs for other commodities	JMPR 1993[30] ADI 0-0.02 mg/kg bw based of the NOAEL of 1.5 mg/kg bw/day in the one-year study in dogs using a 100-fold safety factor. LD50 Rat 3 mg/kg

30 JMPR 1993

APPENDIX 2 – OTHER NATIONAL STANDARDS OR REGULATIONS

Search conducted on the International Maximum Residue Level Database[31]

FAS MRL Database

Terms of Use

Users are advised that international regulations and permissible Maximum Residue Levels (MRL) frequently change. Although this International MRL Database is updated frequently, the information in it may not be completely up-to-date or error free. Additionally, commodity nomenclature and residue definitions vary between countries and country policies regarding deferral to international standards are not always transparent. This database is intended to be an initial reference source only, and users must verify any information obtained from it with knowledgeable parties in the market of interest prior to the sale or shipment of any products. The developers of this database are not liable for any damages, in whole or in part, caused by or arising in any way from user's use of the database.

Results Key Legend

MRL values in *Red Italics* are more restrictive than US

All numeric values listed are in parts per million (ppm), unless otherwise noted

--- (dashes) indicate that no specific MRL for the commodity or relevant crop group is established. A default MRL may apply for countries that have default MRLs (see Default MRLs section below). Additionally, inadvertent or extraneous MRLs are not included in the database; and the database does not indicate substances that are banned in a country or exempt from requiring an MRL.

Cod (Codex), EU (European Union), US (United States) and EXP (exporting market) indicate the source of the MRL for countries which defer to other markets' MRL regulations.

Section 18, Time-Limited, or Regional: indicates that the US MRL is a temporary Section 18, Time-Limited Tolerance, or Regional Tolerance.

Default MRLs

These countries have a default MRL which may be applicable if a specific MRL is not established. However, default MRL regulations vary by country. Before assuming a default MRL applies, the country's specific regulations governing the default MRLs should be consulted. Country MRL regulations are summarized in market information pages located at the "Market Information" link on the toolbar at the top of this page.

31 http://www.mrldatabase.com/ accessed 23.02.13

European Union: 0.01 ppm | Argentina: 0.01 | Canada: 0.1 ppm | Iceland: 0.01 | Japan: 0.01 ppm | Malaysia: 0.01 ppm | New Zealand: 0.1 ppm | Norway: 0.01 | South Africa: 0.01 ppm

		US *1*	Cod *2*	EU *3*	Chl *4*
Blueberry, highbush	**Azoxystrobin**	5 PPM	5 PPM	5 PPM	5 PPM
		1. United States maintains a Azoxystrobin MRL of 5PPM set on "Bushberry, subgroup 13-07B". 2. Codex maintains a Azoxystrobin MRL of 5PPM set on "Berries and other small fruits". Commodity Note: Except cranberry, grapes and strawberry. 3. European Union maintains a Azoxystrobin MRL of 5PPM set on "Blueberries (Bilberries)". Commodity Note: Fresh or frozen fruit. MRL applies to whole product after removal of caps/crowns and stems. 4. Chile maintains a Azoxystrobin MRL of 5PPM set on "Berries and other small fruits, except cranberry, grape and strawberry (including among others raspberry, blueberry)".			
		US *1*	**Cod**	**EU *2***	**Chl *3***
Blueberry, highbush	**Bifenthrin**	1.8 PPM	 ---	*{0.05}* PPM	1.8 PPM
		1. United States maintains a Bifenthrin MRL of 1.8PPM set on "Bushberry, subgroup 13-07B". 2. European Union maintains a Bifenthrin MRL of 0.05PPM set on "Blueberries (Bilberries)". Commodity Note: Fresh or frozen fruit. MRL applies to whole product after removal of caps/crowns and stems. 3. Chile maintains a Bifenthrin MRL of 1.8PPM set on "Blueberry".			
		US *1*	**Cod *2***	**EU *3***	**Chl *4***
Blueberry, highbush	**Fenhexamid**	5 PPM	5 PPM	5 PPM	5 PPM
		1. United States maintains a Fenhexamid MRL of 5PPM set on "Bushberry, subgroup 13B". 2. Codex maintains a Fenhexamid MRL of 5PPM set on "Blueberries". 3. European Union maintains a Fenhexamid MRL of 5PPM set on "Blueberries (Bilberries)". Commodity Note: Fresh or frozen fruit. MRL applies to whole product after removal of caps/crowns and stems. 4. Chile maintains a Fenhexamid MRL of 5PPM set on "Blueberry".			

		US *1*	Cod *2*	EU *3*	Chl *4*
Blueberry, highbush	**Fludioxonil**	2 PPM	2 PPM	3 PPM	2 PPM
		1. United States maintains a Fludioxonil MRL of 2PPM set on "Bushberry, subgroup 13-07B". 2. Codex maintains a Fludioxonil MRL of 2PPM set on "Blueberries". 3. European Union maintains a Fludioxonil MRL of 3PPM set on "Blueberries (Bilberries)". Commodity Note: Fresh or frozen fruit. MRL applies to whole product after removal of caps/crowns and stems. 4. Chile maintains a Fludioxonil MRL of 2PPM set on "Blueberry".			
		US *1*	Cod *2*	EU *3*	Chl *4*
Blueberry, lowbush	**Azoxystrobin**	10 PPM	*{5}* PPM	*{5}* PPM	*{5}* PPM
		1. United States maintains a Azoxystrobin MRL of 10PPM set on "Berry, low growing, subgroup 13-07G, except cranberry". 2. Codex maintains a Azoxystrobin MRL of 5PPM set on "Berries and other small fruits". Commodity Note: Except cranberry, grapes and strawberry. 3. European Union maintains a Azoxystrobin MRL of 5PPM set on "Blueberries (Bilberries)". Commodity Note: Fresh or frozen fruit. MRL applies to whole product after removal of caps/crowns and stems. 4. Chile maintains a Azoxystrobin MRL of 5PPM set on "Berries and other small fruits, except cranberry, grape and strawberry (including among others raspberry, blueberry)".			
		US *1*	Cod	EU *2*	Chl *3*
Blueberry, lowbush	**Bifenthrin**	1.8 PPM	 ---	*{0.05}* PPM	1.8 PPM
		1. United States maintains a Bifenthrin MRL of 1.8PPM set on "Bushberry, subgroup 13-07B". 2. European Union maintains a Bifenthrin MRL of 0.05PPM set on "Blueberries (Bilberries)". Commodity Note: Fresh or frozen fruit. MRL applies to whole product after removal of caps/crowns and stems. 3. Chile maintains a Bifenthrin MRL of 1.8PPM set on "Blueberry".			

		US *1*	Cod *2*	EU *3*	Chl *4*
Blueberry, lowbush	**Fenhexamid**	5 PPM	5 PPM	5 PPM	5 PPM
		1. United States maintains a Fenhexamid MRL of 5PPM set on "Bushberry, subgroup 13B". 2. Codex maintains a Fenhexamid MRL of 5PPM set on "Blueberries". 3. European Union maintains a Fenhexamid MRL of 5PPM set on "Blueberries (Bilberries)". Commodity Note: Fresh or frozen fruit. MRL applies to whole product after removal of caps/crowns and stems. 4. Chile maintains a Fenhexamid MRL of 5PPM set on "Blueberry".			
		US *1*	Cod *2*	EU *3*	Chl *4*
Blueberry, lowbush	**Fludioxonil**	3 PPM	*{2}* PPM	3 PPM	*{2}* PPM
		1. United States maintains a Fludioxonil MRL of 3PPM set on "Berry, low growing, subgroup 13-07G, except cranberry". 2. Codex maintains a Fludioxonil MRL of 2PPM set on "Blueberries". 3. European Union maintains a Fludioxonil MRL of 3PPM set on "Blueberries (Bilberries)". Commodity Note: Fresh or frozen fruit. MRL applies to whole product after removal of caps/crowns and stems. 4. Chile maintains a Fludioxonil MRL of 2PPM set on "Blueberry".			
		US *1*	Cod *2*	EU *3*	Chl *4*
Raspberry, black/red	**Azoxystrobin**	5 PPM	5 PPM	5 PPM	5 PPM
		1. United States maintains a Azoxystrobin MRL of 5PPM set on "Caneberry, subgroup 13-07A". 2. Codex maintains a Azoxystrobin MRL of 5PPM set on "Berries and other small fruits". Commodity Note: Except cranberry, grapes and strawberry. 3. European Union maintains a Azoxystrobin MRL of 5PPM set on "Raspberries (Wineberries, arctic bramble/raspberry, (Rubus arcticus), nectar raspberries (Rubus arcticus x idaeus))". Commodity Note: Fresh or frozen fruit. MRL applies to whole product after removal of caps/crowns and stems. 4. Chile maintains a Azoxystrobin MRL of 5PPM set on "Berries and other small fruits, except cranberry, grape and strawberry (including among others raspberry, blueberry)".			

		US *1*	Cod *2*	EU *3*	Chl *4*
Raspberry, black/red	**Bifenthrin**	1 PPM	1 PPM	1 PPM	1 PPM
		1. United States maintains a Bifenthrin MRL of 1PPM set on "Caneberry subgroup 13A". 2. Codex maintains a Bifenthrin MRL of 1PPM set on "Raspberries, Red, Black". 3. European Union maintains a Bifenthrin MRL of 1PPM set on "Raspberries (Wineberries, arctic bramble/raspberry, (Rubus arcticus), nectar raspberries (Rubus arcticus x idaeus))". Commodity Note: Fresh or frozen fruit. MRL applies to whole product after removal of caps/crowns and stems. 4. Chile maintains a Bifenthrin MRL of 1PPM set on "Raspberry".			
		US *1*	Cod *2*	EU *3*	Chl *4*
Raspberry, black/red	**Fenhexamid**	20 PPM	*{15}* PPM	*{10}* PPM	*{15}* PPM
		1. United States maintains a Fenhexamid MRL of 20PPM set on "Caneberry subgroup 13A". 2. Codex maintains a Fenhexamid MRL of 15PPM set on "Raspberries, Red, Black". 3. European Union maintains a Fenhexamid MRL of 10PPM set on "Raspberries (Wineberries, arctic bramble/raspberry, (Rubus arcticus), nectar raspberries (Rubus arcticus x idaeus))". Commodity Note: Fresh or frozen fruit. MRL applies to whole product after removal of caps/crowns and stems. 4. Chile maintains a Fenhexamid MRL of 15PPM set on "Raspberry".			
		US *1*	Cod *2*	EU *3*	Chl *4*
Raspberry, black/red	**Fludioxonil**	5 PPM	5 PPM	5 PPM	5 PPM
		1. United States maintains a Fludioxonil MRL of 5PPM set on "Caneberry, subgroup 13-07A". 2. Codex maintains a Fludioxonil MRL of 5PPM set on "Raspberries, Red, Black". 3. European Union maintains a Fludioxonil MRL of 5PPM set on "Raspberries (Wineberries, arctic bramble/raspberry, (Rubus arcticus), nectar raspberries (Rubus arcticus x idaeus))". Commodity Note: Fresh or frozen fruit. MRL applies to whole product after removal of caps/crowns and stems. 4. Chile maintains a Fludioxonil MRL of 5PPM set on "Raspberry".			

APPENDIX 3 – ANALYTICAL TESTING RESULTS FOR IQF BLUEBERRIES AND RASPBERRIES (EX CHILE)

The method used for the determination of pesticide residues in fruit, fruit products, vegetables and vegetable products is Gas Chromatography Mass Spectroscopy (GC/MS) and Liquid Chromatography Tandem Mass Spectroscopy (LC/MSMS). [32]

IQF Blueberries – MRL Testing Results

Raw Material	Container Number	Supplier	Lot No.	Stock remaining (kg)	Testing Date	Testing Laboratory	Results (mg/kg)	Limit of Reporting (mg/kg)
Blueberries (raw)	MORU5810906	Natural Ingredients	1206080001	544	19/12/2012	Agrifood	All <LOR	Fenhexamid = <0.02; Azoxystrobin < 0.05; Fludioxonil < 0.01
Blueberries (raw)	CRLU6621946	Natural Ingredients	1206250021	0.00	19/12/2012	Agrifood	All <LOR	
Blueberries (raw)	SZLU9027670	Natural Ingredients	1206250022	0.00	19/12/2012	Agrifood	Fenhexamid 0.024	
Blueberries (raw)	CRLU1277840	Natural Ingredients	1206260002	0.00	18/12/2012	Agrifood	All <LOR	
Blueberries (raw)	TRIU8765597	Natural Ingredients	1206260020	4814.4	19/12/2012	Agrifood	Fenhexamid 0.032	
Blueberries (raw)	TCLU1100471	Alifruit	1207120001	0.00	18/12/2012	Agrifood	All <LOR	
Blueberries (raw)	TRIU8168518	Alifruit	1207120002	21148	24/12/2012	Agrifood	Azoxystrobin 0.075 Proposed MRL= 5.0 Fenhexamid 0.029	
Blueberries (raw)	MWCU6770730	Entyce	1207120003	0.00	19/12/2012	Agrifood	All <LOR	
Blueberries (raw)	GESU9196250	Alifruit	1207130001	11475.6	24/12/2012	Agrifood	Fenhexamid 0.097	

32 Agrifood Technology: Determination of pesticide residues in fruit and vegetable using LC/MS/MS and GC/MS

Blueberries (raw)	MSCU7320949	Alifruit	1207130002	24165.8	24/12/2012	Agrifood	Fenhexamid 0.13 Re-test/composite testing 18/2/13 = Fenhexamid 0.038;	
Blueberries (raw)	TCLU1031684	Natural Ingredients	1209070001	23077.8	24/12/2012	Agrifood	All <LOR except Phosmet 0.049	
Blueberries (raw)	BMOU9777591	Natural Ingredients	1209120001	23091.4	24/12/2012	Agrifood	Fenhexamid 0.052	
Blueberries (raw)	MORU1118989	Natural Ingredients	1209130002	22086.4	24/12/2012	Agrifood	Fenhexamid 0.042	
Blueberries (raw)	CHIU9060347	Alifruit	1210030001	0.00	19/12/2012	Agrifood	All <LOR	
Blueberries (raw)	CRLU1288248	Alifruit	1210030002	24165.8	24/12/2012	Agrifood	All <LOR	
Blueberries (raw)	TRIU8350862	Alifruit	1210030003	24208	24/12/2012	Agrifood	Fenhexamid 0.046 Composite from 10 cartons retested. All < LOR	
Blueberries (raw)	TRIU8887640	Alifruit	1210030004	24029.8	24/12/2012	Agrifood	Fenhexamid 0.11	
Blueberries (raw)	TRIU8887996	Alifruit	1210040001	26817.8	24/12/2012	Agrifood	Fenhexamid 0.028 Composite from 10 cartons retested. All <LOR	
Blueberries (raw)	MORU0501083	Natural Ingredients	1210050001	21964	24/12/2012	Agrifood	Fenhexamid 0.59	
Blueberries (raw)	GESU9454077	Natural Ingredients	1210050002	22887.4	24/12/2012	Agrifood	Fenhexamid 0.32	
Blueberries (raw)	CRSU6141635	Natural Ingredients	1210240004	19298.4	18/01/2013	Agrifood	All <LOR	
Blueberries (raw)	MEDU9036080	Alifruit	1210240005	23106.4	7/01/2013	Agrifood	All <LOR	
Blueberries (raw)	MEDU9112787	Alifruit	1210250001	23106.4	7/01/2013	Agrifood	All <LOR	
Blueberries (raw)	SZLU9034370	Alifruit	1210250002	23106.40	7/01/2013	Agrifood	All < LOR	

Blueberries (raw)	TRIU8213263	Alifruit	1210250003	23106.40	7/01/2013	Agrifood	Fenhexamid 0.054	
Blueberries (raw)	MORU0051284	Natural Ingredients	1210290001	21964	7/01/2013	Agrifood	Fenhexamid 0.037	
Blueberries (raw)	CRLU1278682	Alifruit	1211140001	22576	19/12/2012	Agrifood	All <LOR	
Blueberries (raw)	GESU9124558	Alifruit	1211150001	23106.4	7/01/2013	Agrifood	Fenhexamid 0.035	
Blueberries (raw)	TCLU1100532	Alifruit	1211150002	23106.40	7/01/2013	Agrifood	All <LOR	
Blueberries (raw)	CRSU6125716	Alifruit	1211150003	20576.80	7/01/2013	Agrifood	All <LOR	
							All < LOR refers to chemicals that are requested in this application	
						Proposed MRLs	Azoxystrobin = 5.0mg/kg	
							Fenhexamid = 5.0mg/kg	
							Fludioxonil = 2.0mg/kg	

IQF Raspberries – MRL Testing Results

Raw Material	Container Number	Supplier	Lot No.	Stock remaining (kg)	Testing Date	Testing Laboratory	Results (mg/kg) Bifenthrin	Limit of Reporting (mg/kg)Bifenthrin
Raspberries	CRSU6155686	Natural Ingredients	1205250004	0.0	10/12/2012	DTS (NMI)	<LOR	<0.01
Raspberries	CGMU4958617	Natural Ingredients	1206120002	0.0	10/12/2012	DTS (NMI)	<LOR	<0.01
Raspberries	TCLU1151268	Natural Ingredients	1206130004	0.0	10/12/2012	DTS (NMI)	<LOR	<0.01
Raspberries	GESU9590999	Natural Ingredients	1206220001	0.0	10/12/2012	DTS (NMI)	<LOR	<0.01
Raspberries	MWCU6577865	FCI	1207050002	0.0	10/12/2012	DTS (NMI)	<LOR	<0.01
Raspberries	MCAU8563406	FCI	1207050003	0.0	10/12/2012	DTS (NMI)	<LOR	<0.01
Raspberries	MMAU1179512	FCI	1207060001	20650.0	28/12/2012	Agrifood	Bifenthrin 0.01	<0.01
Raspberries	PONU4889210	FCI	1207060002	1110.0	28/12/2012	Agrifood	<LOR	<0.01
Raspberries	MMAU1218115	FCI	1207060003	18500.0	28/12/2012	Agrifood	<LOR	<0.01
Raspberries	PONU4981688	FCI	1207090001	22500.0	10/12/2012	DTS (NMI)	<LOR	<0.01
Raspberries	CGMU5008331	Natural Ingredients	1208060001	15320.0	10/12/2012	DTS (NMI)	<LOR	<0.01
Raspberries	TCLU1002726	Natural Ingredients	1208060002	17770.0	10/12/2012	DTS (NMI)	<LOR	<0.01
Raspberries	CGMU9320271	Natural Ingredients	1208060005	21500.0	10/12/2012	DTS (NMI)	Bifenthrin 0.055	<0.01

Raspberries	CGMU9316944	Natural Ingredients	1208070001	21500.0	10/12/2012	DTS (NMI)	<LOR	<0.01
Raspberries	TRIU8739900	Natural Ingredients	1208070002	21500.0	10/12/2012	DTS (NMI)	<LOR	<0.01
Raspberries	CHIU9017628	Natural Ingredients	1208070003	21500.0	10/12/2012	DTS (NMI)	<LOR	<0.01
Raspberries	MORU020580	Natural Ingredients	1208160001	21720.0	10/12/2012	DTS (NMI)	<LOR	<0.01
Raspberries	TRIU8737281	Natural Ingredients	1208160003	21500.0	10/12/2012	DTS (NMI)	Bifenthrin 0.012	<0.01
Raspberries	CGMU9295029	Natural Ingredients	1208310001	20690.0	7/01/2013	Agrifood	<LOR	<0.01
Raspberries	MWCU6638220	FCI	1209050006	22500.0	7/01/2013	Agrifood	<LOR	<0.01
Raspberries	CHIU9006290	Natural Ingredients	1209070002	14400.0	18/01/2013	Agrifood	<LOR	<0.01
Raspberries	MWCU6862646	FCI	1209120001	7320.0	18/01/2013	Agrifood	<LOR	<0.01
Raspberries	MORU0052315	Alifrut	1209180001	21370.0	7/01/2013	Agrifood	<LOR	<0.01
Raspberries	MWMU6400709	FCI	1209190002	9780.0	7/01/2013	Agrifood	<LOR	<0.01
Raspberries	BMOU9750327	FCI	1209190006	21490.0	7/01/2013	Agrifood	<LOR	<0.01
Raspberries	MWCU6818915	Natural Ingredients	1209260005	22490.0	7/01/2013	Agrifood	<LOR	<0.01
Raspberries	CGMU4915791	Natural Ingredients	1210010002	21490.0	7/01/2013	Agrifood	Bifenthrin 0.02	<0.01
Raspberries	MWSU9105381	FCI	1210040002	22490.0	18/01/2013	Agrifood	<LOR	<0.01
Raspberries	TCLU1068174	Natural Ingredients	1210090001	21400.0	7/01/2013	Agrifood	<LOR	<0.01

Raspberries	MWCU6178103	FCI	1210110001	22490.0	7/01/2013	Agrifood	<LOR	<0.01
Raspberries	MSWU0011824	FCI	1210260001	22490.0	7/01/2013	Agrifood	<LOR	<0.01
Raspberries	MORU0201676	Alifrut	1302070202	22300.0	11/02/2013	Agrifood	<LOR	<0.01
							Proposed MRL = 1.0mg/kg	

APPENDIX 4 – REFERENCES

(6) IRO Talca Chile, 2010

(7)/(9)/21 World Blueberry Acreage and Production, February 2011. Brazelton Ag Consulting

(10) Patties own research bespoke research study: Frozen Sweets Shoppers: October 2008 by Oblique Research (CONFIDENIAL COMMERCIAL INFORMATION)

(11) Source: Aztec Scan Data, Feb 2013

(12) WTO Agreement on the Application of Sanitary and Phytosanitary Measures, Article 3(1).

(13) Source: GTIS

(14)/(16) Informa UK Ltd 2012 – FOODNEWS® 27 April 2012

(15)/(18) Informa UK Ltd 2011 – FOODNEWS® 11 November 2011

(20) Standard 1.4.2 Australia New Zealand Food Standards Code, start date 18 January 2013

(22) Source: Aztec Scan Data, Feb 2013

(23) Source: Retail World Annual Report, December 2011

(27) Fenhexamid 255–301 JMPR 2005

(28) Azoxystrobin, JMPR 2009a

(29) Fludioxonil, JMPR 2004

(30) Bifenthrin, JMPR 1993

(32) Agrifood Technology: Determination of pesticide residues in fruit and vegetable using LC/MS/MS and GC/MS

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