Australian Government
Australian Customs and Border Protection Service

R E P O R T

CONTINUATION INQUIRY AND REVIEW OF MEASURES APPLYING TO 2,4-DICHLOROPHENOXYACETIC ACID

EXPORTED FROM THE PEOPLE'S REPUBLIC OF CHINA

VISIT REPORT - AUSTRALIAN INDUSTRY

NUFARM LIMITED

THIS REPORT AND THE VIEWS OR RECOMMENDATIONS CONTAINED THEREIN WILL BE REVIEWED BY THE CASE MANAGEMENT TEAM AND MAY NOT REFLECT THE FINAL POSITION OF CUSTOMS AND BORDER PROTECTION

November 2012

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1 INTRODUCTION AND GENERAL INFORMATION

1.1 Current continuation inquiry and review

On 7 May 2012, Customs and Border Protection published a notice in *The Australian* newspaper to invite certain persons to apply to the CEO of Customs and Border Protection for the continuation of current anti-dumping measures on 2,4-D exported to Australia from the People's Republic of China (China).[1]

On 5 July 2011, Nufarm Limited (Nufarm), the sole manufacturer of 2,4-D acid in Australia, lodged an application for the continuation of those measures.[2]

The CEO decided not to reject the application, the reasons for which are set out in Consideration Report No. 189. On 10 August 2012 a notice was published in *The Australian* announcing a continuation inquiry.

Whilst considering the application for the continuation of measures on 2,4-D from China, Customs and Border Protection requested the Minister also conduct a review the measures as they affect exporters of 2,4-D from China as one or more of the variable factors relevant to the taking of the measures in relation to an exporter, or exporters generally, may have changed.

The Minister accepted this request. On 10 August 2012 a notice notifying of the review of the anti-dumping measures on 2,4-D from China was published in *The Australian*.

The review period is 1 July 2011 to 30 June 2012 and covers all exporters of the goods from China.

1.2 History of anti-dumping measures on 2,4-D

March 2002	Nufarm applied for anti-dumping measures on 2,4-D exported to Australia from China, India and the United Kingdom (UK).
25 March 2003	The then Minister published a dumping duty notice applying to 2,4-D exports from China and the UK (Report No. 58). The investigation was terminated as far as it related to India due to negligible volumes of dumped goods.
24 March 2008	The measures relating to China were continued for a further five years (Report No. 126). The measures relating to the UK were allowed to expire.
5 July 2012	Nufarm applied for a further continuation of the anti-dumping measures on 2,4-D relating to China.

[1] In accordance with s.269ZHB

[2] In accordance with s.269ZHC(2).

10 August 2012	Customs and Border Protection initiated an inquiry into the continuation of the anti-dumping measures on 2,4-D exported from China, and a review into those measures.

The current anti-dumping measures are due to expire on 25 March 2013. These measures have not been reviewed since their introduction in 2003.

1.3 The goods

1.3.1 Description

The goods subject to anti-dumping measures are 2,4-Dichlorophenoxy-acetic acid, a selective herbicide exported to Australia mainly in the forms of 2,4-D acid and 2,4-D ester.

The 2,4-D covered by the measures include:

- sodium salt;
- 2,4-D acid;
- 2,4-D intermediate products (salts and esters), including:
    - iso butyl ester technical;
    - ethyl ester technical;
    - 2 ethyl hexyl ester technical;
    - dimethylamine (DMA); and
    - iso-propylamine (IPA);
- 2,4-D fully formulated products; and
- all other forms of 2,4-D.

1.3.2 Further information

Report No. 58 includes the following information in relation to 2, 4-D:

> *2,4 dichlorophenoxy acetic acid (2,4-D) is a herbicidally active molecule sold in various forms throughout the world for the control of broadleaf weeds. The most common forms sold are salts, principally sodium and dimethylamine, and esters, principally ethyl, iso butyl and ethyl hexyl. All products' performance are measured in terms of their efficacy (ability to kill plants) to the base active ingredient 2,4-D acid. While there are various routes of manufacture for the various products the base molecule is 2,4-D and this is used as the measuring tool for equivalence.*

Nufarm's application for continuation of the measures included the following further information in relation to 2,4-D:

> *2,4-D acid is used as an active ingredient in the manufacture of phenoxy herbicides. The 2,4-D acid is dedicated for this purpose and has no other known use.*
>
> *2,4-D acid is used by companies known in the industry as 'formulators' who convert the 2,4-D acid into fully formulated (saleable or end use) 2,4-D products (herbicides).*

There are 2 stages of formulation.

The first, or intermediate, stage is the formulation of 2,4-D acid into

- *2,4-D salts (e.g. dimethylamine (DMA) & iso-propylamine (IPA), and*
- *2,4-D esters (ethyl ester or iso-butyl ester)*

that are known as technical grade active constituents (TGAC's).

The purpose of the formulations is simply to convert 2,4-D acid into a soluble form.

The second stage is to fully formulate the end product using the TGAC's. This process is performed by both Nufarm and importers of acid and ester.

1.3.3 Tariff classification

The goods are classified to the following tariff subheadings and statistical codes of Schedule 3 to the *Customs Tariff Act 1995.*

The applicable rate of duty for China is 5%.

2,4-D acid and intermediate products	2918.99.00
Formulated products consisting wholly of, or with a base of 2,4-D acid, its salts or esters	3808.93.00

There are currently no Tariff Concession Orders applicable to the relevant tariff subheadings.

1.4 Verification visit

Following initiation of the continuation inquiry and review, Customs and Border Protection conducted a verification visit (and one follow-up visit) to Nufarm. This report details the matters discussed and verification process undertaken during this visit.

1.4.1 Company visited

Company name	Nufarm Limited
ABN	37 091 323 312
Address	103-105 Pipe Road, Laverton North, VIC 3026
Telephone	(03) 9282 1444
Fax	(03) 9282 1111
Date of visits	Primary visit: 25 September to 28 September 2012 Follow up visit: 12 to 13 November 2012

1.4.2 Representatives present

The following representatives were present at various stages of the visits.

Company/agency	Representatives
Nufarm	• Lachlan McKinnon, General Manager, Australasia • Gerard Bardell, National Business Manager, Nufarm Australia • Bernard Lee, Industry & Government Affairs Manager • Maree Porter, Regional Financial Controller, Australia and New Zealand • Catherine Forster, Systems Accountant, Nufarm Australia • Eugene Shanahan, Technical Manager • Rachel Gibson, National Rebate Co-ordinator
T.R. O'Neill & Associates Pty Ltd	• Terry O'Neill, Adviser
Customs and Border Protection (the 'Verification Team')	• Ms Andrea Stone, Manager, Operations 3 • Mr Carl Halpin, Supervisor, Operations 1 • Mr Timothy Flor, Supervisor, Operations 3

1.4.3 Purpose of visit

We (the Verification Team) explained to Nufarm that the purpose of our visit was to:

- obtain general information about the Australian market for 2,4-D;
- gain a greater understanding of the company's manufacturing, marketing, sales and distribution processes;
- verify information provided in the application relating to the company;
- obtain additional financial data to assist in the analysis of the claimed potential injury to the Australian industry should the measures be allowed to expire;
- give the company the opportunity to provide any further comments or raise any further issues it believed relevant to the investigation; and
- discuss and gather data relevant to establishing an unsuppressed selling price (USP).

Prior to the verification visit, we provided Nufarm detailed visit agendas. Copies of the visit agenda are at **Confidential Attachment GEN 1.**

During its previous involvement in Customs and Border Protection's investigations for 2,4-D and other agricultural chemicals, Nufarm has been visited and undergone verification of submitted data (most recently in 2012 in relation to formulated glyphosate).

1.4.4 Investigation process and timeframes

We confirmed that Nufarm were aware of the key reporting investigation timeframes as specified in Australian Customs Dumping Notice (ACDN) 2012/39.[3]

We provided a summary of the investigation process and timeframes as follows:

- the review period is 1 July 2011 to 30 June 2012;
- a Statement of Essential Facts (SEF) will be placed on the public record by 28 November 2012 or such later date as the Minister allows under s. 269ZHI;[4]
- Customs and Border Protection's report to the Minister is due no later than 14 January 2013, unless an extension to the SEF is approved by the Minister.

We explained, that for the purpose of initiation, Customs and Border Protection must consider whether there appear to be reasonable grounds for asserting that the expiration of the measures might lead, or might be likely to lead, to a continuation of, or a recurrence of, the material injury that the measures are intended to prevent.

However following the inquiry Customs and Border Protection must not recommend that the Minister take steps to secure the continuation of the measures unless Customs and Border Protection is satisfied that the expiration of the measures would lead, or would be likely to lead, to a continuation of, or a recurrence of, the dumping and the material injury that the measure is intended to prevent.

1.4.5 Visit report

As Nufarm has previous experience with the verification and visit reporting process, we briefly explained to the company that we would prepare a report of our visit (this report) and provide it to the company to review its factual accuracy, and to identify those parts of the report it considers to be confidential.

We noted that, in consultation with Nufarm, we would prepare a non-confidential version of the report to be placed on the Public Record.

[3] The ACDN published notifying of the initiation of the continuation inquiry and review.

[4] The SEF will set out the material findings of fact on which Customs and Border Protection intends to base its recommendations to the Minister. The SEF will invite interested parties to respond, within 20 days, to the issues raised. Submissions received in response to the SEF will be considered when compiling the report and recommendations to the Minister.

2 BACKGROUND - NUFARM AND THE AUSTRALIAN INDUSTRY

2.1 Corporate, organisational and ownership structure

Nufarm (the parent company of the Nufarm group) was founded in 1957 and is an Australian Public Company (limited by shares) listed on the Australian Stock Exchange (ASX).

Nufarm is the largest crop protection company in Australia, and one of the largest crop protection companies in the world.

The Nufarm group has substantial operations in North and South America, Europe, New Zealand and Asia (with 14 manufacturing sites and sales made in 100 markets).

In Australia, Nufarm operates through the following four subsidiaries:

- Nufarm Australia Limited (Nufarm Australia) – an Australian public company limited by shares which was registered in 1957;
- Crop Care Australasia Pty Ltd (Crop Care) – an Australian proprietary company limited by shares which was registered in 1993;
- Croplands Equipment Pty Ltd (Croplands – an Australian proprietary company limited by shares which was registered in 1985; and
- Nuseed Pty Ltd (Nuseed) – an Australian proprietary company limited by shares which was registered in 1993.

Nufarm explained that its operations can be divided into two main business functions:

- crop protection; and
- seeds and seed treatment ('seed technologies').

Nufarm explained that the seed technology function focuses on the sale of seeds and seed treatment products, whereas the crop protection function focuses on the manufacture and sale of crop protection products (manufacture, formulation and sale of 2,4-D falls under this function).

Nufarm provided a chart displaying the group's corporate structure. The chart demonstrated that Crop Care, Nuseed and Croplands are all wholly owned subsidiaries of Nufarm Australia (with Nuseed being owned via Nugrain Pty Ltd), and in turn that Agryl Holdings Limited (a wholly owned subsidiary Nufarm via other companies) wholly owns Nufarm Australia. This chart is supplied in confidential **Attachment GEN 2**.

Two of Nufarm's Australian subsidiaries, Nufarm Australia and Crop Care are directly involved in supplying 2,4-D into the Australian market.

Nufarm explained that Nufarm Australia is a manufacturer and supplier of agricultural chemicals (herbicide, insecticide and fungicide products) applied by farmers and other users to protect crops against damage from weeds, pests and disease. This includes

the manufacture of 2,4-D acid and the formulation of 2,4-D formulated products (both salt (amine) and ester-based).

Nufarm explained that Crop Care is a supplier of formulated 2,4-D products manufactured by Nufarm Australia. Nufarm explained that Crop Care sells these products under its own brand names, which differ to those which Nufarm Australia supplies under.

Nufarm explained that, while the products sold by Crop Care and Nufarm Australia [redacted][sales arrangements], with Crop Care being seen as more of a generic/basic products in the market and the Nufarm product being a more premium brand.

Nufarm advised that it operates according to a service delivery and value add business model; which includes:

- manufacturing (synthesis and product formulation);
- logistics (extensive network of regional service centres);
- regulation (hundreds of product registrations held with the Australian Pesticides and Veterinary Medicines Authority (APVMA));
- product development (significant investment in R&D programs to develop new products, innovative packaging and product mixtures);
- marketing (agency and loyalty programs); and
- sales (field sales force and after sales service and administration).

Nufarm explained that the APVMA is the Federal Government agency responsible for the registration of all agricultural and veterinary chemical products into the Australian marketplace. Only 2,4-D formulations that have an APVMA registration may be legally sold in Australia.

2.2 Accounting structure and details of accounting systems

The accounting period of the company is based on the financial year 1 August to 31 July.[5]

Nufarm Australia and Crop Care's financial statements are consolidated into group global annual statements and financial reports for Nufarm Limited and its subsidiaries, associates, interests and jointly controlled entities.

The audited reports are segmented into:

- crop protection (which itself is broken down into the regions of Australia and New Zealand, Asia, Europe, North America and South America);
- seed technologies; and
- corporate.

[5] Hereafter referred to as 'Nufarm's FY').

Nufarm's financial statements are audited annually by the accounting firm KPMG.

Nufarm advised that its accounting practices do not differ from Australia generally accepted accounting principles (GAAP).

Nufarm uses the Enterprise Resource Planning (ERP) system -JD Edwards' Enterprise One (E.1) – for their financial and management accounting system. During the verification we viewed Nufarm extracting financial information in respect of sales and costs from this system and exporting relevant data into reports.

Nufarm uses third party software tools E-Dash and crystal to extract financial reports to enable analysis of financial data from E1.
Nufarm utilise a Business Process Analysis (BPA) financial consolidation tool to record/reconcile Nufarm's financial accounts to statutory accounts for the global Nufarm group.

2.3 Relationship with suppliers and customers

Suppliers

Nufarm advised that it has no relationship other than a commercial buyer/seller relationship with any of its suppliers of raw materials for the manufacture of 2,4-D acid or formulated 2,4-D products.

[redacted] [commercial supply arrangements]

Nufarm has advised that, while there is no formal relationship between it and [redacted], it has an exclusive supply arrangement with that company [redacted]. Nufarm has explained that this arrangement relates to [redacted] manufactured for global sales by the Nufarm group of companies, not only into Australia.

Nufarm does not have any direct relationships with the Chinese exporters of 2,4-D.

Customers

Nufarm advised that is does not have any relationships with its domestic customers other than that of buyer or seller.

2.4 Nufarm's facilities and product range

2.4.1 Facilities

Nufarm Australia manufacture a range of crop protection products at sites in Laverton North (herbicides), Kwinana (herbicides), Lytton (insecticides and fungicides) and Welshpool (herbicide granular plant).

Nufarm Australia operates two manufacturing facilities in Australia at which 2,4-D products are produced:

- Laverton North (VIC); and
- Kwinana (WA).

Of these facilities, 2,4-D acid is produced at the Laverton North facility, and formulated 2,4-D products are manufactured at both facilities.

Nufarm's production facilities incorporate a number of segregated manufacturing sheds, laboratories, offices and warehouse. The sites also include laboratories for quality control and formulation development.

Nufarm also has an extensive network of thirteen regional service centres in key agricultural areas, including; New South Wales, Southern Australia, Tasmania, QLD and VIC. Nufarm has Sales Managers positioned in all Australian states and territories and research and development (R&D) field teams and managers regionally dispersed.

2.4.2 Product range

Nufarm predominantly supplies 2,4-D to the Australian market in fully formulated form (i.e. 2,4-D acid is further processed into a soluble and formulated form ready for application as a herbicide).

Nufarm explained that it supplies the Australian market with these formulated products through two channels:

1) sales of own-branded formulations (manufactured by Nufarm Australia from own-production 2,4-D acid [redacted] bearing its own branding);[6] and
2) sales of 'toll processed' 2,4-D formulations, which Nufarm manufactures for certain other customers using various 2,4-D acids (Nufarm refers to these as 'third party sales').

These formulations are supplied in a number of packaging sizes and different strengths, which are measured by their g/L content of 2,4-D acid.

Nufarm explained that pack sizes are generally 20L, 110L or 1000L, with some sales of 5L packs and a newly-developed 15L quick pour pack. Of these, Nufarm explained that the 110L and 1000L packs are returnable (i.e. a deposit is paid for the containers on sale and refunded upon return).

Over the investigation period Nufarm sold the following formulated 2,4-D products in Australia.

[6] Either under the Nufarm or Crop Care brands.

2,4-D strength (g/L)	Product name	Packaging type (L)			
300	[redacted]		20		
	[redacted]		20	110	1000
	[redacted])	5	20		
475	Cobber 475		20	100	110
	Surpass 475		20	110	1000
625	Amicide 625	5	20	110	1000
	[redacted]		20		
	[redacted]			110	1000
	[redacted]			110	1000
	Amicide 625-LOW		20	110	1000
	Amine 625 (CCA)		20	110	1000
	Zephyr 625		20		
670	2,4-D Ethyl Hexyl Ester 230K				
680	[redacted]			110	1000
	[redacted]		20		1000
	[redacted]		20	110	1000
	Estercide Xtra 680	10	110	500	1000
	LV Ester 680 (CCA)		20	100	1000
700	Amicide Advance 700	15	20	100	1000
	[redacted]				
800	Baton 10K				
	Ester 800 (CCA)			100	110
	Estercide 800			110	1000

These sales are a mixture of the two streams of supply of formulated 2,4-D.

Nufarm explained that the 2,4-D amine 625 and 680 ester formulations are the 'base' or most popular formulations of 2,4-D. However, Nufarm explained that it has recently innovated an amine 700 formulation, which is now considered the base for amine 2,4-D formulations (see below).

Product types

We asked Nufarm the difference between amine and ester-based 2,4-D formulations, In broad terms, Nufarm explained that:

- amine-based 2,4-D formulations:
  - are best for broad acre applications, but can be used in pasture markets as well
  - are less volatile than ester-based formulations
  - rely on an actively-growing plant
- ester-based formulations:
  - are almost exclusively used in broad acre applications (particularly on cereals)
  - have lower impact on water quality
  - will 'force' their way into a plant a little faster than amine

- are generally compatible with other products
- are more volatile than amine
- are more efficacious where conditions are 'stressed'
- are generally more expensive in terms of $/ha.

Nufarm explained that historically, its 2,4-D formulations were used for the following applications (note – the below relates to Nufarm-branded products only, Crop Care equivalents also available).

	Product family	Description / application
Amine product	Amicide 625-Low	Low odour Sugar crops
	Amicide 625	**'Base' amine product** 'Crop' products (including sugar) Pasture applications
	Baton	DMA-based 800 g/L strength
	Surpass 475	Glyphosate-compatible. DMA salt-based Useful for grasses
Ester product	Estercide Xtra 680	**Base ester product** Lower-volatility ester product Used where environmental conditions require lower volatility
	Estercide 800	Used predominantly in WA in fallow periods Subject to multiple APVMA constraints in application

However, Nufarm has explained that this historical product mix has changed (with some cross-over between the old and new mixes during the review period).

Nufarm explained its current offer of products to be:

	Product family	Description / application
Amine product	Baton Low	'Baton' product to be re-branded to Baton Low (as of September 2012) Replace amicide 625 low, which will be phased out
	Amicide advance 700	**Base amine product** A new innovation by Nufarm Replaces amine 625 formulations and surpass product DMA-based amine
Ester product	Estercide Xtra 680	**Base ester product** Lower-volatility ester product Used where environmental conditions require lower volatility Replaces Ester 680 and 800 products.

Nufarm provided copies of its 'Which phenoxy where' product guide that outlined the above phenoxy products. These form **Confidential Attachment GEN 3**.

Nufarm explained the following Crop Care/Nufarm product equivalents (same product, different packaging):

Nufarm Product	Crop Care Product
Amicide 625-Low	Zephyr 625
Surpass 475	Cobber 475
Estercide Xtra 680	LV Ester 680
Amicide 625	Amine 625
Estercide 800	Ester 8000

Product registration

Nufarm explained that its products are registered with the APVMA and its registrations are published on the APVMA's Pubcris database. The database contains details of agricultural and veterinary chemical products which are registered for use in Australia. The data includes the product name, registering company, active constituents and the product category.

Toll manufactured products are registered by other Australian companies and Nufarm manufacture products on their behalf.

Imports – 2,4-D acid

Nufarm advised that, during the review period, it imported 2,4-D acid from [redacted]), which it then uses to formulate 2,4-D-based herbicides [redacted] [market information]

Nufarm advised that they import and formulate 2,4-D acid from [redacted] to maintain their market share under price pressure from 2,4-D acid imports from China and to allow them to service the overseas 2,4-D acid export market where greater returns can realise (see below). This 2,4-D acid is mainly imported to maintain competitive pricing to service the toll manufacturing aspect of the business; however some customers are supplied only locally produced 2,4-D acid where it is requested as a quality issue.

[redacted] [product information]

Nufarm advised that, for this and other reasons (e.g. ease of transport), the imported [redacted] 2,4-D acid predominantly is sent to the Kwinana plant for formulation (as that plant has glass-lined reactors that can cope with the imported acid better).

[redacted]

[redacted] [product information]

Nufarm advised that, in the past, it has also purchased other [redacted] imported 2,4-D acid that it has used to formulate 2,4-D products with, however this is an unusual occurrence.

Imports – intermediate and formulated 2,4-D products

Nufarm has also made (small) purchases of formulated 2,4-D products from Austria, and has recently begun [redacted]

[redacted]. [product information]

Exports

Nufarm explained that approximately [redacted]% of its 2,4-D acid production is exported to a related Nufarm company in the United States, where it is formulated at its plant in Chicago. Nufarm Australia's 2,4-D acid is registered in the United States with the relevant authorities for formulation, and Nufarm is an approved manufacturer of formulated product for the US market via Nufarm's US subsidiary.

2.5 Production process

During the verification, we observed Nufarm's production process of 2,4-D at its Laverton North plant to be as follows.

1. A brine solution is produced by mixing sodium chloride and water. Electrolysis of the brine solution produces chlorine gas and caustic soda in a chlor-alkali plant.
2. The chlorine gas generated in the chlor-alkali plant is pumped under pressure to a chlorination reactor where the gas is used to chlorinate phenol. The chlorination reaction produces the 2,4-D compound.
3. [redacted]. [processing step]
4. The [redacted] 2,4-D and monochloroacetic acid are reacted together [redacted] to produce sodium 2,4-D.

[redacted] Sodium 2,4-D is crystallised and washed [redacted]

[redacted] Acidification of sodium 2,4-D produces purified 2,4-D. [redacted] [acidification process]

2,4-D acid produced at Laverton North is sold as 2,4-D acid ([redacted]) or used to formulate 2,4-D salts (e.g. DMA and , IPA and).

The purpose of the formulation process is simply to convert 2,4-D acid into a soluble form.

This formulation of 2,4-D acid into formulated products occurs at both the Laverton North and Kwinana sites, using 2,4-D acid produced by Nufarm at the Laverton North facility, 2,4-D acid that has been imported, or DMA that has been imported.

In terms of toll manufacturing (third party sales) of formulated 2,4-D product, Nufarm explained that is toll manufacturing can take multiple forms:

As a result of the information provided by Nufarm and our inspection of Nufarm's production facilities, we are satisfied that Nufarm:

- produces 2,4-D acid, salt and ester in the method described above; and
- undertake at least one substantial process of manufacture in producing 2,4-D in Australia.

2.6 Like goods

Like goods are defined as "goods that are identical in all respects to the goods under consideration or that, although not alike in all respects to the goods under consideration, have characteristics closely resembling those of the goods under consideration".[7]

Nufarm advised that it considers 2,4-D acid and formulated product produced domestically are like goods to 2,4-D acid and formulated products imported from China and that there is no discernible difference between the products.

The application referred to Customs and Border Protection Trade Measures Report No. 58 and No. 126, and stated that Customs and Border Protection has previously found:

- *that the physical characteristics of the Australian produced 2,4-D and the imported 2,4-D from China are very similar;*

[7] Subsection 269T(1)

- *a high degree of commercial likeness. The imported goods are formulated into goods that are directly competitive in the Australian market and it is usual that they are marketed within the same or similar price ranges;*
- *that functionally the imported 2,4-D and the Australian produced 2,4-D are interchangeable in end use on a same form to same form basis; and*
- *the goods are made in similar production processes.*

Nufarm confirmed at the verification visit that 2,4-D mixtures (such as 2,4-D mixed with picloram, another type of herbicide) are considered by Nufarm not to be like goods.

2.6.1 Like goods preliminary assessment

The Verification Team has examined the evidence presented in the application, the conclusions made in Report No. 58 and No. 126, and the evidence observed and collected during the verification visits.

As a result, the team is satisfied that Nufarm produces like goods as defined under section 269T of the Act.

2.7 Annual turnover

Nufarm's Australia's and Crop Care's annual net revenue ($AUD) for domestic, export, and 'third party' (toll processed) products for Nufarm FY2011 and FY2011 was detailed in each company's income statements, provided during the visit (discussed throughout this report).

3 AUSTRALIAN MARKET

3.1 Sources of supply

We understand that 2,4-D acid is supplied to the Australian market by:

- Nufarm (manufacturing its own and [redacted]); and
- importers of 2,4-D acid (generally these are domestic formulators who use the acid in their own formulation processes – see below).

We understand that the Australian formulated 2,4-D market is supplied by:

- Nufarm, through:

  [redacted]Nufarm-produced formulated 2,4-D herbicide products, [redacted]

  [redacted]

- domestic formulators (using imported 2,4-D acid (and in some cases small amounts of Nufarm-produced 2,4-D acid) then formulating products); and
- imported, fully-formulated 2,4-D products (i.e. imported already formulated).

Customs and Border Protection's commercial database indicates that significant sources of import supply of 2,4-D acid. Intermediary and formulated product (other than China) include India, Poland, New Zealand, Austria and Malaysia.

Customs is aware that Nufarm is a significant importer of 2,4-D acid.

3.2 Market size and trends

Nufarm did not provide information on the Australian 2,4-D market size in its application. Nufarm advised there is no accurate market intelligence body for herbicides to accurately show the market size and trends.

In its application, Nufarm referred to Trade Measures Report No. 126, stating:

> *Trade Measures Report No. 126 did not disclose the size of the Australian market, however, indicated that demand for 2,4-D in Australia had increased between 2002/03 and 2006/07.*
>
> *Nufarm understands that the Australian market for 2,4-D has continued to grow since 2006/07 with increases in sales volumes apparent over the intervening period.*

Nufarm estimated that it holds approximately [redacted]% of the market share of the total agricultural chemicals business in Australia. Nufarm explained that 2,4-D formulated product is a large proportion of the market (especially [redacted]).

At the verification visit, Nufarm provided two graphs depicting information from the APVMA and internal data to demonstrate trends in the Australian non-glyphosate agricultural chemical market from FY2006 – FY2011 (these form **Confidential Attachment GEN 4**).

Nufarm explained that this APVMA information is based on the annual declared value to the APVMA of agricultural chemical sales, as it is a requirement of APVMA product registration agricultural chemical sales must be declared to the APVMA. Nufarm noted that this information included 2,4-D, but other non-glyphosate and other non-herbicide products as well.

The APVMA data demonstrated that non-glyphosate agricultural chemical sales (i.e. the total market size) had increased significantly from FY2006 to FY2011.

These graphs further depicted the estimated percentage Australian market share of total non-glyphosate agricultural chemical sales of Nufarm Australia, and Nufarm Limited (Nufarm Australia, Crop Care Australia and toll processed sales) from FY2006 to FY2011. Both charts demonstrated minor declines and rises in Nufarm Australia and Nufarm Limited's sales in the non-glyphosate agricultural chemicals market from over the depicted period, with the sales ending relatively the same in FY2011 as they were in FY2006.

However, the graphs show that Nufarm Limited and Nufarm Australia's sales, as a proportion of the total market, have decreased significantly over the period FY2006 – FY2011 (from approximately [redacted] of the non-glyphosate agricultural chemical market to approximately [redacted] of that market). Nufarm submitted this was consistent with its understanding of the 2,4-D market in Australia, which it considers has grown substantially while Nufarm's sales volumes remained constant (indicating a drop in market share).

We note the limitations of this data (combined non-glyphosate agricultural chemical information therefore unable to isolate 2,4-D).

We consider that more accurate estimates of market size and share are able to be devised using Nufarm Limited and import data. Consequently, further discussion and estimates of the total 2,4-D market will be provided in the statement of essential facts.

In terms of yearly market trends, Nufarm advised that the Australian market is significantly influenced by seasonal demand (e.g. the cropping cycle) and rainfall events (which increase weed activity and hence demand for herbicides).

Nufarm explained that peak demand for ester forms of formulated 2,4-D is January, February and March which coincides with the summer fallow.

3.3 Segmentation

Nufarm described the 2,4-D market as being segmented across in-crop cereals (e.g. what, barley, oats, etc.) and fallow period applications, estimating applications were [redacted]% crop-based and [redacted]% fallow-based.

At the verification, Nufarm provided an estimation of the application its major 2,4-D formulated product to crops to be as follows:

Product	Broad acre farming	Pastures	Sugar	Other	Total
Amicide Advance 700 Family	[redacted]	[redacted]	[redacted]	[redacted]	[redacted]
Estercide 800	[redacted]				[redacted]
Estercide Xtra 680	[redacted]				[redacted]

Relevant documentation is at **Confidential Attachment GEN 5**.

3.4 Import supply

In its application, Nufarm claimed that since the last continuation inquiry in 2007, imports of 2,4-D from China declined and were displaced by imports from India until 2010. From 2010 Chinese 2,4-D imports increased substantially and at the time of application Chinese 2,4-D imports represented approximately two-thirds of total 2,4-D imports in 2012.

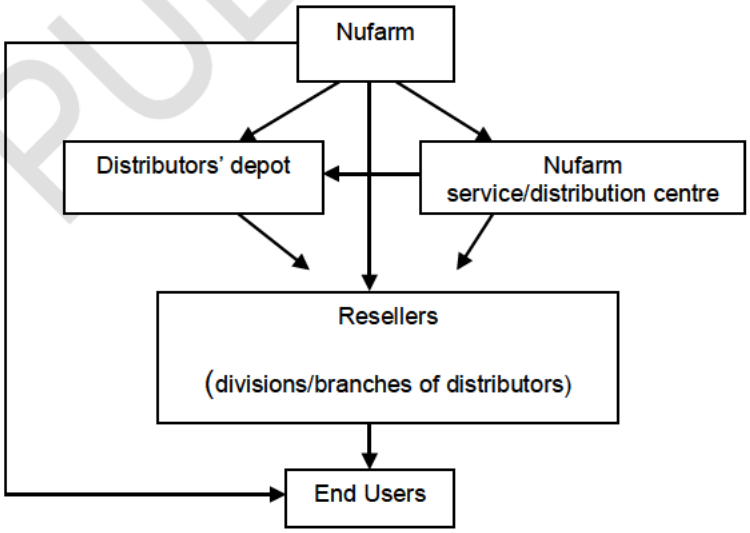
Further, Nufarm observed an increase in 2,4-D imports since the measures were continued in 2008. Nufarm maintain that 2,4-D acid and 2,4-D ester imports from China maintain a prominent Australian market share.

The application used import data 2,4-D data published by the Australian Bureau of Statistics to support these observations.

3.5 Distribution channels

3.5.1 Nufarm's distribution

Nufarm described its own distribution channel, as outlined in Section 4.3.2 below.



Nufarm explained that the direct-to-end user delivery is very rare, and all sales transactions are through a distributor.

3.5.2 Imports

Nufarm explained that traditionally, imported 2,4-D (either fully formulated or formulated by domestic formulators) was supplied in a similar fashion to Nufarm's products (i.e. to distributor's depots or resellers themselves).

However, Nufarm explained that it has seen the emergence of 'No Frills Traders' and internet-based traders over the past few years. Nufarm explained these to be 'opportunistic' traders that offer pricing specials and limited offers, and in many cases offer these directly to end users (farms), which may include delivery direct to the farm (by-passing the traditional distribution network).

Nufarm explained that these traders generally take smaller margins, and do not offer credit terms or other services.

Nufarm explained that, in many cases, these traders are the importer of the fully formulated 2,4-D product.

Nufarm explained that the "No Frills Trader' may have regional depots for imported product, then distribute from these centres. Internet traders (e.g. '[redacted]') generally carry no inventory. In many cases, the traders made a single one-off purchase ahead of the spraying season and pre-sold the products to end-users prior to shipping by the overseas supplier.

Nufarm explained that it has seen prices from these traders undercutting the pricing of its products from resellers (i.e. the point at which Nufarm's product traditionally reaches the end user). Nufarm explained that this has resulted in upwards pressure from sellers to their head office distributors and back to Nufarm, as resellers look to match the pricing offers made by these newer trader types.

Nufarm explained that this causes pricing pressure in the market, noting that, even though the offers from these new trader types may be for small or limited volumes, they impact the price in the market regardless. Nufarm explained that the pricing offers from these traders have seen end users try to get these prices through the normal distribution chain (i.e. local resellers) and this feed up the distribution chain.

Nufarm provided a copy of a [redacted] offer from January 2012 (**Confidential Attachment GEN 6**). Nufarm also provided a chart that displayed the relative costs borne and margins achieved by No Frills Traders, internet traders and traditional distributors of 2,4-D, demonstrating how these traders are able to offer lower market prices (**Confidential Attachment GEN 7**).

3.6 Factors influencing market performance

At the visit Nufarm identified the following key factors affecting agrochemical markets, including 2,4-D:

- volatility in cost of goods and profitability;
- climatic variability i.e. rainfall (and scarcity of natural resources (including water);
- geographic location and type of cropping
- commodity prices for cropping
- regulatory impact (such as lead times for 2,4-D product registrations with the APVMA);
- changing agricultural and farming practices (including application rate of herbicides, herbicide efficacy, water use, crop efficiencies);
- growth in genetically modified (GM) crops;
- corporate and stocking policies; and
- changed distribution channels and market participants.

4 SALES

4.1 Introduction

Nufarm provided Customs and Border Protection with a line by line sales listing (Appendix 4 or 'A4') for the period July 2011 – July 2012 (the review period, plus one extra month of July 2012 to assist with verification to Nufarm's accounts).

The A4 listing identified all export and domestic sales of 2,4-D acid and formulated 2,4-D product (i.e. like goods) made by Nufarm Australia and Crop Care Australia, including third party sales made by Nufarm Australia.

At the visit, we sought to verify the company's sales information to its financial accounts and source documents for selected sales in order to establish that the information provided was complete, relevant and accurate.

4.2 Customers and arm's length

Nufarm explained that majority of its customers are distributors for Nufarm's own and Nufarm's third party (toll processed) sales, which represent the key distribution channels into the agrochemical market.

According to Nufarm's A4 sales data, Nufarm's main distribution customers during the review period were:

[redacted]

Nufarm explained that, in most cases, these distribution customers generally operate whereby the sale is made to the head office of the distributor, and the goods are then on-sold to resellers (who are generally the individual branches of the distributors), who in turn, sell to end users (mostly farmers).

Nufarm explained that no domestic 'sales' were made to related parties and that all transactions were arms length.

[redacted][internal commercial arrangements]

Based on our assessment, we consider all domestic sales transactions to have been made at arms length.

4.3 Ordering, invoicing and delivery arrangements

Nufarm explained that the bulk of its domestic sales orders are placed by its customers electronically through a business-to-business system known as 'First for Farmers'.

Nufarm explained the domestic sales process as being as follows:

- Nufarm's customer will place an electronic order into the First for Farmer's system.
- There may be some price negotiation before the order is placed (depending on the customer) whereby the price is negotiated and agreed with the customer (this includes a toll fee for third party sales).
- The ordering system generates purchase orders.
- Nufarm assesses stock availability. If the item is in stock, it gets shipped to the appropriate location. If needed, an order for manufacture is forwarded to the production department and the product goes into production, and is then shipped after production.
- Nufarm Australia or Crop Care generates a tax invoice for the customer.

4.3.1 Trading agreements

Nufarm explained that it has trading agreements in place for all major customers. These agreements set out the major terms of trade with each customer, including pricing, rebates and discounts, payment arrangements, etc.

Nufarm explained these are generally negotiated on an annual basis.

We sighted copies of these agreements for some of Nufarm's major customers during our verification.

4.3.2 Delivery and distribution chain

Nufarm described its domestic 2,4-D product distribution chain as depicted in the diagram at Section 3.5.

As shown in this diagram, ordered goods may be delivered as described below:

In general, Nufarm advised that it arranges transportation to distribution centres (either its own or its large distribution customers) in each state. Customers then arrange the transportation from the distribution centre to their premises.

Nufarm has advised that there is a freight equalization scheme in place, which ensures that the transport costs are the same for all sales, regardless of the distance travelled. A component for the recovery of these costs is automatically built into the sales price.

4.4 Pricing

Nufarm advised that prices for 2,4-D are based on [redacted].

Nufarm explained that the primary pricing driver is [redacted].

Nufarm explained that it maintains standard price lists, as well as individual price lists for major customers.

Nufarm provided several internal base price lists for all products (national price lists, not customer-specific for those with trading agreements) for the review period (**Confidential Attachment SALES 1**). Nufarm explained that these base price lists are the invoice/gross price before discounts or rebates are applied (see below).

Nufarm explained that, for its major customers, price negotiation generally takes place at the head office level (i.e. distribution companies' head offices negotiate directly with Nufarm).

Nufarm advised that, in some cases, monthly prices are also established however pricing terms vary by customer.

Nufarm stated that the terms of sale for the significant majority of 2,4-D sold domestically were free into store (FIS).

Nufarm explained that, even though it maintains a price list system, it is responsive to price offers received by its customers. [redacted] [price negotiations]

4.5 Credit Terms

As specified on Nufarm's A4 sales spreadsheet, the credit terms applicable to Nufarm's 2,4-D sales varied by customer, with payments due:

[redacted]

Based on the commercial documentation provided for selected sales (see below), we were able to verify that the payment terms reflected dates as shown on the commercial invoices.

Nufarm advised that payment terms vary by customer. For example 2,4-D sales may be made early in the season and are not due until the cropping period. Such contingencies are often reflected in Nufarm's individual deals to customers.

Credit terms are generally specified in a customers' trading agreement.

4.6 Rebates and discounts

4.6.1 Trade allowance discount

Nufarm explained that it maintains a system of on-invoice discounts that collectively appear titled as 'trade allowance' on its invoices.

Nufarm explained that these trade allowance discounts are discounts off its standard price list, or individual company contract prices in their trading agreements, and are usually due to the contractual discount agreements (in trading agreements).

Nufarm explained that these on-invoice trading allowances had been accounted for and recorded in the A4 sales listing, and that the invoice price minus these trade allowances is referred to as 'Level 1' pricing.

4.6.2 Rebates

Nufarm maintains a complex off-invoice rebate scheme with selected customers, which are part of the trading agreements with these customers.

[redacted] [rebate structure]

However, Nufarm explained that it offers more than just these types of rebates during Nufarm's FY2012, noting its rebate system includes:

- marketing rebates;
- corporate rebates;
- forecast incentives; and
- rewards programs(e.g. Top Croppers and Landmark Growers' Rewards)

as well as 'base' rebates.

Nufarm explained that some of these rebates are incentive-based, and that its customers may or may not finally qualify for the rebate, depending on if they meet certain targets (e.g. sell a specific volume in a certain period). We consider this means that, when making a specific sale, Nufarm may not in fact know what the final 'net, net' price of the goods being sold will be.

Nufarm, explained that its rebates are paid to its customers in three ways:

1) as a credit note;

2) as a cheque via accounts payable; and

3) by provision of stock in the form of payment (i.e. the customer agrees to take product of a certain value in lieu of a credit of funds).

Nufarm explained that it had not attributed rebates to the line-by-line sales data in the A4, and that the net selling price in the A4 was in fact the Level 1 sales price and did not reflect the final net of rebates selling price of 2,4-D.

Nufarm explained that this was due to difficulty in isolating precisely what amount of the total rebates paid were in fact attributable to 2,4-D, as its sales system, when providing data as to the total of rebates, does not attribute the rebate to the invoice it relates to.

Nufarm explained that, to arrive at a true 'net, net' sales price, the final value of rebates (which can be a combination of different rebate types paid out at different periods) would need to be removed from the A4 sales listing.

This processes, and the verification of rebate data, is discussed further below.

4.7 Verification of sales data to audited accounts

We sought to reconcile Nufarm's sales (volume and value) data to the company's management accounts, then to the company's most recent audited financial accounts (Nufarm's FY2012).

At the same time, we sought to reconcile EBIT figures, to allow for the upwards verification of Nufarm's cost to make and sell 2,4-D (discussed further in Chapter 5 of this report).

Nufarm's audited financial accounts are audited at the consolidated group level (for Nufarm Limited).

4.7.1 Step one – sales data to income statement

We asked Nufarm to demonstrate how its A4 sales listing data reconciled to its income statement.

At the verification, Nufarm provided a 'Source Data' workbook for its FY2012. Nufarm explained that this listing was a complete sales listing of all products sold by Nufarm Australia and Crop Care during the Nufarm FY2012, as the product level (i.e. not invoice line-by-line detail). This workbook forms **Confidential Attachment SALES 2**.

Within this source data, Nufarm had created a column that identified whether that line was for 'like goods' (i.e. 2,4-D product) or not. This column was created by reference to the product name for each line. We observed that this appeared to accurately identify 2,4-D sales as like goods and non 2,4-D product as not like goods.

Nufarm demonstrated how the sales data volumes and net revenue (sales value minus discounts but not net of rebates), when filtered on like goods, reconciled exactly to the A4 sales data, when Nufarm's FY2012 data was isolated within the A4.

Nufarm also demonstrated how this reconciliation could be performed to the source data from the A4 separately for Crop Care and Nufarm Australia sales.

Nufarm then demonstrated, using a pivot of the source data, how the total net revenue of the sales data spreadsheet reconciled to Nufarm Australia and Crop Care's FY2012 income statement's total sales revenue (prior to rebates being accounted for in the profit and loss statements).

Nufarm Australia and Crop Care's FY2012 income statements form **Confidential Attachment SALES 3**. Other relevant documents form **Confidential Attachment SALES 4**.

4.7.2 Step two – revenue and EBIT from income statement to audited accounts

As discussed above, Nufarm's audited accounts are consolidated with the group's results into consolidated accounts for its parent company, Nufarm Limited.

We sought to reconcile Nufarm Australia's income statement to the Nufarm Limited consolidated FY2012 audited accounts, for both total revenue (for sales verification) and EBIT (costs verification).

During the verification, Nufarm provided an extract of Nufarm Limited's FY2012 audited income statement. This forms **Confidential Attachment SALES 5**.

We observed from these accounts that revenue and EBIT figures for the Nufarm group are reported in the following categories:

- crop protection (which itself is broken down into the regions of Australia and New Zealand, Asia, Europe, North America and South America);
- seed technologies; and
- corporate.

The accounts then reported revenue and EBIT totals for the entire Nufarm group, as well as profit for the whole group.

Nufarm explained that, as its operations cover both crop protection and seed technologies, its results are split between these two categories within the audited accounts, and further its results are combined with results from the New Zealand region in the consolidated accounts.

Consequently, Nufarm explained that it would seek to reconcile its income statement to the Australia and New Zealand crop protection figures for total revenue and EBIT.

To facilitate this, Nufarm presented two reports for the entire Nufarm group from its E.1 system:

1) 'Sales by region July 2012' - showing net sales for each individual company within the Nufarm group and regional totals; and

2) 'Operating expenses by region July 2012' – showing underlying EBIT for each individual company within the Nufarm group and regional totals.

These regional reports showed figures for the whole of each company's operations, as well as total for seed technologies for each company (for those that are involved in the seed technology segment, and net figures for crop protection activities (the total for each company minus seed technology totals).

We observed that the Australia region's totals were made up of figures for Nufarm Australia, Crop Care, and several other Australia-based companies.

Nufarm demonstrated how the total revenue and EBIT figures within Nufarm Australia's and Crop Care's FY2012 income statement reconciled to the regional reports.

Nufarm then demonstrated how the crop protection segment, Australia and New Zealand figures in its audited accounts reconciled to the regional reports by:

- totalling the revenue and EBIT for the Australia and New Zealand region; then
- removing the revenue and EBIT figures for seed technologies for the Australia and New Zealand region from the total figures.

For confidentiality reasons, once Nufarm demonstrated its reconciliation to the audited accounts with these reports, Nufarm provided a smaller redacted version of these reports, which from **Confidential Attachment SALES 6**.

4.8 Verification to source documents (accuracy)

Prior to the visit we selected the following 2,4-D sales from Nufarm's transactions from the sales lists for verification to source documents.

Product strength	Invoice No.	Item Description
625 g/l	[redacted]	AMICIDE 625 20L
680 g/l	[redacted]	LV ESTER 680 110L (CCA)
680 g/l	[redacted]	ESTERCIDE XTRA 680 110L
300 g/l	[redacted]	[redacted]
680 g/l	[redacted]	ESTERCIDE XTRA 680 20L
800 g/l	[redacted]	ESTERCIDE 800 1000L
680 g/l	[redacted]	ESTERCIDE XTRA 680 1000L
625 g/l	[redacted]	AMICIDE 625 1000L
625 g/l	[redacted]	AMICIDE 625 1000L

475 g/l	[redacted]	COBBER 475 1000L
800 g/l	[redacted]	ESTER 800 110L (CCA)
625 g/l	[redacted]	[redacted]
680 g/l	[redacted]	[redacted]

For each selected sale, Nufarm provided the relevant:

- commercial invoice (and/or adjustment note/credit note as applicable);
- purchase order;
- delivery documents;
- evidence of payment made by the customer (including remittance statements from Nufarm's bank account);
- rebate credit notes (shown as volume or price discounts), if applicable; and
- rebate calculation summaries by customer and period and other supporting documentation (showing total rebate amounts for each customer over various periods).

The sales source documentation is at **Confidential Attachment SALES 7.**

4.8.1 Invoice details and proof of payment of invoiced amount

We noted that:

- the invoice details matched the transaction details reported in the A4 sales listing (including date and product mix);
- on-invoice discounts were recorded correctly and the net price reconciled to the net invoice price (Level 1 price); and
- the proof of payment matched invoiced amounts.

As advised by Nufarm, we observed that the [redacted] (i.e. the A4 listing 'net' invoice amount in [redacted] and not a true 'net' price).

4.8.2 Allocation and verification of rebates

As discussed above, the net prices listed in the provided A4 sales listing as submitted were in fact inclusive of rebates (and not a true 'net net' price).

Nufarm explained that, through various interrogation of its sales data and manual isolation, it is possible to isolate on a quarterly basis which rebates paid were for:

- glyphosate product;
- 2,4-D; and
- other products

but that, due to the significant amount of data involved, it had not been able to perform this for the entire review period.

However, Nufarm explained that it had been able to perform this isolation for the 3rd and 4th quarters of its FY2012 for sales by Nufarm Australia (but not for Crop Care). For the remaining quarters (and for the entire FY2012 for Crop Care), Nufarm had only been able to isolate its total rebate data into:

- glyphosate-based product; and
- non-glyphosate-based product.

We sought to verify and allocate Nufarm's rebates for 2,4-D product on a line-by-line basis in the A4 sales listing in a reasonable fashion, noting the limitations with Nufarm's rebate data.

We determined with Nufarm that a reasonable method of calculating these line-by-line rebates in the A4 (subject to verification of the total rebates and the abovementioned split performed by Nufarm, which was successful and is detailed below) would be to:

1) for sales by Nufarm Australia:
    a. arrive at a percentage of 2,4-D related rebates of all non-glyphosate rebates quarters of FY 2012 where the full split of rebates was complete; and
    b. use these percentages to calculate a weighted average percentage of 2,4-D related rebates of all non-glyphosate rebates for the other periods covered by the A4; then
    c. apply these rebate percentages to the A4 sales listing
2) for sales by Crop Care, apply the same percentages determined above to Crop Care sales in the A4 sales listing.

We considered it reasonable to apply the same percentages arrived at for Nufarm Australia's sales to those made by Crop Care as these rebate amounts are considered to be reasonably consistent across the two sales types, [redacted] from Crop Care would likely be slightly less than that for Nufarm Australia (hence the net net A4 price for Crop Care's sales would likely be slightly understated).

<u>Verification of total rebate amounts and 2,4-D/glyphosate/other split</u>

To verify the total rebate amounts and the split of rebates into 2,4-D and non-2,4-D product for the final two quarters of Nufarm's FY2012, Nufarm provided:

1) a complete listing of rebate-related credit notes (code '[redacted]') paid to [redacted] during Nufarm's FY2012, noting that this was only for the first type of rebate repayment (credit notes);[8]

[8] I.e. this listing not include cheque or payment in product rebates.

2) quarterly detailed supporting rebate file sheets for each type of [redacted] credit note rebate in the abovementioned listing; and
3) separate 'rebate summary' spreadsheets for Nufarm Australia and Crop Care for FY2012.

These form **Confidential Attachment SALES 8**.

The detailed supporting sheets (item 2) above) displayed listings by product family name of the total rebates paid in credit notes for each quarter.

Nufarm demonstrated how, within the rebate summary spreadsheet for Nufarm Australia, it had arrive at separate figures for total rebates paid that related to glyphosate, 2,4-D and all other products for all three types of rebates paid (credit note, cheque and as product) for the final two quarters of FY2012, for each customer category ([redacted] and all other customers). We observed that for Q1 and Q2 FY2012, Nufarm had only split total rebates into glyphosate and non-glyphosate product (not identifying 2,4-D specific rebates).

To verify the total rebate amounts in these rebate summary files, Nufarm demonstrated how the total rebates paid figure for Q4 FY2012 in the rebate summary reconciled exactly to the total rebates figure for that quarter in the 'Source Data' file (Confidential Attachment SALES 2, the verification of which is discussed above).

Nufarm demonstrated how the total of all credit notes paid to [redacted] (regardless of product) for Q4 FY2012 reconciled with the detailed listing of credit notes paid to [redacted] (item 1) above) for that period.

We selected three individual credit notes in the [redacted] credit notes listing, which Nufarm provided copies of the credit notes for (included as **Confidential Attachment SALES 9**). These reconciled to the [redacted] credit note listing exactly.

In the detailed supporting rebate sheets (item 2) above) Nufarm had manually identified what rebates were attributable to 2,4-D, glyphosate and other products by reference to the product family name these related to. Nufarm then demonstrated how the split between glyphosate products, 2,4-D products and other products in the rebate summary spreadsheet reconciled to the total of these detailed supporting sheets for Q4 FY2012.

Nufarm provided a spreadsheet, that calculated the applicable rebate amounts as discussed above. This forms **Confidential Attachment SALES 10**.

Nufarm provided a revised A4 applying these rebate percentages to the Level 1 sales revenue figures in the A4 as applicable to each customer.

The revised A4 forms **Confidential Attachment SALES 11**.

4.8.3 Calculation and verification of freight

We observed that the A4 data as submitted originally did not include calculations of freight per line.

Nufarm explained that its sales are made at delivered terms in most cases, and the total amount for freight per invoice appears on each invoice as a separate line for the total invoice (i.e. is not separated on the invoice for as freight for each individual product).

Nufarm explained that, in the originally-provided A4 sales data, no freight charge had been included as it was not possible to identify from Nufarm's records what amount of the total freight was attributed to each sale line of the invoice and hence what freight is attributed to 2,4-D or other products on the invoice.

To reasonably calculate line-by-line freight in the A4, Nufarm provided weighted average calculations of per unit:

- freight billed (i.e. invoiced to its customers); and
- freight paid (i.e. the actual cost of freight incurred by Nufarm)

for domestic and export sales for Nufarm Australia, based on the period FY2012 (i.e. excluding the month of July 2011 and including July 2012).

Nufarm explained that, although these calculations were for its FY2012 and not the review period, and for Nufarm Australia alone, the calculations should reasonably reflect the entire review period and sales by Crop Care (noting that they had been worked out on a weighted average basis). We considered this to be reasonable.

Nufarm explained that, although it had provided calculations of freight billed and freight actually paid, it is more accurate to calculate the cost of freight in the A4 as the cost of freight actually paid, noting there would be numerous reasons why the two differed (e.g. a customer collects the product part way through the distribution chain, etc.). We considered this to be reasonable.

Nufarm was able to demonstrate how it arrived at the freight billed figure, tracing this down to freight amounts billed to its customers on various invoices. As we do not consider this data should be used in our analysis, this verification is not discussed in detail in this report.

To demonstrate how it calculated the 'freight paid' average amount, Nufarm provided a 'Freight Account FY 11 12' spreadsheet (**Confidential Attachment SALES 12**) which included a full listing of freight out[9] paid per invoice for all sales by Nufarm Australia. Nufarm used this data to arrive at the weighted average freight calculations (i.e. total freight paid/total volume freighted).

We verified the detailed freight paid listing in the Freight Account FY 11 12 spreadsheet to three separate selected invoices (**Confidential Attachment SALES 13**).

We are satisfied that the weighted average unit freight paid calculations provided by Nufarm reasonably represent the freight paid on sales of 2,4-D products during the

[9] Not including non-sales related freight e.g. freight in, courier fees, etc.

review period, and can be applied to the A4 sales data to calculate line-by-line freight figures.

4.9 Conclusion on sales

We are satisfied that the revised A4 sales spreadsheets provide a reasonably complete and relevant list of all sales of like goods sold by Nufarm to the Australian market in the review period.

Based on the material provided we are satisfied that:

- the invoiced amounts and sales details in the revised sales listing are accurate;
- the invoiced amounts were paid by Nufarm's customers (noting these sales were linked to rebates);
- the rebate amounts shown in the sales listings have been reasonably apportioned; and
- the quantity (in L) is recorded accurately in the revised sales listing.

On this basis, we consider the revised sales data is reasonably accurate.

5 COST TO MAKE AND SELL

5.1 Introduction

Nufarm provided CTMS spreadsheets for "product families", which were identified with a specific number. There are several product families of formulated 2,4-D product within differing 2,4-D strength (i.e. there may be several product families which are all formulated 2,4-D 680 g/L product).

Nufarm provided Appendix A6 ('A6') spreadsheets for the following formulated 2,4-D product families:

- 0042 AI Amicide 625;
- 0047 AI Amicide 625;
- 0391 AI680 Estercide Xtra 680
- [redacted];
- 0392 AI680 LV Estercide 680;
- 0400 Estercide 800;
- 0860 AI .475 Surpass 475;
- 0865 AI .475 Cobber 475;
- 8004 24D acid export.

Nufarm explained that these calculations were based on the costs incurred at its Laverton North plant (the plant that manufactures 2,4-D acid and larger volumes of formulated 2,4-D product of the two 2,4-D plants).

We observed that these product families account for 80% of Nufarm's domestic sales of formulated 2,4-D products during the investigation period.

We explained to Nufarm that we needed to be satisfied that the costs data submitted was complete, relevant and accurate and contained only costs applicable to the cost to make and sell (CTMS) for 2,4-D products.

We also explained that the company would have to demonstrate that the data could be verified and traced to financial statements and to source documents.

As discussed above, Nufarm did not make significant domestic sales of 2,4-D acid during the investigation period (though it made large volumes of export sales of 2,4-D acid during this period). Consequently, a domestic CTMS for 2,4-D acid was not provided as a separate spreadsheet.

The data in these spreadsheets was presented in a quarterly format, following Nufarm's standard accounting quarters (August – October, November – January,

February – April and May – July) for the period of Nufarm's 2008 financial year, to the end of April 2012 (the first three quarters of Nufarm's 2012 financial year (FY2012)).

The A6 data was broadly categorised as:

- variable manufacturing costs
    - raw materials – 2,4-D tech[10]
    - raw materials – other incipients
    - formulation overheads
    - pack/run off overheads
    - packaging costs
- fixed manufacturing costs
    - purchase price variance
    - revaluation
- selling, distribution and administration costs
    - selling, distribution and administration costs
    - interest (finance charges)
    - foreign exchange

Nufarm explained that, although its CTMS spreadsheet categorised cost components as 'variable manufacturing costs' or 'fixed manufacturing costs', this was not in fact an accurate categorisation, as Nufarm has simply used the part of Customs and Border Protection's A6 template that relates to fixed manufacturing costs to record variances and revaluation, while its fixed and variable manufacturing costs in fact captured under the 'variable manufacturing costs' category.

During the verification visit, Nufarm explained that its manufacturing cost elements are a combination of standard and actual costs (with standard costs being subject to purchase price variances to arrive at actual costs).

Nufarm explained that it uses standard costs for its raw material and other manufacturing inputs that are updated each quarter. Nufarm explained that, at the end of the each quarter, the difference between the standard and actual cost of raw materials purchased (including raw materials, packaging, etc.) is recorded as a purchase price variance (PPV).

[10] I.e. 2,4-D acid

Nufarm explained that its actual costs of manufacture in its A6 calculations are arrived at by removing (or adding) the total product-specific PPV from its total costs to make. This is discussed further below.

Stock on hand is re-valued at the end of each quarter to the new standard cost. The new standard cost is calculated based on the actual and/or forecast cost of purchases. The stock revaluation is shown in the CTMS spreadsheet as part of fixed manufacturing costs.

Formulation overheads comprise fixed and variable overheads including depreciation and are shown as part of variable manufacturing costs.

Packaging costs are a weighted average of costs for the 20 L containers.

During the verification, we informed Nufarm that we would like to focus our verification on either an Amicide 625 of Estercide 680 product, as these represented the highest volume of sales by Nufarm during the investigation period.

Nufarm explained that it could provide a verification document package to demonstrate the Estercide Xtra 680 CTMS for its 2011 financial year. Nufarm explained that this document package was referenced throughout to demonstrate its CTMS methodology, and that this could then be applied to all other product families and periods.

We agreed to focus our verification on this product, and selected the final quarter of Nufarm's 2011 financial year (May – July 2011) as the period to focus our verification on (noting that our investigation period is July 2011 – June 2012, and hence Nufarm's final quarter of 2011 is the only quarter of its 2011 financial year that includes part of our investigation period.

The document package prepared by Nufarm for CTMS verification is at **Confidential Attachment CTMS 1**.

5.2 Production and sales volumes

In its CTMS calculations, Nufarm had:

- calculated per unit (L) costs of each cost element based on total costs for those elements (allocating, including and excluding costs as relevant – discussed below) over production or sales volumes where relevant; and
- multiplying these unit costs by the total sales volume of each product family for which the CTMS was calculated.

Nufarm advised that, explained that it used sales volumes as its basis for product family costs calculations as it records production volumes at the bulk product level and one bulk product can belong to multiple product families sold. Nufarm explained that, to multiply unit costs by production volumes would be inaccurate at arriving at CTMS per product family.

We consider that cost attribution based on sales volumes is suitable for the purpose of injury analysis. We observe this approach is consistent top previous data submitted by Nufarm and accepted by Customs and Border Protection.

The verification of the sales and production volumes used in the CTMS calculations was successfully completed with Nufarm, as discussed throughout the below costs verification commentary.

5.3 Verification to audited accounts

As with submitted sales data, we explained to Nufarm the need to verify its CTMS figures provided for 2012 'upwards' to its audited accounts, by tracing the figures firstly to the company's income statement, and then to the most recent audited financial accounts (Nufarm's FY2012).

5.3.1 Step one – cost to make and sell data to income statement

We asked Nufarm to demonstrate how the Estercide Xtra 680 costs we were focussing on could be traced to its income statement. We noted that, as the Estercide Xtra 680 product is a Nufarm Australia product, it should be traced to the Nufarm Australia income statement.

Nufarm demonstrated this in two steps:

1) showing how the standard manufacturing cost of Estercide Xtra 680 reconciled to the total Nufarm Australia FY2011 income statement (reconciling the manufacturing costs components); and

2) demonstrating how the total selling, general and administrative (S,G & A) expenses that themselves had been allocated to product families reconciled to the Nufarm Australia income statement.

During this verification, Nufarm highlighted and reasonably explained why certain cost elements were not included in its Estercide Xtra 680 CTMS calculations.

Nufarm's FY2011 income statement forms **Confidential Attachment CTMS 2**.

Manufacturing costs

Nufarm explained that its cost family CTMS calculations were for actual CTMS each product family, after accounting for the PPV (discussed below). However, Nufarm explained that the standard cost of product families could be traced to its total cost of goods sold (COGS) in the company's income statements.

In its CTMS calculations, Nufarm provided a 'Standard Usage Product Family' sheet for each product family, including Estercide Xtra 680 (part of Confidential Attachment CTMS 1). This sheet displayed the quarterly standard costs for FY2011 for Estercide Xtra 680.

Nufarm focussed on the standard cost for Q4, and demonstrated how this standard cost was extracted from its Laverton North Q4 FY2011 cost book for Estercide Xtra 680 (part of Confidential Attachment CTMS 1).

Nufarm demonstrated, through interrogating the E.1 system (providing screen shots throughout) how:

- the Estercide Xtra 680 standard cost reconciled to the total COGS figure in Nufarm Australia's FY2011 income statement for the Estercide Xtra 680 product family;
- the Estercide Xtra income statement COGS reconciled to the domestic COGS figure in Nufarm Australia's FY2011 income statement;
- the domestic COGS of Nufarm Australia's FY2011 income statement, when summed with all other COGS types (interrogated in E.1) reconciled with the total FY2011 COGS figure in Nufarm Australia's FY2011 income statement.

S, G & A

We were able to successfully verify all relevant S, G & A costs to the Nufarm Australia FY2011 income statement. This verification process is discussed at Section 5.5.

5.3.2 Step two – income statement to audited accounts

As discussed in Section 4.7, Nufarm was able to demonstrate how Nufarm Australia and Crop Care's FY2012 income statement EBIT figures reconciled upwards to Nufarm Limited's consolidated audited financial statements for that period.

This was reconciliation combined with the reconciliation of total revenue to Nufarm's audited accounts.

We are therefore satisfied that the total operating expenses recorded in Nufarm Australia's income statement reconciles to the consolidated group audited accounts.

5.4 Verification to source data – manufacturing costs

5.4.1 Raw material costs – 2,4-D tech

As Estercide Xtra 680 is a formulated product made from 2,4-D ethyl hexyl ester (EHE) (predominantly manufactured by Nufarm itself), the main raw material cost for the product is this the EHE itself, which Nufarm produces at the Laverton north site from manufactured 2,4-D acid.

In its CTMS workings, Nufarm calculated a total until cost (per L) to make EHE, then multiplied this by the sales volume of Estercide Xtra 680.

Nufarm explained that the cost of the EHE in the formulated product's CTMS is calculated a [redacted] cost components (standard raw materials and actual overheads).

The unit EHE costs were calculated by quarter for Estercide Xtra 680 in a '0391' product family CTMS sheet (part of Confidential Attachment 1). This was calculated as:

- the quarterly standard cost of EHE, itself made up of the standard cost of:

  - manufactured 2,4-D acid; and
  - other chemicals
- MINUS the standard cost of EHE overheads;
- PLUS the actual cost of EHE overheads.

This arrived at a blended cost of EHE (standard cost of raw materials with actual cost of overheads).

Standard cost of EHE

We traced the standard cost of EHE back to Nufarm Australia's Laverton North Estercide Xtra 680 Q4 2011 cost book (provided as part of Confidential Attachment CTMS 1).

We observed this standard cost was calculated by reference to the standard cost of the elements of EHE, multiplied by the 'standard usage' (i.e. the amount of that material required to make 1L of EHE.

Nufarm demonstrated the standard usage of 2,4-D acid (the major cost component of EHE) to its E.1 system.

We then traced the standard cost of 2,4-D acid to a provided '2,4-D Manufacturing Process' sheet (Part of Confidential Attachment 1), which displayed the standard costs of the raw materials and labour and overheads for 2,4-D acid for each step of the 2,4-D acid production process, beginning with the manufacture of chlorine and caustic soda from salt [redacted] and other raw materials.

The standard costs of these materials were calculated as the standard usage of each material by their own standard cost.

We sought to verify the standard cost in this worksheet for both salt and [redacted]. Nufarm demonstrated these standard costs for Q4 FY2011 in the E.1 system, and provided screen shots of these reports.

Nufarm then provided downloads of all purchases of salt and [redacted] for Q4 FY2011, (noting that variances from purchase price to the standard cost would be captured in the PPV – see below). We selected two invoices for each raw material for verification. Nufarm provided these invoices, which we noted matched the E.1 invoice listings.

Relevant documents form **Confidential Attachment CTMS 3**.

EHE overheads

We focussed our verification of the EHE overheads on the actual EHE overheads figure in the 0391 sheet.

Nufarm explained that this figure was calculated as the actual cost of overheads related to the production of EHE (as well as 2,4-D acid, and other intermediary products) times the standard usage for Estercide Xtra 680.

Nufarm demonstrated the Estercide Xtra 680 standard usage for FY2011 in the E.1 system.

To demonstrate the actual costs of EHE overheads, Nufarm provided a copy of an 'Over head data 2010 -2011' workbook that was used to calculate the unit labour and overheads costs associated with making EHE (and other labour and overheads as discussed throughout this section of the report). This workbook forms part of Confidential Attachment CTMS 1.

Within this workbook, Nufarm individually calculated the total labour and manufacturing overheads attributable to separate production processes across the categories of:

- 2,4-D;
- Trifluralin;
- Glyphosate;
- General formulations;
- Specialty formulations;
- Automated run-off;
- Local run-off; and
- Returnable containers.

by allocating the total cost of labour and overheads for FY2011 to each category and then dividing each category's total by the total production volume for each category to arrive at the unit cost.

Nufarm explained that each of these categories represent the production processes performed by Nufarm Australia at the Laverton plant. The 2,4-D category is the process of making the 2,4-D acid and intermediary products (including EHE).

The allocation of overheads was done on a line-by-line basis for each manufacturing and labour cost components, based on the following allocation methods:

- simple production volume split (e.g. building depreciation, fuel, security charges, etc.);
- staff ultisation (e.g. salaries and wages, payroll tax, superannuation);
- actual depreciation of equipment;

- waste production levels (i.e. high-waste functions allocated a greater amount of cost); and
- estimated replacement value (general insurance).

This workbook contained spreadsheets that calculated each type of allocation method, including:

- an employee work area sheet that allocated each manufacturing employee to the relevant category (splitting some across categories), which arrives at a percentage of employee time for each category; and
- a depreciation allocation sheet that split depreciation costs amongst various plant and equipment for each production process category (including some shared depreciation that was attributed evenly across each category).

We asked Nufarm to demonstrate the production volumes used within the workbook to arrive at unit costs, and to allocate costs by production volume for certain lines. We witnessed Nufarm interrogate its E.1 system to demonstrate the production volume for the general formations and 2,4-D acid categories. Nufarm provided a screen shot of these totals, which form **Confidential Attachment CTMS 4**.

To verify the total manufacturing labour and overheads costs that are allocated in the Over head data sheet, we selected three cost categories for further examination:

- repairs and maintenance (R&M);
- trade waste; and
- depreciation.

1) R&M

Nufarm provided a download of its R&M ledger for FY2011 which reconciled to total cost of R&M in the Over head data spreadsheet.

We selected one transaction from this listing, which Nufarm provided the invoice for,. This reconciled directly to the R&M listing.

Relevant documents form **Confidential Attachment CTMS 5**.

2) Trade waste

During the verification, Nufarm displayed a download of its trade waste ledger for FY2011 which reconciled to the total cost of trade waste in the Over head data spreadsheet.

We selected one transaction from this listing, which Nufarm provided the invoice for. This reconciled directly to the trade waste listing.

Relevant documents form **Confidential Attachment CTMS 6**.

3) Depreciation

Nufarm provided an electronic workbook entitled 'Fixed Assets Summary', which included Nufarm's assets register for all plant and machinery. This forms **Confidential Attachment CTMS 7**.

Within this workbook, Nufarm demonstrated the total depreciation figure within the OH spreadsheet by isolating only those assets (by asset type code) applicable to the above-listed production processes (i.e. 'Asset Class 50').

This reconciled with the total depreciation figure within the Over head data spreadsheet.

5.4.2 Raw material costs – other incipients

Nufarm advised that the 'other incipients' cost category related to other raw materials mixed with the EHE to arrive at formulated Estercide Xtra 680.

Nufarm advised that this cost element represented standard costs, and is subject to a PPV (see below).

We observed that the other incipients cost in the Estercide Xtra 680 A6 was calculated as a unit total cost of other incipients, by the Estercide Xtra 680 sales volume.

We traced the total other incipients standard unit cost to the 0391, and then to the Laverton North Q4 FY2011 cost book for Estercide Xtra 680 (both part of Confidential Attachment CTMS 1).

Within the its Q4 FY2011 cost book, we observed that the total of other incipients was made up of three incipient chemicals, themselves with a standard cost that was multiplied by their standard usage to make 1L of Estercide Xtra 680.

We focussed our verification on the incipient '[redacted]', which Nufarm demonstrated the Q4 FY2011 standard cost for as recorded in E.1.

Nufarm also provided a download of all [redacted] purchases for Q4 FY2011(noting that variances from purchase price to the standard cost would be captured in the PPV – see below). We selected one invoice from this listing for verification, which Nufarm provided. We noted the invoice reconciled to the E.1 listing exactly.

Relevant documents form **Confidential Attachment CTMS 8**.

5.4.3 Formulation overheads

As with the manufacturing overheads and labour for 2,4-D acid, Nufarm calculated the yearly unit formulation overheads within its 'Over head data 2010 -2011' workbook (discussed above). This unit amount is then multiplied by the sales figure for Estercide Xtra 680 for each quarter to arrive at total formulation overheads for that product.

Nufarm explained that the 'formulation overheads' cost component included the total manufacturing labour and overhead costs associated with converting 2,4-D acid into formulated 2,4-D product.

As with 2,4-D acid labour and overheads, Nufarm explained that the costs recorded in its CTMS in relation to this cost component are actual costs.

We observed that the formulation manufacturing labour and overheads amount calculated in the overhead data workbook reconciled with the unit amount used in the Estercide Xtra 680 CTMS calculations.

5.4.4 Pack/run off overheads

As with the manufacturing overheads and labour for 2,4-D acid and general formulations, Nufarm calculated the yearly unit pack/run off overheads within its 'Over head data 2010 -2011' workbook (discussed above).

As with other manufacturing labour and overheads, Nufarm explained that the costs recorded in its CTMS in relation to this cost component are actual costs.

Nufarm explained that its 'Pack/run-off overheads' recorded the cost of packing 2,4-D into 20L containers, and hence the unit amount recorded in the Over head data sheet was in fact to pack a 20L container.

Nufarm explained that its CTMS calculations for all product types are based on the assumption that the product is packed into 20L containers. Nufarm explained that this cost is captured in the production process known as 'Automated run-off' (see above) as this process is formed using its automated packing line, while packing of 2,4-D (and other formulations) into larger containers is captured as 'Local run-off' in another line.

Nufarm explained that if a CTMS was to calculated for 2,4-D formulations in the larger containers, the local run off figure should be used instead.

Consequently, to calculate the total cost of pack/run off overheads in the Estercide Xtra 680 CTMS calculations, Nufarm:

- divided the total production volume by 20; and
- multiplied this by the unit (per 20L container) automated run-off figure in the Over head data workbook.

5.4.5 Packing costs

The Packing costs element of Nufarm's CTMS relates solely to the cost of packing materials. The cost of packing overheads as captured in the 'Pack/run off overheads' discussed above.

Nufarm explained that this cost component was based Nufarm explained that packaging costs were calculated based on the assumption that the Estercide Xtra 680 was packed into standard 20L containers (as were packing overheads – see above).

Consequently, Packing costs in the Estercide Xtra 680 CTMS (which arrive at CTMS/L after the total quarterly CTMS is divided by the quarterly sales volume in the A6) were calculated as:

- the standard cost of one 20L container;
- divided by 20 (to arrive at a per L cost);
- multiplied by the sales volume of Estercide Xtra 680.

We witnessed Nufarm interrogate the E.1 system to demonstrate the standard cost of packaging recorded in the Estercide Xtra 680 CTMS.

Nufarm demonstrated that this total standard packaging cost is made up of several components, including labelled containers (which Nufarm buys in and labels itself) and container caps.

We selected the element of container caps to further verify. Nufarm demonstrated the standard cost of these caps in the E.1 system. It provided a download of all purchases of container caps in Q4 FY2011. We selected one invoice from this purchases list, Nufarm provided this invoice and we observed it matched the details in the purchase listing.

5.4.6 Purchase price variance (PPV)

As discussed previously, to arrive at the actual cost to manufacture Estercide Xtra 680, Nufarm made the appropriate adjustment for the total applicable PPV per quarter for that product from its total manufacturing costs calculations.

The total PPV represents then variance between the standard costs for manufacturing inputs used in the calculations to the actual purchase prices for those inputs (i.e. raw materials to make 2,4-D acid, EHE, other incipients, and packaging materials).

We sought to verify the total PPV figure listed in the Estercide Xtra 680 CTMS calculations for Q4 of Nufarm's FY2011.

Nufarm explained that the total PPV recorded in the Estercide Xtra 680 CTMS was calculated as a unit PPV for 2,4-D products, multiplied by the sales volume of that specific formulation.

In its Estercide Xtra 680 document package (Confidential Attachment CTMS 1) Nufarm provided a 'CTMS-Final' spreadsheet, which identified (among other things) the unit PPV for 2,4-D formulations as the total 2,4-D formulations PPV for that quarter divided by the total production volume of 2,4-D bulk for that quarter.

To verify the total PPV for 2,4-D formations, Nufarm provided a download of its complete PPV listing for Q4 FY2011 (**Confidential Attachment CTMS 9**).

This listing showed line-by-line detail of purchases of all manufacturing inputs, and the PPV for each line. Each line is attributed a 'cost category' which identifies which product category (i.e. 2,4-D, glyphosate, etc.) the purchase relates to.

Nufarm demonstrated that the PPVs for the 2,4-D cost categories, when isolated, reconciled directly to the CTMS-Final sheet (and hence to the Estercide Xtra 680 CTMS calculations).

We selected to individual PPV lines in the detailed PPV listing and observed Nufarm interrogate E.1 for each transaction to show the individual entries for each line (displaying the purchase price, standard cost and PPV, which reconciled to the PPV listing). Nufarm also produced invoices that we sighted for each purchase to demonstrate that the purchase price in these entries was accurate.

5.4.7 Revaluation

Nufarm provided an extract of its end FY2012 balance sheet, which recorded the total cost of stock revaluation at that time. Nufarm also provided a printout of a download from its E.1 system, showing this same figure. These documents form **Confidential Attachment CTMS 10**.

Nufarm explained that this figure included revaluation of all stock, not only 2,4-D-related stock.

To demonstrate the amount of the revaluation that should be allocated to 2,4-D, Nufarm provided a 'Revale' spreadsheet (**Confidential Attachment CTMS 11**). Within this spreadsheet, Nufarm had manually attributed revaluation to 2,4-D stock by reference to SKU. We observed this to be accurate by reference to product titles.

Within the CTMS-Final sheet (part of Confidential Attachment CTMS 1), the monthly revaluation attributable to 2,4-D calculated in the Revale spreadsheet was then divided by total sales volume of 2,4-D products, to arrive at monthly unit 2,4-D product revaluation figures.

We were able to reconcile the monthly 2,4-D revaluation figures to the Revale spreadsheet.

After arriving at this unit monthly 2,4-D revaluation amount, Nufarm calculated monthly revaluation amounts for Estercide Xtra 680 by multiplying this unit amount by the Estercide Xtra 680 sales volume. The totals of these monthly amounts reconciled to the CTMS spreadsheet (when added into quarters).

5.5 Selling, General & Administrative expenses

Nufarm's selling, general and administrative expenses were broken down into the categories of:

- selling, distribution and administration costs
- interest (finance charges)
- foreign exchange.

5.5.1 Selling, distribution and administration costs

Nufarm explained that the unit selling, distribution and administration costs of domestic formulated 2,4-D were calculated as:

1) the total of all of Nufarm Australia's general administration expenses (e.g. IT, purchasing, finance and all other costs that are considered to apply equally to all sales types) divided by the total sales volume of all products sold y Nufarm Australia (in L) to arrive at a per unit 'admin' cost; plus

2) the total pool of other selling, distribution and administration costs applicable to the domestic sale of formulated 2,4-D products divided by the total sales volume of domestic 2,4-D products.

This unit price was then multiplied by the Estercide Xtra 680 sales volume to arrive at total selling, general and distribution costs for that product family.

Nufarm explained these calculations excluded 'global' expenses, which do not relate to the sale of 2,4-D, and also manufacturing overheads, which had already been accounted for in the cost elements of raw materials costs and formulation overheads.

These calculations were performed in the CTMS-Final spreadsheet (part of Confidential Attachment COSTS 1). Nufarm also provided a 'BU P&L REC' spreadsheet that detailed Nufarm Australia's P&L selling and administration expenses and identified which category each expenses fell into for allocation to 1) or 2) above, or exclusion from the S,G & A calculations.

We were able to trace the total expenses in the BU P&L REC to Nufarm Australia's FY2011 income statement.

We observed the categorisation of costs as either type 1) or 2) expenses in the BU P&L REC sheet, and discussed these categorisations with Nufarm. We considered these to be reasonable.

Traced these expenses to the total of each of the two abovementioned selling, distribution and administration costs in the CTMS-Final sheet, observing that global costs and manufacturing overheads were removed, and only domestic type 2) expenses were included. We observed how these manufacturing overheads were relocated into the Over head data spreadsheet discussed in Sections 5.4.2 to 5.4.4 above.

We observed the categorisation of costs as either type 1) or 2) expenses as above and discussed these categorisations with Nufarm. We considered these to be reasonable.

5.5.2 Interest and foreign exchange (FX)

Nufarm's interest and FX costs for each product family, including Estercide Xtra 680, were calculated in the 'CTMS-Final' sheet (part of Confidential Attachment CTMS 1).

This evenly apportioned the monthly total interest FX gain/loss over total sales volume of all Nufarm Australia products to arrive at a unit cost, which was then multiplied by

the sales volumes of the individual product families to arrive at monthly interest and FX costs for each family (which reconciled to the quarterly calculations in the Estercide Xtra 680 CTMS).

Nufarm demonstrated how the year total interest and FX gain/loss in these calculations traced to the total interest and FX gain/loss in Nufarm Australia's income statement.

Relevant documents form **Confidential Attachment CTMS 12**.

5.6 Conclusion - costs

Having regard to the above, we consider that Nufarm's Appendix A6 CTMS data represents reasonably complete, relevant and accurate accounts of the actual fully absorbed costs to manufacture and sell 2,4-D products during the review period.

6 ECONOMIC CONDITION OF THE INDUSTRY

6.1 Applicant's injury claims

In Trade Measures Report No. 58, Customs and Border Protection found the Australian industry producing 2,4-D (represented by Nufarm) had suffered the following forms of injury:

- loss of market share
- price undercutting
- price depression
- price suppression; and
- reduced profits and profitability.

We have examined Nufarm's performance in the period of Nufarm's FY2008 – FY2012 and charted the results below.

As discussed in Chapter 5, in its appendix A6 CTMS workings, Nufarm provided cost and selling price information for the following product families:

- 0042 AI Amicide 625;
- 0047 AI Amicide 625;
- 0391 AI680 Estercide Xtra 680
- [redacted]
- 0392 AI680 LV Estercide 680;
- 0400 Estercide 800;
- 0860 AI .475 Surpass 475;
- 0865 AI .475 Cobber 475;
- 8004 24D acid export.

In the past, Customs and Border Protection has assessed that the competitive market for 2,4-D is seen in the sales of the fully formulated forms of 2,4-D as there are negligible sales of 2,4-D acid and intermediate products. Therefore, Customs and Border Protection has historically analysed price and profitability injury at the fully formulated level (refer to Report No. 58 and Report No. 126).

Of the provided A6 calculations, our analysis shows that the following families make up over 72% of total domestic sales of formulated 2,4-D product sold by Nufarm during the review period:

- 0042 AI Amicide 625 (Amicide 625);

- 0391 AI680 Estercide Xtra 680 (Estercide Xtra 680);
- 0392 AI680 LV Estercide 680 (Ester 680 CCA) – a Crop Care product;
- 0400 Estercide 800 (Estercide 800);
- 0860 AI .475 Surpass 475 (Surpass 475) – a Crop Care product.

Consequently, the analysis in this chapter focuses on these product families.

Our analysis outlined in this Chapter forms **Confidential Attachment INJ 1**.

6.2 Price trends

6.2.1 Price undercutting

Price undercutting occurs when imported product is sold at a price below that of the Australian manufactured product.

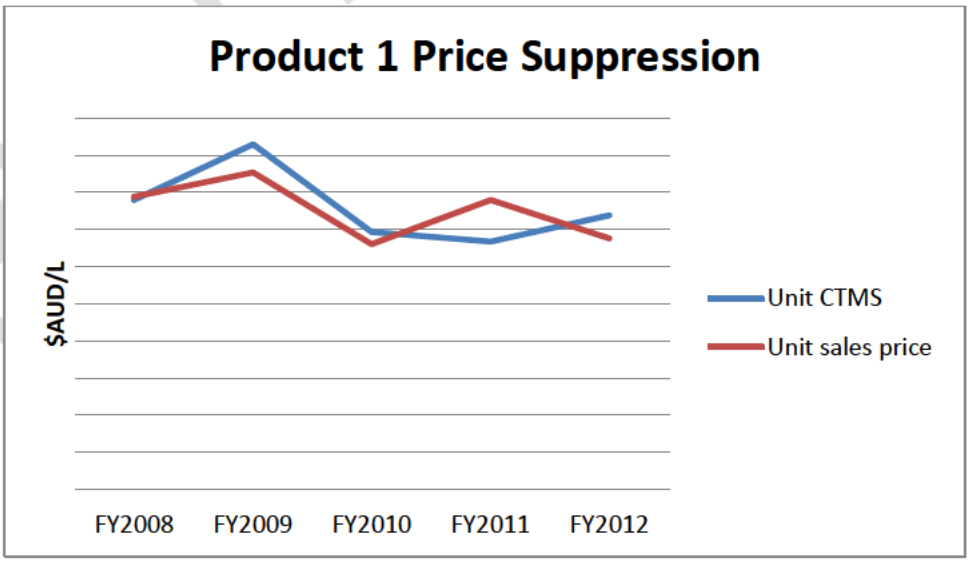
Nufarm has made claims of price undercutting of imported 2,4-D product (fully formulated and formulated in Australia). Customs and Border Protection will perform price undercutting analysis in the SEF.

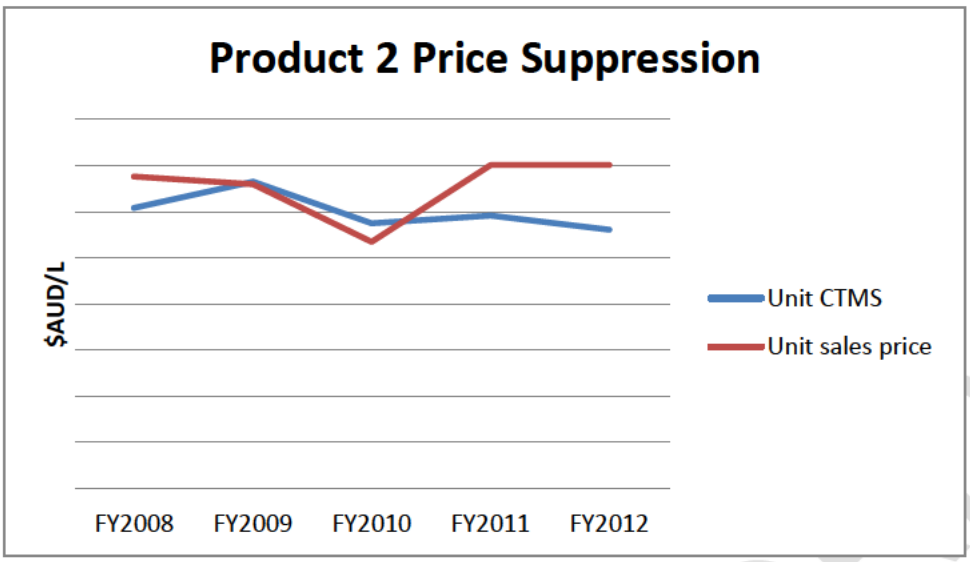
6.2.2 Price depression and suppression

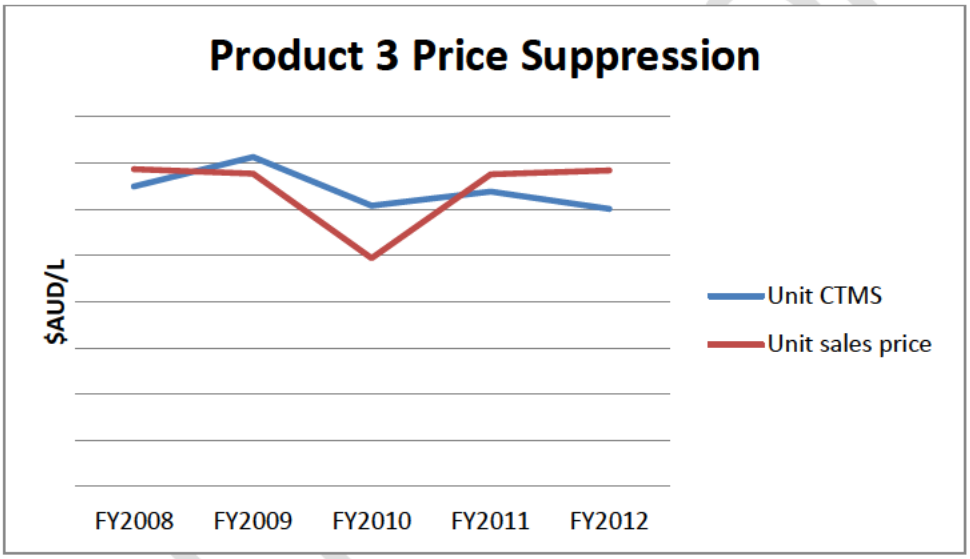
Price depression occurs when there is a reduction in prices.

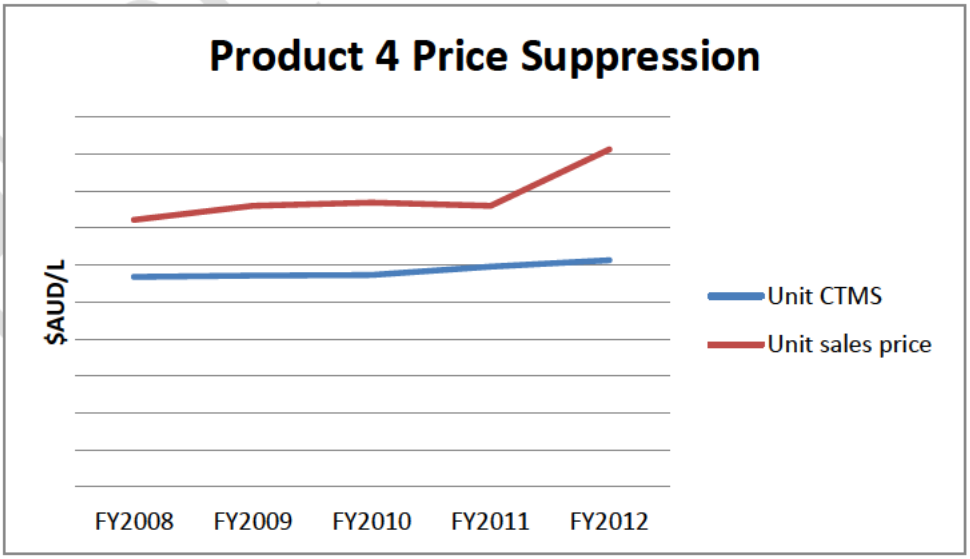
Price suppression occurs when the margin between costs and prices is reduced or when price increases, which otherwise would have occurred, have been prevented.

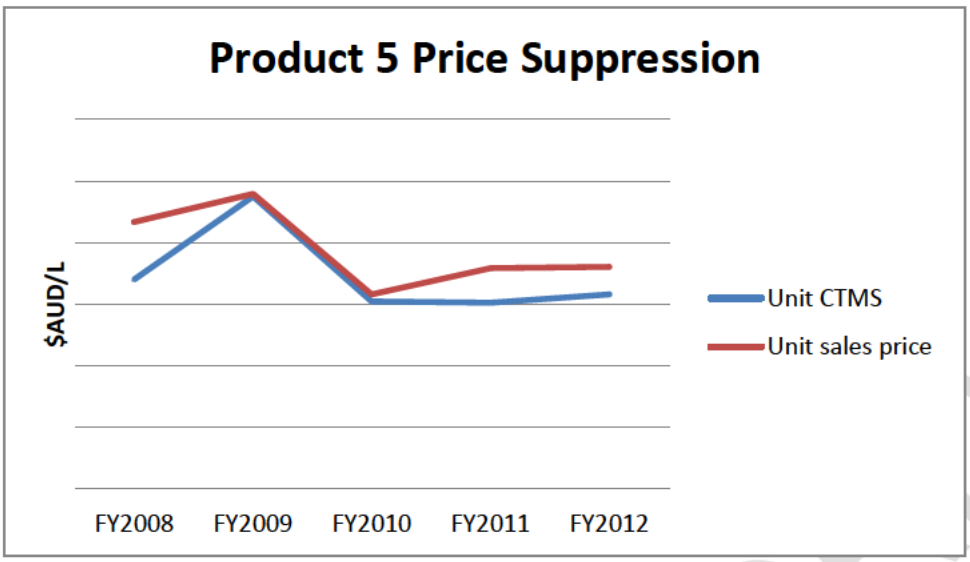
Movements in Nufarm's weighted average quarterly and annual unit selling prices and CTMS are illustrated in the following charts.

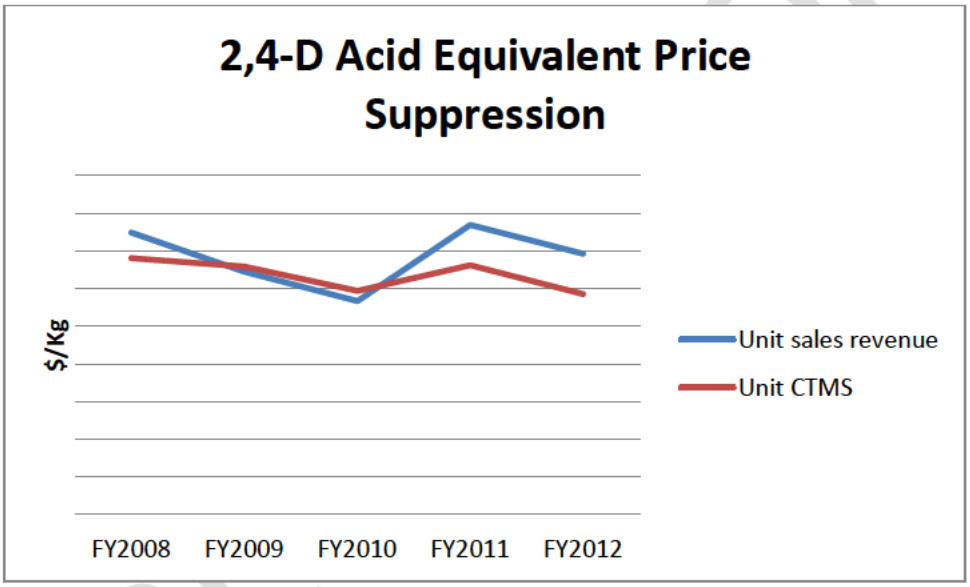



Product 2 Price Suppression
$AUD/L
FY2008
FY2009
FY2010
FY2011
FY2012
Unit CTMS
Unit sales price


Product 3 Price Suppression
$AUD/L
FY2008
FY2009
FY2010
FY2011
FY2012
Unit CTMS
Unit sales price


Product 4 Price Suppression
$AUD/L
FY2008
FY2009
FY2010
FY2011
FY2012
Unit CTMS
Unit sales price





The above analysis demonstrates that:

- the unit selling price for two products (Product 2 and Product 3) increased marginally over the full analysis period, after suffering a marked drop in Nufarm's FY2010;
- the unit selling price for two products (Product 1 and Product 5) decreased over the full analysis period, recovering slightly in FY2011 after suffering a marked drop in FY2010, then Product 1 dropping again to FY2010 levels in FY2012 while Product 5 continued its recovery (though not again reaching pre-FY2010 levels);
- the unit selling price of Product 4 increased slightly over the period FY2008 – FY2011, then increased at a greater rate in FY2012, to end at levels above that seen throughout the assessment period;

- the unit CTMS of Product 5, Product 1, Product 2 and Product 3[11] followed a similar pattern of increasing in FY2009 before decreasing in FY2010 and ending at similar, though lower levels than in FY2008;
- the CTMS for Product 4 remained relatively stable throughout the analysis period, with slight increases over that period;
- Product 1 experienced a decrease in price from FY2011 to FY2012, at the same time as an increase in the CTMS;
- Product 2 and Product 3 experienced a decrease in price from FY2008 to FY2009, at the same time as an increase in the CTMS, as well a further decrease in price from FY2009 to FY2010, accompanied by a CTMS decrease, though the decrease in CTMS was less significant than the pricing decrease;
- Product 5 experienced an increase in price from FY2008 to FY2009, though this was accompanied by a greater increase in CTMS over that period, and steady selling prices from FY2011 to FY2012, accompanied by an increase in CTMS over that period; and
- while unit CTMS and unit sales price of the formulations combined as an acid equivalent fell from FY2008 to FY2010, the decrease in selling price was greater than the fall in unit CTMS.

From this analysis, it appears as though Nufarm has suffered:

- price depression for:
    - all formulations (except for Product 4) and the 2,4-D acid equivalent in FY2010;
    - Product 1 in FY2012;
    - Product 2 and Product 3 in FY2009 and FY2010;
    - Product 5 in FY2009 and FY2012;
    - 2,4-D acid equivalent in FY2009 and FY2012;
- price suppression for:
    - Product 1 in FY2010 and FY2012;
    - Product 2 in FY2009 and FY2010;
    - Product 3 in FY2009 and FY2010;

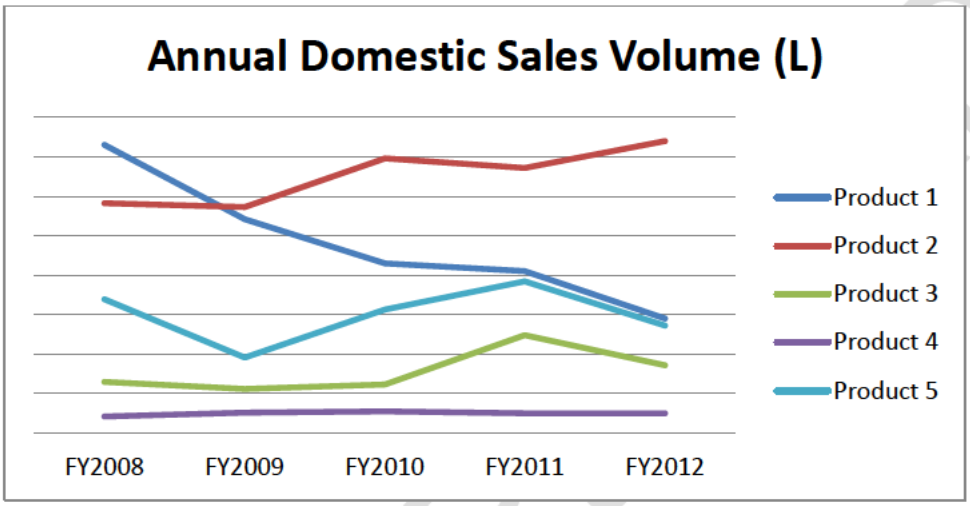
[11] Noting that Product 2 and Product 3 would [redacted] for Nufarm Australia or Crop Care Australia

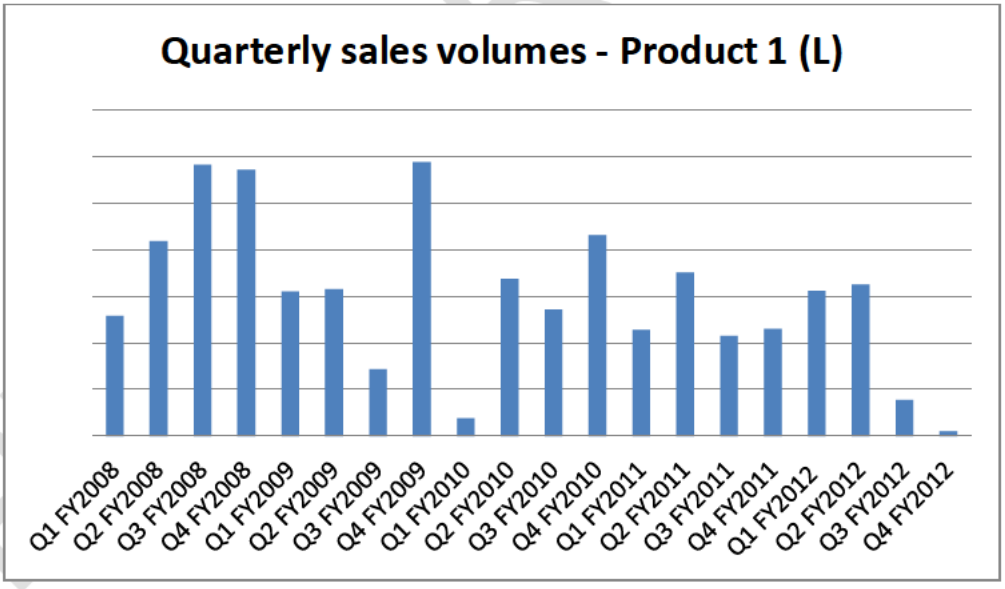
- Product 5 in FY2009, FY2010 and FY2012; and
- 2,4-D acid equivalent in FY2009 and FY2010.

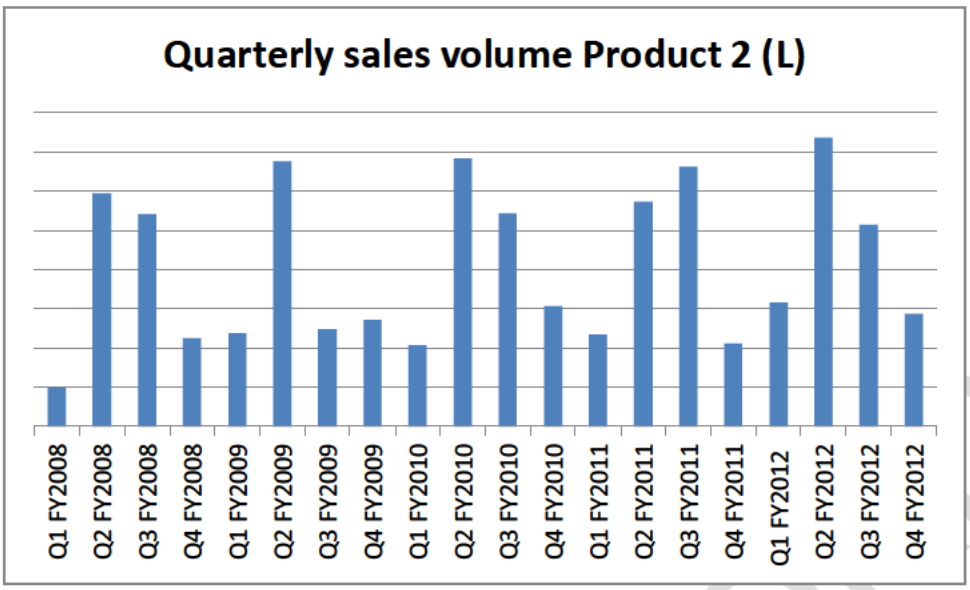
6.3 Volume effects

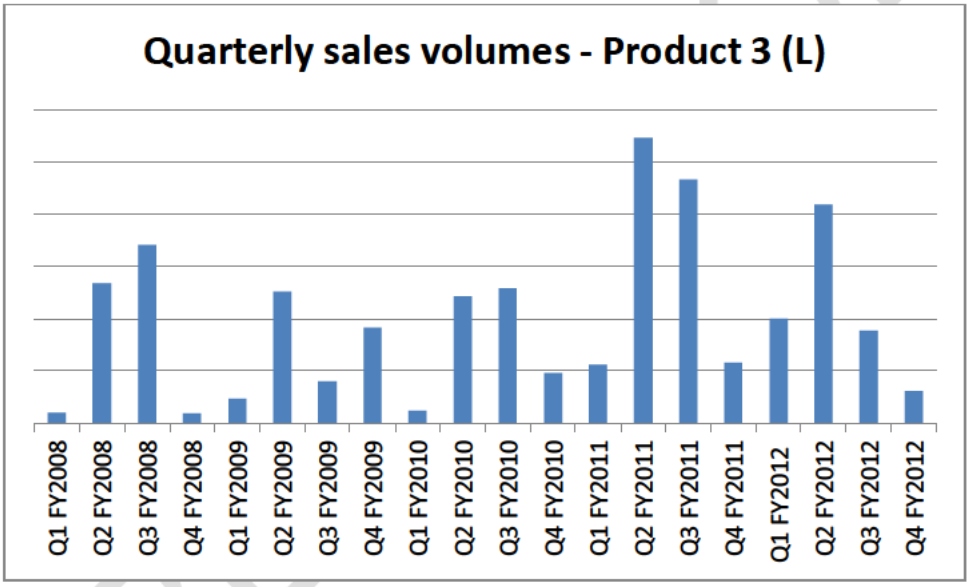
6.3.1 Sales volumes

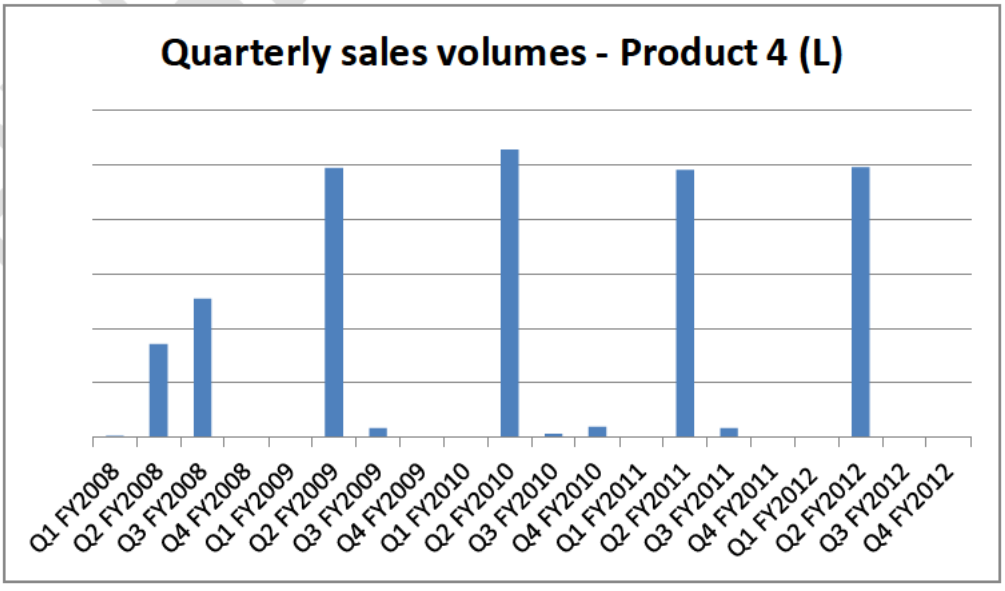
Nufarm's domestic sales volumes for the five examined formulations are charted below (in yearly and quarterly period).

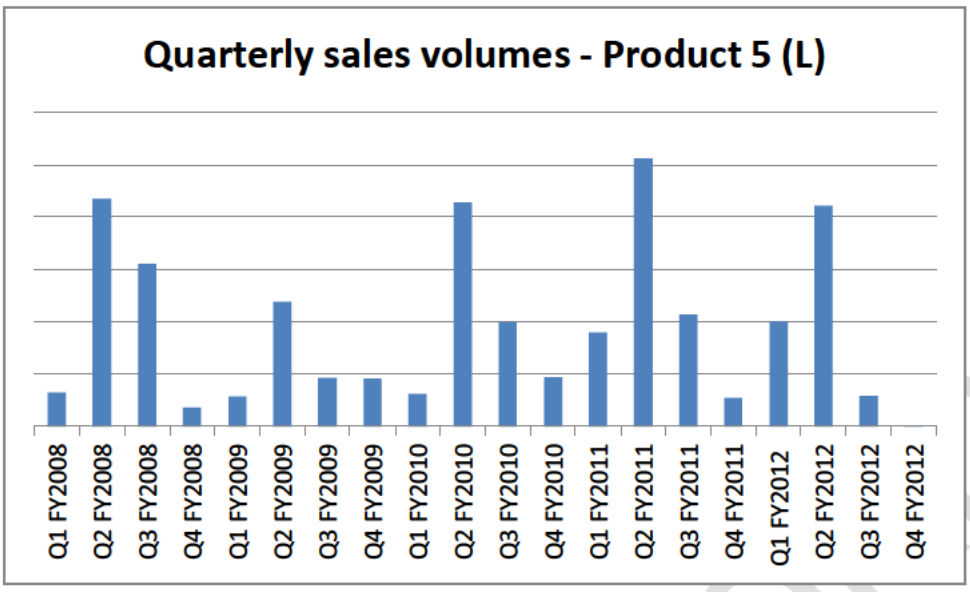




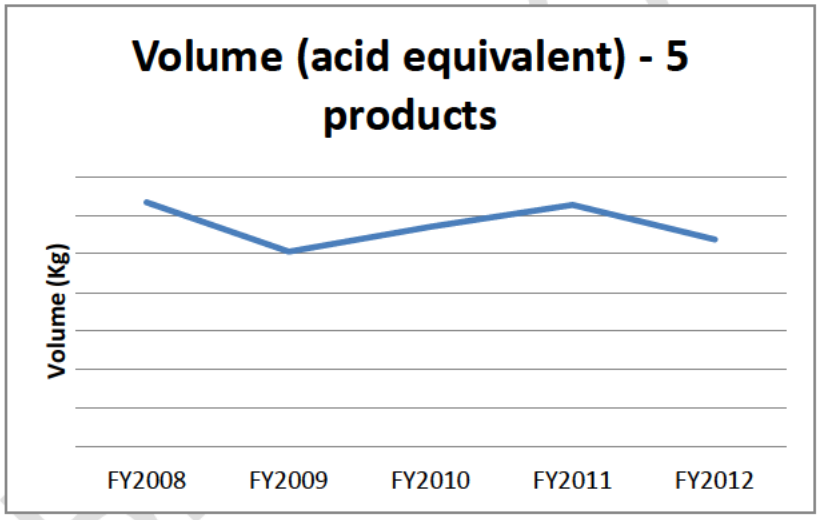

Quarterly sales volume Product 2 (L)
Q1 FY2008
Q2 FY2008
Q3 FY2008
Q4 FY2008
Q1 FY2009
Q2 FY2009
Q3 FY2009
Q4 FY2009
Q1 FY2010
Q2 FY2010
Q3 FY2010
Q4 FY2010
Q1 FY2011
Q2 FY2011
Q3 FY2011
Q4 FY2011
Q1 FY2012
Q2 FY2012
Q3 FY2012
Q4 FY2012


Quarterly sales volumes - Product 3 (L)
Q1 FY2008
Q2 FY2008
Q3 FY2008
Q4 FY2008
Q1 FY2009
Q2 FY2009
Q3 FY2009
Q4 FY2009
Q1 FY2010
Q2 FY2010
Q3 FY2010
Q4 FY2010
Q1 FY2011
Q2 FY2011
Q3 FY2011
Q4 FY2011
Q1 FY2012
Q2 FY2012
Q3 FY2012
Q4 FY2012


Quarterly sales volumes - Product 4 (L)
Q1 FY2008
Q2 FY2008
Q3 FY2008
Q4 FY2008
Q1 FY2009
Q2 FY2009
Q3 FY2009
Q4 FY2009
Q1 FY2010
Q2 FY2010
Q3 FY2010
Q4 FY2010
Q1 FY2011
Q2 FY2011
Q3 FY2011
Q4 FY2011
Q1 FY2012
Q2 FY2012
Q3 FY2012
Q4 FY2012



Nufarm's sales of the 5 products, when converted to a 100% acid equivalent is charted below.



We observe that the quarterly analysis of sales clearly demonstrates the seasonal nature of sales of formulated 2,4-D acid products.

We note this analysis indicates that:

- for the Product 5, Product 4 and Product, sales volumes in Nufarm's FY2012 ended at similar levels as sales in FY2008, after a marked increase in sales volume for Product 3 and Product 5 in the years up to FY2011;
- sales volumes of Product 1 decreased steadily over the period to end at levels in FY2012 that were considerably below those of FY2008;
- sales volumes of Product 2 increased year-on-year throughout the period (except for a small decline in FY2011) to end at levels significantly higher than in FY2008; and

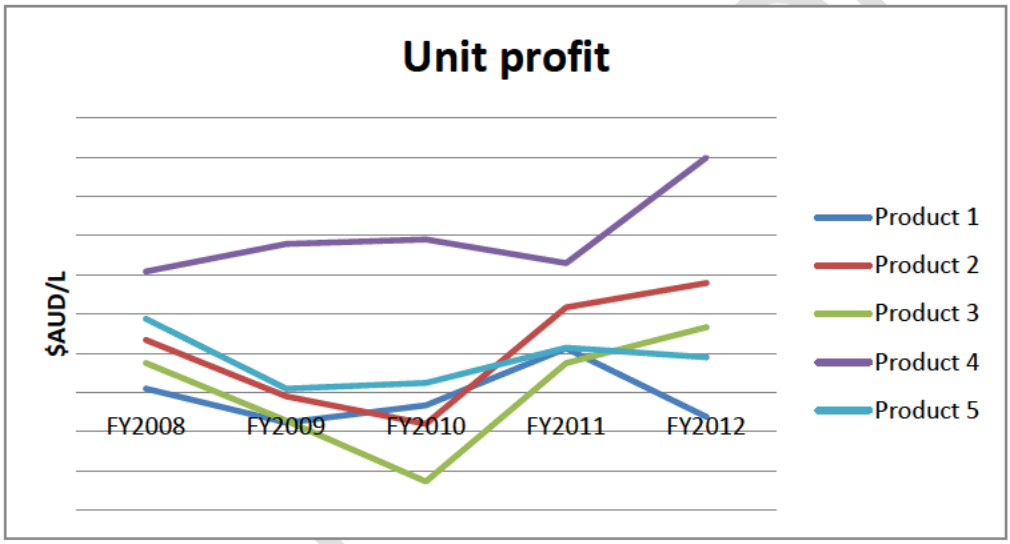
- combined sales volumes of the five products, when converted to a 100% 2,4-D acid equivalent, shows a decline in sales volume from FY2008 to FY2009, before a recovery in sales volumes to FY2011,and another decline in FY2012.

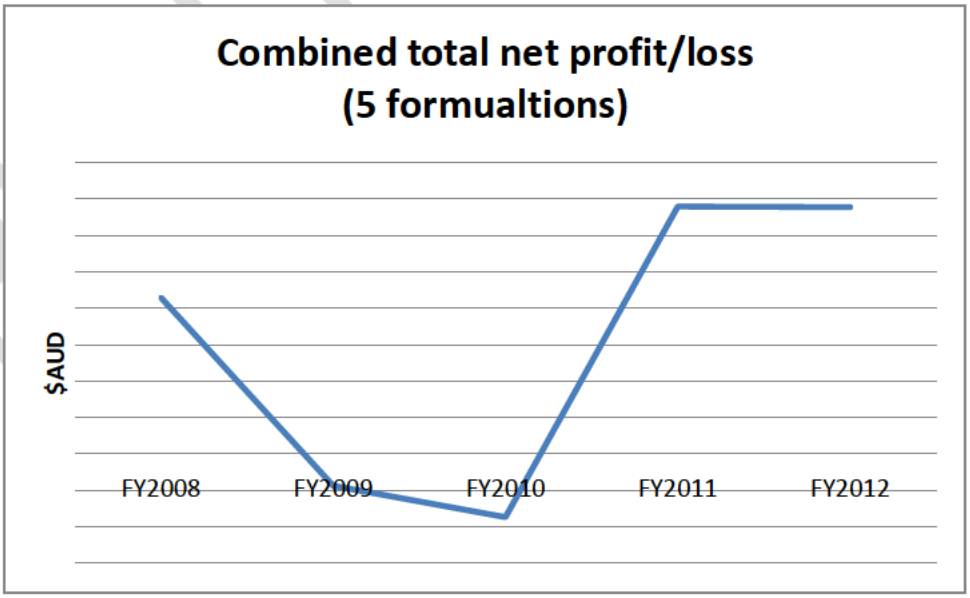
From this analysis, we conclude that the overall (for the five main formulations) Nufarm's total sales volumes of 2,4-D formulated products have decreased from FY2008 to FY2009, then increased in FY2010 and FY2011, then again decreasing in FY2012 (to be at levels approximately [redacted] FY 2008).

6.4 Profits and profitability

6.4.1 Profit

Nufarm's profit (in relation to the five analysed formulations) over the analysis period is illustrated in the below chart:





We observe this displays that, for Product 2, Product 3, Product 5 and Product 1:

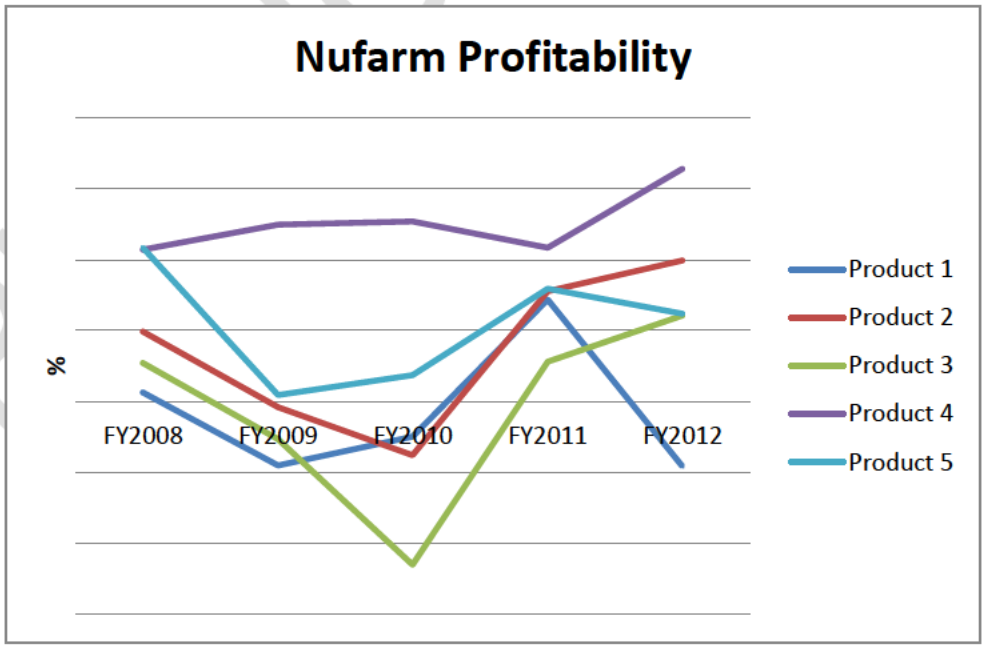
- profits fell from Nufarm's FY2008 to FY2009 (to an unprofitable level for some products);
- this fall continued for both Product 2 and Product 3 into FY2010, though Product 1 and Product 5 both saw unit profit increases into FY2010;
- all four products saw increased unit profits from FY2010 to FY2011;
- the increase in unit profit continued for both Product 2 and Product 3 formulations into FY2012, though Product 5 and Product 1 saw a decrease in unit profits from FY2010 to FY2011; and
- overall, unit profit for both Product 2 and Product 4 formulations ended at a higher level in FY2012 from the base year of FY2008, while unit profit for Product 1 and Product 5 ended lower in FY2012 than in FY2008.

We observe that unit profit for Product 4 steadily increased from FY2008 to FY2010, before falling in FY2011 but experiencing a significant increase in FY2012 to end the analysis period at levels significantly higher than in FY2008.

Overall (for the five formulated products examined) there was a significant increase in total profit from FY2008 through FY2009 into FY2010 to loss-making levels, followed by a significant increase in total profit in FY2011, with total profit remaining steady in FY2012.

6.4.2 Profitability

Movements in Nufarm's profitability for the five examined 2,4-D products over the analysis period are illustrated in the table below:



For all products except Product 4, profitability saw a decrease from Nufarm's FY2008 to FY2010, increasing in FY2011, then continuing to increase for the Product 2 and Product 3 formulations but decrease for Product 1 and Product 5 into FY2012.

We observe that the profitability of Product 1 and Product 5 ended the analysis period at a rate lower than that seen in FY2008 (the start of the analysis period).

Profitability for Product 4 was steady from FY2008 to FY2011 (with increases in the intermediate years), before a marked increase in FY2012.

6.5 Other economic factors

Nufarm submitted a complete Appendix A7 (other injury factors) spreadsheet for the period. This forms **Confidential Attachment INJ 2**.

This included data, for the period of Nufarm's FY2008 – FY2012 relating to research and development expenditure, capacity, capacity utilisation, employment numbers, return on investment, stock levels and cash flow.

We sought to test the accuracy of Nufarm's recorded capacity and capacity utilisation figures. We were able to trace the maximum capacity volumes recorded in the A7 to internal Nufarm reports, and the actual production volume for Q2 2012 (which we selected) through to Nufarm's production records. Relevant documents form **Confidential Attachment INJ 3.**

We are satisfied that the data recorded in the A7 is reasonably accurate and reliable for injury assessment.

From the Appendix A7, we observed the following over the period of Nufarm's FY2008 – FY2012:

- Nufarm's production of 2,4-D acid was at, slightly over or slightly below the maximum production capacity of 2,4-D acid throughout the analysis period;
- production of formulated products was consistently below capacity throughout the period (between [redacted]%) – Nufarm noted that its capacity to formulate 2,4-D formulations relies partially on the capacity of its acid production and that this has limited capacity utilisation of formulated product capacity;
- Nufarm has increased the value of its assets for 2,4-D;
- Nufarm has decreased capital investment and research and development costs for 2,4-D;
- return on investment in 2,4-D products has fallen significantly;
- revenue for 2,4-D remained relatively stable (with falls in in FY2009 – FY2011 and an increase in FY2012).

6.6 Conclusion

Based on an analysis of the information contained in the application and obtained and verified during our visit, we consider that Nufarm has experienced injury in the form of:

- price depression;

- price suppression;
- reduced sales volume;
- reduced profits;
- reduced profitability; and
- reduced return on investment and thus reduced attractiveness to reinvest.

Assessments of price undercutting and market share will be reached in the SEF.

7 OTHER MATTERS DISCUSSED

Nufarm reiterated its view that should anti-dumping measures on 2,4-D expire, the Australian industry would experience a recurrence of, or be threatened with material injury from dumped 2,4-D exports from China.

7.1 'Flood' of Chinese exports

We highlighted to Nufarm that certain interested parties had disputed its position in its application that, should the measures be allowed to expire, numerous Chinese producers of 2,4-D would be able to flood the Australian market. We highlighted that these interested parties had submitted that these Chinese exporters are limited in their access to the Australian market by the registration and approval process.

Nufarm disputed the claim that the process of achieving the necessary approvals to access the Australian market was onerous.

Nufarm stated that there are two kinds of APVMA registrations for 2,4-D. They include approval for the active component of the formulated product from an approved source (i.e. 2,4-D acid) and registration for the branded (formulated) product for sale and distribution in Australia.

Nufarm explained that formulated products would only receive registration for sale in Australia if they were made from an approved active ingredient.

Nufarm advised that, to receive an approval for an active ingredient, applicants would need to:

- complete an APVMA application form for approval of the active ingredient;
- provide the required chemistry package, including 5 batch analyses for the active ingredient source (information that is readily available to the manufacturer); and
- pay a fee of $1580.

Nufarm explained the approval process takes approximately 5 months, and an approval will be granted if the application meets the requirements of the APVMA and the applicant demonstrates that the active ingredient meets the applicable APVMA composition standard(e.g. levels of impurities not too high).

Nufarm explained that, to obtain a registration for a formulated product was much easier, and takes approximately 3 months (noting the APVMA will provide registrations where the active ingredient used in the proposed product is from a manufacturing source that is already approved and the application meets the APVMA requirements).

Nufarm drew attention to the increase in APVMA product registrations since the previous continuation inquiry and provided a list showing 182 individual product registrations with the APVMA (**Non-confidential Attachment GEN 8**).

Nufarm stated that the APVMA does not regulate the volume of product registrations or approvals, they will be allowed if the requisite criteria are met.

Nufarm noted that importer formulated product must itself contain an approved active ingredient in order to receive registration.

7.2 Higher Australian dollar

We asked Nufarm about the impact it considered the higher Australian dollar was having in the 2,4-D market.

Nufarm did not deny that this impacts the Australian market, making imports cheaper. However, Nufarm also highlighted that its 2,4-D input costs would also be cheaper due to the increased dollar (as certain inputs are imported). Nufarm considered the impact of the dollar was not as pronounced as other interested parties have suggested.

7.3 Carbon tax

Nufarm raised the point that there may be some perception that the carbon tax would be causing Nufarm injury, as opposed to Chinese imports.

Nufarm explained that the impact of the carbon tax on its 2,4-D costs was in fact minimal, as it is eligible for free carbon tax permits under the government's Jobs and Competitiveness Program in respect of the chlor alkali activity undertaken at the commencement of its 2,4-D production.. In addition, Nufarm's greenhouse gas emissions are also below the 25,000 tonne threshold of CO2-e emissions annually (and consequently Nufarm is not directly liable under the carbon pricing mechanism).

7.4 Increased efficiencies

Nufarm discussed its recent exploration of options to invest in productivity improvements related to the production of 2,4-D at its Laverton North facility.

Nufarm provided technical papers and emails discussing its progress to date in examining the potential investment. These are at **Confidential Attachment GEN 9**.

7.5 Issue of current measures – flat rate applicable to acid and formulations

We discussed with Nufarm the opinions of interested parties that the current measures are inappropriate, as they apply the same rate of interim dumping duty (IDD) for imports of 2,4-D acid and intermediary products as for formulations (which are only partly made up of 2,4-D acid of varying strengths).

Nufarm did not have any particular views on the way the current dumping duty was originally applied. However it did state that should the measures change, that the duties that could reflect the most commonly imported 2,4-D active strengths: 625 g/L and 680 g/L (and possibly 800 g/L).

7.6 Exports to the USA and Nufarm's capacity

We highlighted to Nufarm the concerns of interested parties that Nufarm was already operating at capacity, and that a large percentage of this domestically-produced acid was sent to the USA while imported [redacted] acid was used to make domestic formulations.

Nufarm advised that this current business model was due to the fact that the USA's 2,4-D acid market provided much more satisfactory returns that the company would achieve by selling this acid in Australia.

Nufarm explained that, as a result, it had made the business decision to export significant volumes of acid to the USA and supplement its Australian acid needs with [redacted] product (noting that it is currently operating at capacity in terms of acid production – see above).

Nufarm explained that the returns it can achieve for 2,4-D acid on the Australian market are much lower than the USA, attributing this to low priced imports of 2,4-D.

Nufarm stated that, if the Australian market were more attractive, it would likely change its approach to supply the Australian market with 2,4-D solely produced by Nufarm Australia, noting that this would also be a factor in its potential increased investment in 2,4-D at Laverton North discussed above.

Nufarm explained that it currently has the capacity to supply the Australian 2,4-D market, but this is less attractive than the current mixed export/domestic model currently in place due to the state of the Australian 2,4-D market.

7.7 Market price setting and purchasing decisions

We asked Nufarm how the market price for 2,4-D is established and who is the traditional price leader.

Nufarm explained that traditionally, it would be the entity that is the price leader in the market, however this is increasingly eroded by cheap imports, such that it now considers that imports set the market price for 2,4-D formulations.

Nufarm explained that the number one element that will see customers chose Nufarm product over imports is pricing.

Nufarm considered that some brand loyalty may factor in to purchasing decisions (estimating this may represent [redacted] of the purchase decision).

We asked Nufarm whether it experienced any 'premium' or other domestic advantage that would provide it with a competitive advantage over imports (e.g. offering support through regional service centres, availability of supply, etc.).

Nufarm explained that they try to differentiate their goods as Australian, higher quality and better supported, but the imported products perform the same function as

Nufarm's products and that many end users do not differentiate between the two on these grounds.

Nufarm explained that imported 2,4-D formulations are not generally ever in short supply in the market, as the domestic formulators of imported product maintain a continuous production of formulated goods.

8 CONTINUATION OR RECURRENCE OF DUMPING & MATERIAL INJURY

We consider that it is not possible to draw conclusions on the continuation or recurrence of dumping and material injury solely from an examination of Nufarm's claims.

The issue of causal link will be assessed and discussed in the Statement of Essential Facts.

9 UNSUPPRESSED SELLING PRICE

Customs and Border Protection generally derives the non-injurious price by first establishing a price at which the applicant might reasonably sell its product in a market unaffected by dumping. This price is referred to as the unsuppressed selling price.

Customs and Border Protection's preferred approach to establishing unsuppressed selling prices observes the following hierarchy:

- industry selling prices at a time unaffected by dumping;
- constructed industry prices – industry CTMS plus profit; or
- selling prices of un-dumped imports.

Having calculated the unsuppressed selling price, Customs and Border Protection then calculates a non-injurious price by deducting the costs incurred in getting the goods from the export free on board point (or another point if appropriate) to the relevant level of trade in Australia. The deductions normally include overseas freight, insurance, into-store costs and amounts for importer expenses and profit.

Nufarm has provided a submission to Customs and Border Protection in respect of a proposed USP.

10 LIST OF ATTACHMENTS

Confidential Attachment GEN 1	Nufarm verification visit – visit agenda
Confidential Attachment GEN 2	Nufarm corporate structure
Confidential Attachment GEN 3	'Which phenoxy where' product guide
Confidential Attachment GEN 4	Trends in the Australian non-glyphosate agricultural chemical market FY2006-2011
Confidential Attachment GEN 5	Nufarm Australia Ltd Portfolio Categorisation
Confidential Attachment GEN 6	Competitor offers – January 2012
Confidential Attachment GEN 7	Cost and price models for no frills traders, internet traders and traditional distributors of 2,4-D
Confidential Attachment GEN 8	Product registrations with the APVMA
Confidential Attachment GEN 9	Technical papers and emails on future investments
Confidential Attachment SALES 1	Product price list
Confidential Attachment SALES 2	Complete sales listing by product– Nufarm FY 2012
Confidential Attachment SALES 3	Nufarm Australia and Crop Care's FY2012 income statements
Confidential Attachment SALES 4	Other relevant documents
Confidential Attachment SALES 5	Nufarm Limited – FY 2012 audited income statement
Confidential Attachment SALES 6	Regional reports – Sales by region 2012 and Operating expenses by region July 2012
Confidential Attachment SALES 7	Sales source documentation
Confidential Attachment SALES 8	Rebate documentation
Confidential Attachment SALES 9	Credit note documentation for [redacted]
Confidential Attachment SALES 10	Rebate calculations
Confidential Attachment SALES 11	A4 spreadsheet – application of rebate percentages to sales
Confidential Attachment SALES 12	'Freight Account FY 11 12' spreadsheet
Confidential Attachment SALES 13	Freight invoices
Confidential Attachment CTMS 1	Document package – CTMS verification
Confidential Attachment CTMS 2	Nufarm's FY2011 income statement
Confidential Attachment CTMS 3	Summary – 4th Quarter FY 2011 for purchases of salt and [redacted]
Confidential Attachment CTMS 4	Screenshots – production volume for general formations and 2,4-D acid categories
Confidential Attachment CTMS 5	Repairs and maintenance invoice and transaction listing
Confidential Attachment CTMS 6	Trade waste invoice and transaction listing
Confidential Attachment CTMS 7	Fixed Assets Summary
Confidential Attachment CTMS 8	Other incipients – purchases and relevant invoice
Confidential Attachment CTMS 9	Purchase price variance listing – Q4 FY2011
Confidential Attachment CTMS 10	End FY 2012 balance sheet – cost of stock revaluation

Confidential Attachment CTMS 11	Revaluation allocated to 2,4-D - spreadsheet
Confidential Attachment CTMS 12	Year total interest and foreign exchange gain/loss
Confidential Attachment INJ 1	Injury analysis workbook
Confidential Attachment INJ 2	Appendix A7
Confidential Attachment INJ 3	Capacity and capacity utilisation verification documents