Department of Primary Industries

Proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007

Regulatory Impact Statement

This Regulatory Impact Statement has been prepared in accordance with the requirements of the *Subordinate Legislation Act 1994*, the *Victorian Guide to Regulation* and the *Measurement of Changes in Administrative Burden*.

April 2007

This Regulatory Impact Statement (RIS) has been prepared to facilitate public consultation on the proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007. In line with the *Victorian Guide to Regulation*, the Victorian Government seeks to ensure that proposed regulations are well-targeted, effective and appropriate, and that they impose the lowest possible burden on Victorian business and the community.

A prime function of the RIS process is to help members of the public to comment on proposed Regulations before they have been finalised. Such public input can provide valuable information and perspectives, and thus improve the overall quality of the regulations. The proposed Regulations are being circulated to key stakeholders and feedback sought. A copy of the proposed Regulations is provided as an attachment to this RIS.

Public comments and submissions are invited on the proposed Regulations. All submissions will be treated as public documents. Written comments and submissions should be forwarded by no later than **4:00pm, 25 May 2007** to:

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SUMMARY

The use of agricultural and veterinary chemicals has brought long-term benefits to Australian agriculture, forestry, horticulture and aquaculture sectors. Their application has reduced the impact of weeds, pests and diseases across these sectors, leading to improved productivity, better quality produce and more competitive primary production sector.

Agricultural and veterinary chemicals are an important input into Victoria's primary production sector. Approximately $450 million was spent on agricultural and veterinary chemicals in Victoria in 2004-05.[1] Gross Farm Product in Victoria in 2004 was $6.4 billion, which is around 2.9 per cent of Gross State Product.[2] More generally, the agricultural industry is the mainstay of many of Victoria's vibrant regional and rural communities.

Misuse of agricultural or veterinary chemicals, however, has the potential to impose significant costs on the environment, human and animal health, and trade. In this regard, all Australian jurisdictions have intervened to impose legislative and regulatory controls with respect to agricultural and veterinary chemical use.

The Agricultural and Veterinary Chemicals (Control of Use) Regulations 1996 ('the current Regulations') have been in place for more than 10 years and will sunset in July 2007. Broadly, these regulations were introduced to minimise risks associated with agricultural and veterinary chemical use by requiring primary producers and veterinary practitioners to maintain records of sale and use. It is proposed to remake these regulations.

The Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007 ('the proposed Regulations') are substantially similar to the current Regulations, however following two reviews and stakeholder feedback concerning the effectiveness of the current Regulations a number of changes have been made. These changes seek to simplify the proposed Regulations and hence lower the regulatory burden. The most significant additions in the proposed Regulations are the requirement to record veterinary chemical use and a requirement to notify nearby schools and hospitals prior to agricultural spraying. Conversely it is proposed to remove or simplify a number of current Regulations, which were considered redundant or overly prescriptive. It is also proposed to lower the level of penalties.

At the outset, it is important to recognise that the costs and benefits attached to the proposed Regulations do not represent the total costs and benefits imposed on the community by the legislation, but represent an incremental cost (ie, only those additional requirements imposed by the proposed Regulations).

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[1] State figures of agricultural and veterinary chemical expenditure were not available. The Australian Pesticides and Veterinary Medicines Authority (APVMA), however, collects national data. In 2004-05 $2.3 billion was spent on agricultural and veterinary chemicals in Australia. It is assumed that Victoria's share of this is 20 per cent, hence the $450 million estimate.

[2] ABS, 2005, *Agricultural State Profile, Victoria, 2003-04*, Cat ABS 7123.2.55.001

The proposed Regulations provide an operational framework to give effect to key elements of the *Agriculture and Veterinary Chemicals (Control of Use) 1992* ('the Act'). Broadly, the proposed Regulations seek to minimise the risks and maximise the benefits associated with agricultural and veterinary chemical use so as to:

- protect the health of the general public and the users of those products;
- protect the environment;
- protect the health and welfare of animals; and
- protect the domestic and export trade in agricultural produce and livestock.

The proposed Regulations seek to fulfil these objectives by establishing a record keeping and notification process by:

- prescribing the records to be made and kept by users and sellers of certain chemical products;
- prescribing requirements for labels and advice notes accompanying certain veterinary chemical products sold by veterinary practitioners for the treatment of stock;
- prescribing information to be provided in relation to certain agricultural spraying to be carried out on land near schools or hospitals; and
- prescribing equipment to be used when carrying out aerial spraying.

While much of the impact of the regulatory framework derives from Commonwealth Government requirements and the Act, it is clear that the proposed Regulations will impact on sections of the community. In particular, costs will be imposed on primary producers and commercial operators (including aerial sprayers) who use agricultural chemicals and veterinary chemicals, certain cattle producers, veterinary practitioners and the Victorian Government.

This Regulatory Impact Statement (RIS) sets out an evaluation framework to assess the costs and benefits of the proposed Regulations. This RIS states the objectives of the proposed Regulations, examines the nature and extent of the problems that the proposed Regulations address, explains the effect of the proposed Regulations and assesses the costs and benefits. Feasible alternatives to the proposed Regulations are also considered and assessed. These alternatives include undertaking an education campaign, industry codes/quality assurance programs, negative licensing, and varying the proposed Regulations.

The total cost imposed by the proposed Regulations is estimated at **$32 million** over the 10-year life of the regulations. The costs imposed on Victorian business by the proposed Regulations are $30.3 million over the life of the regulations, or around $3 million per annum. This cost represents 0.05 per cent of Gross Farm Product in Victoria.

Summary – Compliance Costs imposed by the proposed Regulations

Compliance Costs (10-Year Assessment Period)	**$M**
Administrative costs	27.7
Substantive compliance costs	2.6
Total	**30.3**

The regulatory burden associated with record keeping imposed on agricultural and veterinary chemical users by the proposed Regulations is in the order of $21.50 per annum per individual. The figure imposed upon veterinary practitioners is in the order of $2,900 per annum, reflecting the higher opportunity cost of time attributed to veterinary practitioners and the significantly larger number of records completed annually. A further cost of $1.7 million is imposed upon Victorian taxpayers as a result of administering and enforcing the proposed Regulations.

While the proposed Regulations do impose significant administrative burdens on businesses, the magnitude of these burdens is expected to remain the same or be slightly less than the current Regulations (ie, the proposed Regulations are expected to bring about a *reduction* in the administrative burden relative to the current Regulations). Therefore, the administrative burden on business is not increased by remaking the regulations, except for the requirement to notify schools and hospitals within 200 metres of a planned spraying area and a new requirement for persons to keep records of veterinary chemical use. This additional burden has been assessed as 'not material' for the purposes of the Victorian Government's *Reducing the Regulatory Burden* initiative.[3]

The specific benefits associated with the proposed Regulations include reducing risks of adverse health impacts of the general public and the users of chemical products, reduced risks of adverse environmental impacts, and reduced risks of disruptions to domestic and export trade in agricultural produce and livestock. Other benefits include reduced risk of lowered agricultural production value, providing a more efficient compliance and enforcement regime, and private benefits associated with better information. These benefits proved difficult to quantify, therefore a Balanced Scorecard methodology was used to assist the assessment.

The proposed Regulations were assessed against the 'competition test'. No restrictions on competition were identified in connection with the proposed Regulations. The proposed Regulations will not impose a significant burden on small business.

None of the alternatives identified was assessed as superior to the proposed Regulations in terms of meeting the Victorian Government's objectives.

[3] Department of Treasury and Finance 2006, *Measurement of Changes in Administrative: Interim Guidelines issued by the Treasurer*, October 2006

The risk associated with not proceeding with the proposed Regulations is that there would be a greater likelihood of adverse impacts on the environment, the community and trade arising from agricultural and veterinary chemical misuse.

This Regulatory Impact Statement **concludes** that:

- **the benefits to society of the proposed Regulations exceed the costs;**
- **the benefits of the proposed Regulations are greater than those associated with any practicable alternative;**
- **the proposed Regulations do not restrict competition; and**
- **the proposed Regulations will not lead to a material change in the administrative burden on industry.**

1. INTRODUCTION

In Victoria the *Subordinate Legislation Act 1994* requires that new or remade regulatory proposals that impose an 'appreciable economic or social burden on a sector of the public' be formally assessed in a Regulatory Impact Statement (RIS) to ensure that the costs of the proposed Regulations are outweighed by the benefits, and that the regulatory proposal is superior to alternative approaches.

It has been assessed that the Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007 ('proposed Regulations') impose an appreciable burden and a RIS is required. This RIS formally assesses the proposed Regulations against the requirements in the *Subordinate Legislation Act 1994* and the *Victorian Guide to Regulation incorporating: Guidelines made under the Subordinate Legislation Act 1994*.

The regulatory proposals in this RIS are put forward and assessed in the context of the Victorian Government's policy objectives to reduce the regulatory burden on business. The *Reducing the Regulatory Burden*[4] initiative commits the Victorian Government to reducing both the administrative and compliance burdens of regulation. Accordingly, this RIS also uses the Victorian Standard Cost Model[5] and *Measurement of Changes in Administrative Burden*[6] to inform its cost benefit analysis and to measure any changes to the administrative burden.

Reducing the regulatory burden on business and not-for-profit organisations is a priority of the Victorian Government. The Government recognises that good regulation will protect the community and the environment, while underpinning efficient and well functioning market economies. Conversely, ineffective regulation can both hinder economic activity and lead to unintended consequences.

This RIS states the objectives of the proposed Regulations, examines the nature and extent of the problem, explains the effect of the proposed Regulations and assesses their costs and benefits. Feasible alternatives to the proposed Regulations are also considered and assessed. As noted above, in the context of *Reducing the Regulatory Burden* initiative, this RIS also specifically identifies any net change in the administrative burden imposed on business that arises from the regulatory proposal. It also examines potential impacts on small business and competition.

Two discussion papers were circulated to stakeholders and subsequent feedback has been valuable in framing the proposed Regulations. The Department of Primary Industries (DPI) welcomes and encourages further feedback on the proposed Regulations.

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[4] Victorian Government, 2006, *Reducing the Regulatory Burden: The Victorian Government's Plan to Reduce Red Tape*, pp. 2-3

[5] Department of Treasury and Finance, 2006, *Interim Victorian Standard Cost Model Manual: Measuring Changes in the Administrative Burden, Version 1.1*, Melbourne, October 2006

[6] Department of Treasury and Finance, 2006, *Measurement of Changes in Administrative Burden: Interim Guidelines issued by the Treasurer*, Melbourne, October 2006

2. BACKGROUND

2.1 Primary Production in Victoria

2.1.1 Primary Production

The contribution of agriculture to the Victorian economy can be measured in a number of ways. The most direct measurement available is the gross value of agricultural production (GVP), which is the value placed on recorded production at wholesale prices realised in the market place. In 2003-04, the GVP for Victoria was $8.7 billion. Other measures of the contribution of agriculture to the economy include gross farm product (GFP), which is a measure of the value added in production by farm businesses. In 2004-05, the GFP for Victoria was $6.4 billion, or 2.9 per cent of gross state product, and the value of exports of agricultural commodities from Victoria amounted to $1.7 billion in 2004-05.[7] Clearly, the sector is an important contributor to the wellbeing of the Victorian economy.

The agriculture industry in Victoria is diverse, ranging from small establishments engaged in horticulture to large properties mainly devoted to sheep, cattle or cereal production. The main broadacre crops are wheat and barley for grain (wheat production in 2004-05 was 1.9 million tonnes). The main livestock raised are cattle for beef and dairy production, and sheep for meat and fine wool (meat cattle numbers in 2004-05 were 2.5 million; milk cattle numbers were 1.9 million; and sheep and lamb numbers were 20.5 million). The apple and pear industries are significant, along with the citrus and stone fruit industries. The main vegetable crops include potatoes, tomatoes and carrots, while Victoria's wine industry has been growing strongly in recent years.

In 2005, 32,357 agricultural establishments operated in Victoria. This number has been declining in recent years and is down from 35,229 agricultural establishments in 2001.

2.1.2 Use of Chemicals in Primary Production

Agricultural chemicals provide a vital input into Victoria's primary production sector. Approximately $1.7 billion was spent on agricultural chemicals in Australia in 2004-05, while $621 million was spent on veterinary products.[8] From these figures it is estimated that the value of agricultural and veterinary chemical use in Victoria is in the order of $450 million.[9] The use of agricultural and veterinary chemicals has brought long-term benefits to primary industry sectors of Australian agriculture, forestry, horticulture and aquaculture. Their application has reduced the impact of weeds, pests and diseases across these sectors, leading to improved productivity, better quality produce and more competitive primary industries.

[7] ABS, 2005, op cit.
[8] Australian Pesticides and Veterinary Medicines Authority: www.apvma.gov.au
[9] See Footnote 1.

The application of agricultural chemicals includes baiting, fumigating, misting, dusting, and spotting as well as veterinary applications. The frequency of such applications will vary considerably across the primary production sectors. For example, baiting of rabbits or wild dogs may occur up to 3 times a year, while the frequency in horticulture (eg, production of tomatoes, lettuces or potatoes) will be considerably greater because of the increased rotation of commodities. Aerial spraying in plantation forestry may only occur 3 times over a 10-20 year period. Similarly, the nature of record keeping and labelling requirements for veterinary chemical products will vary according to the location and size of the veterinary practice.

The Agricultural Chemical User Permit (ACUP) allows primary producers and agricultural workers to use certain higher risk agricultural chemicals. Persons wishing to obtain an ACUP must first undertake prescribed training, which covers storage, handling, transport, record keeping and use of agricultural chemicals. Currently there are around 18,350 ACUP holders in Victoria. In addition, there are currently around 820 Commercial Operators[10], 30 Aerial Operators and around 800 rural veterinary practitioners operating in Victoria. Together these groups broadly represent the population covered by the proposed Regulations.

2.2 Victorian Government Policy and its Administration

DPI's strategic policy is guided by the Government's vision for Victoria, *Growing Victoria Together*, and its objectives of promoting sustainable development, protecting the environment for future generations, and promoting more jobs and thriving innovative industries across Victoria.[11] More specifically, the policy document, *Growing Victoria's Future*, outlines the Government's approach to maximising the long term profitability and potential of primary industries through innovative policy, science and technology, regulation and practice change and by encouraging the sustainable use of Victoria's natural resources.

DPI has overall responsibility for delivering these policy outcomes. Biosecurity Victoria (BV), which operates within DPI, develops policy, standards, delivery systems and services for the protection of animals and plants from pests and diseases.[12]

The Chemical Standards Branch within BV is responsible for identifying and managing risks to food safety, trade, public health, the environment and animal welfare in relation to agricultural and veterinary chemical use in Victoria. The branch manages these risks by administering the *Agricultural and Veterinary Chemicals (Control of Use) Use 1992* and associated regulations. The branch develops appropriate legislative, regulatory and other control mechanisms for the use of

[10] Under the *Agriculture and Veterinary Chemicals (Control of Use) Act 1992*, a Commercial Operator's Licence is required if a person wishes to carry on a business or offer a service for reward if it involves any of the following three activities: the use of a prescribed chemical product, fertiliser or stock food; the use of a chemical product, fertiliser or stock food of a prescribed class; or the use of a chemical product, fertiliser or stock food in a prescribed manner. The prescribed class of chemical products in this case is 'agricultural chemical products' (see proposed Regulation 13 and section 4 of the Act).

[11] Department of Primary Industries, *Growing Victoria's Future*, Annual Report 2002-2003, pp. 8-9

[12] Department of Primary Industries, Biosecurity Victoria Business Plan 2006-07, pp. 2-3

agricultural and veterinary chemicals, stock foods and fertilisers with respect to agricultural and food production in Victoria.

2.3 Agricultural and Veterinary Chemicals (Control of Use) Act 1992

2.3.1 Objectives of the Act

In 1995 the Commonwealth's National Registration Authority for Agricultural and Veterinary Chemicals (now known as the Australian Pesticides and Veterinary Medicines Authority (APVMA)) took over responsibility for all activity in relation to agricultural and veterinary chemicals, up to and including the point of sale or supply. Beyond the point of sale, the states retained control over use of such chemicals, and each state enacted 'Control of Use' legislation.

In Victoria, the *Agricultural and Veterinary Chemicals (Control of Use) Act 1992* became operational on 1 August 1996 and established the broad regulatory framework to control agricultural and veterinary chemicals in Victoria. Specifically, the purposes of the Act are —

(a) to impose controls in relation to the use, application and sale of agricultural and veterinary chemical products, fertilisers and stock foods and the manufacture of fertilisers and stock foods, for the purpose of—

  (i) protecting the health of the general public and the users of those products; and
  (ii) protecting the environment; and
  (iii) protecting the health and welfare of animals; and
  (iv) protecting domestic and export trade in agricultural produce and livestock; and
  (v) ensuring that a product is effective for the purposes described on its label; and
  (vi) promoting uniformity of regulation throughout Australia; and

(b) to impose controls in relation to agricultural spraying and to provide protection against financial loss caused by damage to plants and stock from agricultural spraying; and

(c) to impose controls in relation to the production of agricultural produce to avoid the contamination of food for human consumption; and

(d) to impose controls in relation to the transport, handling, sale and other dealings with agricultural produce, fertilisers and stock food.[13]

In addition, section 27 of the Act, amongst other things, provides that regulations may be made requiring a seller to keep records of the sale of a chemical product, fertiliser or stock food, and requires a user to keep records of the use of a chemical product, fertiliser or stock food.

[13] Section 1 of the *Agricultural and Veterinary Chemicals (Control of Use) Act 1992*

3. NATURE AND EXTENT OF THE PROBLEM

3.1 Nature and Extent of Problem[14]

3.1.1 Health of the General Public and the Users of Chemical Products

While agricultural and veterinary chemicals provide significant benefits to primary producers and the broader community, their misuse has the potential to impose major costs on human health. Agricultural and veterinary chemicals are inherently risky products and great care must be taken regarding their application – this is why governments in all jurisdictions strictly regulate the registration, labelling, sale, storage and use of such chemicals.

Unacceptable chemical residues in food for humans or feed for livestock can be a consequence of misapplication of a chemical, by the presence of pollutants in the environment or by transfer and biomagnification of chemicals along a food chain. Drift of sprays and vapour during application can damage crops, harm livestock or pollute waterways and the general environment.

Some agricultural and veterinary chemicals contain extremely toxic constituents, and poisoning or even death can occur from their misuse or if proper occupational health and safety precautions are not taken. The health effects may include abdominal pain, dizziness, headaches, nausea, vomiting, as well as skin and eye problems. Longer term health impacts may include respiratory problems, memory disorders, dermatologic conditions, cancer, depression, birth defects and neurological deficits.[15]

Reported incidents of spray drift in Victoria between the years 2000-2004 are shown in Table 1 below. Data was not available concerning the actual cost of spray drifts, but court awarded damages for such incidents are in the order of $7,000-10,000. Of the incidents listed below, twelve persons were prosecuted for off target agricultural spraying resulting in damage to crops.

Table 1: Spray Drift and Residue Incidents in Victoria, 2000-2004

Year	Spray Drift – Aerial	Spray Drift – Ground	Off-Target – other		Residue on Exports
2000	14	84	0		0
2001	38	100	0		0
2002	24	76	0		0
2003	11	19	0		2
2004	5	23	3		0
Total	**92**	**302**	**3**	***397***	**2**

Source: CSB Database – Incident Reports

[14] Healy and Gunningham note that, "Agriculture is one of the most hazardous industries in both developing and industrialised countries … exposure to agricultural chemicals is one of the most significant [facets]. But quite how significant remains unclear, because of almost insurmountable difficulties in documenting the true extent of pesticide poisoning in the agricultural workforce." Quoted from Healy, P. and Gunningham, N., 2003, *Working Paper 8: OHS Implications of Agvet Chemical Regulation*, National Research Centre for OHS Regulation, ANU, Canberra, p. 4

[15] See Victorian Government information site on Farm Safety – Handling Chemicals http://www.disability.vic.gov.au/dsonline/dsarticles.nsf/pages/Farm_safety_handling_chemicals?OpenDocument

In 2003, there were two incidents of unacceptable residues detected in fresh horticultural produce exported to Japan. In 2005 the Victorian Produce Monitoring Program (VPMP), a targeted residue survey that monitors chemical residues in fresh Victorian produce annually, found 30 unacceptable residues (it is important to note that 'unacceptable' residue does not equate to 'unsafe').

The Victorian Poisons Information Centre reports on the number of exposures to substances/products. The list includes agricultural and veterinary chemicals (baits, carbamates, chorinated hydrocarbons, fumigants, fungicides, herbicides, insecticides, moth repellents and organophosphates). While not all exposures recorded can be attributed to primary industry use, the number of agricultural and veterinary chemical exposures recorded in 2005 and 2006 were 2,371 and 1,967 respectively.[16]

The Victorian WorkCover Authority (VWA) reports that from 1995/96 to 2004/05 (ie, approximately the period covered by the current Regulations) that 13,409 claims were made in the 'agriculture' industry category sub-division, and of these 388 were made relating to 'services to agriculture'. The average standardised claim payment for 'other injuries' in the agriculture sector over this period was $29,000.[17] It has been estimated that around 1-3 per cent of farm injuries are related to agricultural chemicals.[18] For illustrative purposes, assuming that 2 per cent of these injuries are chemical related, then this would result in about 30 claims per annum (ie, (13,409 x 2 per cent)/9 years - the actually number is much lower: see below). However, it should be recognised that only a small proportion of work-related farm injuries result in workers' compensation claims since the agricultural workforce consists of mostly self-employed, family members or contractors rather than employees.[19] In addition, the VWA reported that in 2003-04 there were four compensation claims in relation to agricultural chemical use, while in 2004-05, six claims were lodged. VWA has advised that the causes of the claims were predominantly due to exposure to the chemicals, both through breathing and skin contact.[20] While the data is dated, the National Occupational Health and Safety Commission reported that from 1989-1992 seven related deaths in Australia could be attributed to contact with chemicals and other substances on farms.[21]

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[16] Royal Children's Hospital, *Victorian Poisons Information Centre, Annual Report, 2005 & 2006*, Melbourne

[17] Victorian WorkCover Authority, 2005, *2004-2005 Statistical Summary*, pp. 13 & 15. See: http://www.worksafe.vic.gov.au/wps/wcm/resources/file/ebcca6435d4cc68/statistical_summary.pdf

[18] Healy, P. and Gunningham, N., op cit, p. 51

[19] op cit, p. 4

[20] Victorian WorkCover Authority quoted in Commonwealth Product Safety and Integrity Committee's (PSIC), *Performance Measurement Framework for the Agricultural Chemical Management System – Interim Assessment – Victoria 2006*, Attachment D, Agenda Item 3(b)

[21] National Occupational Health and Safety Council, 1999, *Fatalities as a result of contact with chemicals and other substances on farms in Australia, 1989 to 1992*, Sydney. No pagination.

3.1.2 Environment and Health and Welfare of Animals

Since the early 1960s, when a landmark study found adverse effects from Dichloro-Diphenyl-Trichloroethane (DDT) use, the adverse effects of misuse of agricultural (and other) chemicals on the environment have been extensively documented. Wildlife and fish losses can arise from careless application of agricultural chemicals, while ground water contamination by leached chemicals can occur in high use areas if products are used persistently. Excessive use can also result in target pests/weeds developing a resistance, while pesticides can have adverse effects on the environment beyond those intended in the control of target pests.

3.1.3 Domestic and Export Trade

As noted earlier, primary production makes a significant contribution to Victoria's economy. Victoria has a reputation for high quality, clean and healthy food production. Consumers associate Victoria's agricultural produce as being amongst the best in the world.[22] The importance of maintaining this reputation is illustrated by the following stakeholder feedback: "The importance of residues as a market access issue for the dairy industry cannot be understated. Particularly in international markets, agvet chemical and related issues are of increasing importance … as consumers demand a higher level of assurance on the 'clean green' status …".[23]

International markets are extremely sensitive to product integrity issues. The homogenous nature of agricultural produce means that products can be easily sourced from markets outside Victoria or Australia. While not related to agricultural chemical use, the following examples illustrate the cost of trade disruptions. In 2003 Australia's live sheep trade was severely affected in the Middle-east following allegations that sheep aboard the MV Cormo Express were diseased - Australia's live sheep exports to Saudi Arabia only resuming in mid-2005. Direct costs were estimated to be at least $10 million.[24] Similarly, in March 2005 Australia's wheat trade was severely disrupted following allegations that several shipments of wheat to Iraq were contaminated with iron filings. The claims, proved unfounded, prevented the unloading of wheat shipments in Iraq for almost three months (from early March to early June) and came at 'significant cost' to AWB Ltd and Australian wheat farmers.[25]

Disruptions to the industry caused by agricultural and veterinary chemical misuse (eg, higher than acceptable chemical residues) could result in the loss of overseas markets or severe disruptions to the local market. For example, a disruption which resulted in a 1 per cent loss of Victoria's Gross Farm Product would equate to a loss of around $64 million per annum.

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[22] See: www.dpi.vic.gov.au - Agriculture & Food: Testing Fresh Produce for Chemical Residues

[23] *Review of the Agricultural and Veterinary Chemicals (Control of Use) Regulations 1996 – Issues & Options* - Submission to DPI from Dairy Australia, 13 December 2005

[24] Department of Agriculture, Fisheries and Forestry, *Eritrea accepts 52,000 sheep from Australia* see: http://www.maff.gov.au/releases/03/03302wtj.html. The Federal Opposition, however, claimed the cost to be more than $16 million – see: http://www.abc.net.au/pm/content/2003/s968780.htm

[25] Department of Foreign Affairs Annual Report, 2004-2005, Performance Reporting, Section 2, p. 68

CASE STUDY 1: **CANOLA EXPORT TO JAPAN**

On 29 May 2006, the number of listed chemicals under Japan's Positive List of Maximum Residue Limits (MRL) increased from 283 to 799. If imported foods are found with residues above relevant Japanese MRLs, the Ministry of Health, Labour and Welfare (MHLW) will increase its monitoring to 50 per cent of all shipments of that commodity from the source country, even if the chemical residue can be traced to a particular state or region. If a second breach is detected, 100 per cent is tested (at the trade's expense) and all shipments are held in bond pending results. This requirement remains in place until the ministry is convinced that further breaches will not occur.

Against this background, Australian grain exporters have been placed on notice after irregular pesticide residue levels were detected in a recent consignment of canola exported to Japan. The pesticide, fenitrothion, is a widely-used chemical used on a range of pests, including locusts, rice stem borers, wheat bugs, flour beetles, grain beetles and grain weevils. The latest contamination breach is the third detection of levels above the Japanese MRL for fenitrothion, discovered on Australian canola in the past nine months.

The first contamination was detected in June last year but while an investigation into the origin of the contaminations is ongoing, it is understood to have been linked to up-farm storage in South Australia.

The second and third breaches were discovered in December 2006 and January 2007, and are believed to be linked to small container shipments from Western Australia. The third discovery has forced Australia's Japanese customers to consider placing enhanced inspection orders on all shipments of canola from Australia. It has also been reported that the Japanese may even ban future trade with individual grain marketing companies if further residue breaches are detected.

Japan is the world's largest canola importer and Victoria's most significant canola market. Victorian canola exports to Japan were $32.8 million in 2003.

Source: *Farm Weekly*, Western Australia, 8 March 2007 and ACIL Tasman

The case study above illustrates that even if only a single incident of this magnitude (ie, $32.8 million) is prevented over the life time of the proposed Regulations the benefits will outweigh the costs ($32 million).

3.1.4 Number of incidents reported involving Agricultural and Veterinary Chemicals

Table 2 below shows that despite a well developed regulatory framework, breaches of the Act and regulations still occur. Incidents warranting further action include: off target agricultural spraying resulting in damage to crops; use of unregistered chemicals; use of a chemical product for a prohibited purpose; provision of false and misleading information on the use of chemical products; use of chemical products to poison domestic and feral animals; use of restricted chemical products without the appropriate licence; and failure to keep adequate records of use of restricted chemical products. One search warrant was also executed in relation to illegal use of unregistered chemicals and off-label use of chemical products. Fines (including costs and damages) ranged from approximately $500 to $22,000, with average penalties in the order of $5,000-$7,000.

Table 2: Incidents and Enforcement of Regulations in Victoria, 2000-2004

Year	Notifications	Investigations	Concluding Letters	Court Cases	Infringement Notices
2000	106	23	16	1	2
2001	126	44	25	0	3
2002	107	36	30	4	4
2003	59	29	11	3	14
2004	70	24	15	3	11
Total	468	156	97	11	34

Source: DPI Incident Reports

3.1.5 Summary

It is evident from the foregoing discussion that agricultural and veterinary chemical misuse can potentially have significant adverse impacts on human health, the environment, animal welfare, agricultural production and trade.

3.2 Base Case

The 'base case' describes the legislative and regulatory position that would be in place in the absence of the proposed Regulations. That is, it is assumed that the *Agricultural and Veterinary Chemicals (Control of Use) Act 1992*, the Occupational Health and Safety (Hazardous Substances) Regulations 1999, the Dangerous Goods (Storage and handling) Regulations 2000, *Agricultural and Veterinary Chemicals Act 1994* (Cwlth), *Agricultural and Veterinary Chemicals Code Act 1994* (Cwlth) and its schedule, the Agricultural and Veterinary Chemicals Code (the Agvet Code) (Cwlth), Agricultural and Veterinary Chemicals Code Regulations (Cwlth), the Code of Practice for Labelling Veterinary Chemical Products (Cwlth), and Veterinary Practitioners Registration Board of Victoria Guideline 6 remain in place but the current Agricultural and Veterinary Chemicals (Control of Use) Regulations 1996 are not remade.

It is necessary to establish this position in order to make a considered assessment of the incremental costs and benefits of the proposed Regulations. In broad terms, the base case is represented by the level of protection afforded to the community by laws and regulations currently in place.

The proposed Regulations predominantly concern record keeping of the use of agricultural and veterinary chemicals. The base case therefore is broadly represented by the degree of record keeping and the associated level of protection that would occur in the absence of the proposed Regulations.

In the absence of the proposed Regulations, it is likely that many primary producers would keep detailed records of agricultural and veterinary chemical use. In many instances the marketplace demands that primary producers keep records of such use. For example, increasingly primary producers are participating in quality assurance (QA) programs, which require them to keep records regarding chemical use and withholding periods. These programs include CattleCare, Live Stock Production Assurance Program, Flockcare, Freshcare, 'Safe, Quality Food', ISO-9000 and the Nursery Industry Accreditation Scheme, Australia. Similar programs exist in the wine, dairy, egg, and poultry industries. In addition, horticulture producers supplying major retailers are required by these retailers to keep records of chemical use (more than 75 per cent of fresh produce is purchased by Woolworths and Coles[26]). Certain export markets also require declarations of chemical use.

Users of agricultural chemicals in Victoria are required to hold an Agricultural Chemical User Permit (ACUP). Before a person can apply for an ACUP they must have completed a prescribed training course. The most common course in Victoria (over 95 per cent of trainees) is conducted by ChemCert Victoria. Such training contains modules, for example RTC 3704A Prepare and Apply Chemicals, which emphasises, amongst other things, the importance of record keeping as part of best practice farm management. DPI has also released a (voluntary) *Code of Practice of Farm Chemical Spray Application*. The Code highlights the importance of record keeping as part of best practice farm management.[27]

Given the requirements demanded by QA programs along with best business practice associated with training and Government education, it could reasonably be assumed that around 50 per cent of Victorian primary producers would keep detailed records of chemical usage even in the absence of the proposed Regulations.[28]

A number of other laws and regulations may also be relevant when assessing the base case. For example, the Occupational Health and Safety (Hazardous Substances) Regulations 1999 impose duties on manufacturers, importers, suppliers and employers to label containers, and there is also a duty for suppliers to keep a record of

[26] Healy, P. and Gunningham, N., op cit, p. 30

[27] Department of Natural Resources and Environment, *Code of Practice for Farm Chemical Spray Application*, Attwood, Victoria, p. 33

[28] The EPA NSW Regulatory Impact Statement, *Proposed Pesticides Amendment (Records) Regulations 2000*, estimated that following discussions with industry and government 40-60 per cent of primary producers kept records of chemical use in the absence of regulations.

supply and use of scheduled hazardous substances.[29] Additionally, the Dangerous Goods (Storage and Handling) Regulations 2000 provide for general duties to control risks in the workplace, which may include safe labelling and storage of certain agricultural and veterinary chemicals.

3.3 Justification of Government Intervention beyond the Base Case

Section 3.1 illustrates that misuse of agricultural and veterinary chemicals has the potential to adversely impact on the environment, human health and animal welfare and trade. These associated costs are described by economists as externalities which can result from 'market failure'.[30] Market failure occurs when the price of goods and services do not reflect the full costs of a particular activity to society; that is, the market mechanism is not providing price signals to cause behaviour to be modified. When market failure occurs there is often justification for governments to intervene to correct undesirable behaviour.

In this regard, all Australian jurisdictions have assessed the risks associated with agricultural and veterinary chemicals use as being sufficiently hazardous to warrant government intervention in the form of comprehensive legislative and regulatory controls. In Victoria's case, the *Agricultural and Veterinary Chemicals (Control of Use) Act 1992* provides the primary regulatory framework to manage these risks. The proposed Regulations give operational effect to key elements of the Act by establishing a record keeping regime.

Requiring agricultural and veterinary chemical users to keep records is a regulatory alternative for government to minimise irresponsible behaviour in terms of use of such chemicals. It could reasonably be contended that in the absence of the current and proposed Regulations a greater number of misuse incidents would occur since offenders would realise that 'trace-back' would be difficult to determine given the absence of records. Another important but related justification for Government intervention is to protect the environment from agricultural and veterinary chemical misuse.

The risk associated with not proceeding with the proposed Regulations is that there would be a greater likelihood of adverse impacts on the environment, the community and trade arising from agricultural and veterinary chemical misuse.

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[29] The Victorian WorkCover Authority states on its website that: "People who use or store agricultural chemicals in workplaces or who supply chemicals have legal responsibilities and obligations under the OHS Act and the Hazardous Substances Regulations. To meet the Regulations you should: obtain material safety data sheets (MSDS) for each chemical or hazardous substance; keep a register of all hazardous substances on the property; clearly label all hazardous substances; conduct a risk assessment and then control any risks identified; inform, instruct and train all employees in the safe use of any hazardous substances; provide health monitoring (where appropriate); and **keep records** (emphasis added). The Dangerous Goods Act also applies to the storage of some chemicals. Many liquids or solid poisons used on farms must be stored and, depending on the quantities, you may need to notify WorkCover".

[30] Department of Primary Industries, 2004, 'Review of Chemicals Standards', *Evaluation Report No: 6*, Melbourne.

4. OBJECTIVE OF THE REGULATIONS

The objective of the proposed Regulations is to minimise the risks and maximise the benefits associated with agricultural and veterinary chemical use so as to:

- protect the health of the general public and the users of those products;
- protect the environment;
- protect the health and welfare of animals;
- and to protect the domestic and export trade in agricultural produce and livestock.

The proposed Regulations seek to fulfil the objectives by establishing a record keeping framework and notification process by:

- prescribing the records to be made and kept by users and sellers of certain chemical products;
- prescribing requirements for labels and advice notes accompanying certain veterinary chemical products sold by veterinary practitioners for the treatment of stock;
- prescribing information to be provided in relation to certain agricultural spraying to be carried out on land near schools or hospitals; and
- prescribing equipment to be used when carrying out aerial spraying.

5. DESCRIPTION OF THE PROPOSED STATUTORY RULE

5.1 Proposed Agricultural and Veterinary Chemicals Regulations

The proposed Regulations will give operational effect to key parts of the *Agricultural and Veterinary Chemicals (Control of Use) Act 1992*.

Regulation 1 sets out the objectives of the proposed Regulations. The objectives are to: prescribe the records to be made and kept by users and sellers of certain chemical products; prescribe requirements for labels and advice notes accompanying certain veterinary chemical products sold by veterinary practitioners for the treatment of stock; prescribe information to be provided in relation to certain agricultural spraying to be carried out on land near schools or hospitals; prescribe the equipment to be used when carrying out aerial spraying; and to prescribe a number of administrative matters authorised by the Act.

Regulation 2 identifies the authority in the *Agricultural and Veterinary Chemicals (Control of Use) Act 1992* under which the proposed Regulations are made. The Regulations are made under sections 27, 45, 47 and 76 of the Act (see Attachment A). Regulation 3 revokes the Agricultural and Veterinary Chemicals (Control of Use) Regulations 1996 and a number of related amending regulations. Regulation 4 defines 'Agvet Code of Victoria', 'APVMA', 'home garden product', 'hormonal growth promotant', 'hospital', 'household product', 'mister', 'property identification code', 'registered veterinary chemical product', 'Schedule 4 Poison', 'school',

'spraying equipment', 'the Act', 'unregistered veterinary chemical product', and 'veterinary practitioner'.

Regulation 5 requires that the user of an agricultural chemical product, within 48 hours of use, to make and keep for a period of 2 years a written record of the chemical use.[31] This regulation prescribes the information that must be recorded and includes such details as the trade name of the product; the date the product was used; the rate at which the product was used; a description of the situation, crop or commodity to which the product was applied; the area, volume, weight or number treated as referred to in the product label; the specific location where the product was used; etc. This regulation further applies in the case of a product applied by being sprayed outdoors, the wind speed and direction as the time and the location at which the product was used is also to be recorded. Additionally, the name of the person spraying, spreading or dispersing the product and, if applicable, the name of the person supervising the spraying, spreading or dispersing of the product. This regulation does not apply to an agricultural chemical product that is a household product or home garden product, or to a person who holds a licence under the Health Act 1958 to use pesticides, when such use is not associated with primary production. Finally, the 48 hour period required by the Regulation to make a record recognises that primary producers may be 'out in the field' where it is not always practical to make records immediately. Any longer period may result in inaccurate information being recorded. The penalty for breaching this regulation is 10 penalty units.[32]

Regulation 6 requires that the user of a veterinary chemical product must, within 48 hours of use, make and keep for 2 years an accurate written record of the trade name of the product; the species, location, description and identification of each animal treated; the date on which the animal was first treated with the product; the date of each subsequent treatment of the animal with the product; and the quantity of the product used for each treatment of the animal. The penalty for breaching this regulation is 10 penalty units.

Regulation 7 provides that a veterinary practitioner must within 24 hours of selling or using veterinary chemical products for the treatment of a stock animal must make and keep for a period of 2 years an accurate written record of the name of the product and the date the product was sold or used; the directions for use of the product; and the name and address of the person to whom the product was sold; and in the case of an unregistered veterinary chemical product, the name of the active constituent, the concentration and form in which the product was sold or used; and the amount of the product sold or used; the species and number of animals treated or intended to be treated; the location of each animal treated or intended to be treated; and the withholding period for the product.

For the purpose of this regulation veterinary chemicals are chemicals that contain a substance that is a Schedule 4 poison within the meaning of the *Drugs, Poisons and Controlled Substances Act 1981*; is an unregistered veterinary chemical product; is a

[31] The period for retaining records of 2 years is considered the minimum period for effective monitoring of chemical use. This period is also the standard under the National Registration Scheme, and enables the Victorian Government to underpin assurances provided to AQIS concerning export permits, which are linked in part to processes surrounding the National Residue Survey.

[32] In accordance with the *Monetary Units Act 2004* the value of a penalty unit for 2006-07 is $107.43.

registered veterinary chemical product that is sold without the label approved by the APVMA; or is a registered veterinary chemical product sold for use other than in accordance with the label approved by the APVMA. The penalty for breaching this regulation is 10 penalty units.

Regulation 8 provides that a veterinary practitioner that sells a veterinary chemical product for the treatment of a stock animal must provide labels or advice notes to the purchaser. The information on such labels or notes must include: the business name, address and telephone number of the veterinary practitioner; the date the product was sold; the species and type (breed, age and sex) of animal to be treated; the directions for treating the animal with the product; the withholding period for the species of animal to be treated or, if relevant, the statement "Nil withholding period required"; in the case of a registered veterinary chemical product, the name of the product unless it is sold in a container bearing the manufacturer's label; and in the case of an unregistered veterinary chemical product, the name of the active constituent and the concentration of the active constituent.

Regulation 9 provides that the 'withholding period' that must be specified on a label or advice note (see Regulation 8) must not be less than the period, which is appropriate for the circumstance as approved by the APVMA and issued by the manufacturer of the product. The 'withholding period' on labels or advice notes for unregistered veterinary products or a registered veterinary chemical product sold with a label or advice note that contains instructions from the veterinary practitioner that differ from the directions on the label or advice note approved by the APVMA and issued by the manufacturer of the product must specify a withholding period which is sufficient to ensure that any stock or produce from stock treated with that product will not be contaminated at the end of that period.

Section 18 of the Act deals with offences relating to labelling requirements. Section 18(1)(b) provides, amongst other things, that a person must not sell a veterinary chemical product unless it is accompanied by a label or advice note if the veterinary chemical is in a prescribed 'class' of veterinary chemicals and complies with any 'requirement' that is prescribed. Regulation 10 provides that the prescribed 'class' of veterinary chemicals is 'registered veterinary chemical' products. The 'prescribed requirement' is that a registered veterinary product must be sold or delivered with either a label approved by the APVMA for the treatment of a species of animal included on the label in accordance with the directions on the label; or a label or advice note that complies with regulation 8 provided by a veterinary practitioner.

To maintain market access for Australian beef and offal exports to the European Union (EU), the EU requires Australia to ensure that such product comes only from animals that have never been treated with hormonal growth promontant (HGP) implants. Since 1 December 1999, producers have only been able to supply the EU market if their property is accredited as 'HGP-free' under the Australian Quarantine Inspection Service (AQIS) EU access scheme. Regulation 11 requires that the use of HGPs be recorded so that AQIS can ensure the effective functioning of the HGP 'Open System' in order to be able to provide government certification for HGP free meat and meat products to specific overseas markets. AQIS have confirmed that proposed Regulation 11 satisfies this requirement.

Specifically, Regulation 11 provides that the user of a hormonal growth promotant must, within 24 hours of the hormonal growth promotant being used, make an accurate record of such use, including the date of treatment; number and type (breed, age and sex) of animals treated; the name of the hormonal growth promotant used; the name and address of the supplier of the hormonal growth promotant used; etc. Records made under this regulation must be kept for a period of 2 year. The penalty for breaching this regulation is 10 penalty units.

Regulation 12 deals with notification of agricultural spraying near schools or hospitals. There are four parts to this regulation. First, an occupier of land who employs or contracts a person to carry out agricultural spraying of an agricultural chemical product on the land by means of an aircraft or mister must at the time the person is employed or contracted advise the person in writing whether or not there is a school or hospital within 200 metres of the land to be sprayed; and if there is, provide the person with details of the location of the school or hospital. The penalty for breaching this regulation is 15 penalty units.

Second, a person who is employed or contracted to carry out agricultural spraying on land must, not less than 24 hours before spraying is carried out, provide to the occupier of the land the name of the proposed agricultural chemical product to be sprayed and the proposed time and date of spraying. The penalty for breaching this regulation is 15 penalty units.

Third, a person who is employed or contracted to carry out agricultural spraying on land must not start the spraying without first having received the information concerning whether or not there is a school or hospital within 200 metres of the land to be sprayed. The penalty for breaching this regulation is 20 penalty units.

Finally, an occupier of land who intends to have agricultural spraying carried out on that land must make every reasonable effort to inform the principal or person in charge of a school or the site manager of a hospital that is within 200 metres[33] of the land to be sprayed of the following information at least 12 hours before spraying is carried out: the name of the agricultural chemical product to be sprayed; the location of the proposed spraying; and the proposed time and date of spraying. The penalty for breaching this regulation is 20 penalty units.

Section 30 of the Act provides that a person must not carry on a business, or offer a service for fee or reward, which involves the use of, amongst other things, a 'prescribed chemical product.' Regulation 13 provides that the prescribed class of chemical products is 'agricultural chemical products'.

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[33] There are a number of reference documents, which provide guidance in terms of the minimum buffer distances that should be observed between a spraying zone and premises such as a dwelling. Planning guidelines developed by the Department of Local Government in Queensland have referenced the Primary Industries Standing Committee PISC - (SCARM) Report 82 [2002] "Spray Drift Management". These guidelines recommended that 300m be a minimum down wind separation distance between a residential property and any agricultural spraying, where there is open ground between the two. In a technical note by the New South Wales, State Forest Organisation, "Aerial Application of solids and sprays for forest crops", it is stated that a down wind buffer distance of 200 - 400m should be adequate to avoid adverse effects to sensitive situations. In view of these reference documents a minimum distance of 200m has been determined as appropriate in Victoria.

Regulation 14 provides that a person must not carry out aerial spraying unless a smoke generating device is used at ground level at or near the point of spraying immediately prior to and during spraying; the aircraft is fitted with a smoke generating device that is operated immediately prior to and during spraying; a windsock is in operation and clearly visible to the pilot at ground level at or near the point of spraying immediately prior to and during spraying; or an automatic weather station is located at or near the point of spraying and information about the wind speed and direction is available to the pilot immediately before and during spraying. The penalty for breaching this regulation is 15 penalty units.

Section 56 of the Act relates to the testing of contaminated stock or produce. An authorised officer may, by notice in writing, require the owner of any stock, land or agricultural produce to have that stock, land or agricultural produce if the authorised officer reasonably suspects that the stock or agricultural produce is contaminated. Under section 56A(e)(ii) such testing is carried out at the expense of the owner if it is being carried out for a prescribed reason. Regulation 15 prescribes these reasons.

The prescribed reasons for requiring testing of stock to be carried out at the expense of the owner are that, at any time during the period of 2 years before the giving of the notice for the testing, the owner has sold or consigned for slaughter contaminated stock; has been convicted of an offence against section 19(1), 19(3) or 19(6) of the Act in relation to the use of a veterinary chemical product; has been convicted of an offence against section 50(4) of the Act in relation to any land on which any stock to be tested has been kept during that period; or has been convicted of an offence against under the *Drugs, Poisons and Controlled Substances Act 1981* or any regulations made under that Act in relation to the use or possession of a Schedule 4 Poison within the meaning of that Act that was prescribed for use in relation to stock.

The prescribed reasons for requiring testing of agricultural produce to be carried out at the expense of the owner are that, at any time during the period of 2 years before the giving of the notice for the testing, the owner has sold or consigned for sale contaminated agricultural produce; has been convicted of an offence against section 19(1), 19(3) or 19(6) of the Act in relation to the use of an agricultural chemical product; has been convicted of an offence against section 50(4) of the Act; or has been convicted of an offence against section 52(4) of the Act.

The *Agricultural and Veterinary Chemicals (Control of Use) Act 1992* does not contain a direct reference to training requirements in the legislation. However, Schedule 1 of the Act deals with applications for authorities (ie, the Agricultural Chemical User Permit, commercial operators licence, etc). Schedule 1 item (2)(b) states that "An Application must include any information that the chief administrator requires" and item (3)(1) states that "The chief administrator may grant or refuse to grant an authority". Under the current arrangements the chief administrator relies on applicants providing 'information' concerning proof that they had attended an appropriate training course. During the remaking of the regulations it was decided to clarify this requirement by including specific reference to training in the proposed Regulations. Consequently, Regulation 16 provides that the chief administrator may refuse to grant an authority if the chief administrator is not satisfied that the applicant for the authority has completed a course of training approved by the chief administrator in accordance with guidelines published in the Government Gazette.

Section 54A of the Act provides for powers of entry and inspection with the consent of the occupier of the premises. Section 54A(3) provides that if an occupier of premises consents to an entry and search, the authorised officer who requested consent must before entering the premises, ask the occupier to sign an acknowledgement in the prescribed form. Regulation 17 sets out these details on a prescribed "Acknowledgement of Consent to Entry and Search" form. The form, amongst other things, provides for a statement that the occupier has been informed of the purpose of the search and that anything seized or taken or recordings made in the search with the consent of the occupier may be used in evidence in proceedings; that the occupier has been informed that he or she may refuse to give consent to the entry and search; that the occupier has consented to such an entry and search; and the date and time that the occupier consented. This is not a common occurrence and only one warrant has been executed since 2000.

5.2 Comparison with Old Regulations

The proposed Regulations have been remade following stakeholder consultation (see Section 10) and experience gained during the operation of the current Regulations. Overall, the proposed Regulations have been simplified and penalties have been lowered. While some current regulations will be removed, the main difference between the current and proposed Regulations is that a there is a new requirement to record veterinary chemical use (proposed Regulation 6) and a requirement to notify of agricultural spraying near schools or hospitals (proposed Regulation 12). Table 3 summarizes the key changes between the current and proposed Regulations and these are discussed below.

The objectives in proposed Regulation 1 have been streamlined and re-written to make them clearer. The authorising provisions in Proposed Regulation 2 have been streamlined to reflect the new regulations. Proposed Regulation 3 removes a number of redundant references and adds new definitions regarding 'hospital', 'household product', 'registered veterinary chemical product', 'Schedule 4 poison', 'school', unregistered veterinary chemical product', and 'veterinary practitioner'.

Current Regulation 5, which prohibits the possession of certain agricultural chemical products has been removed. The prohibited products listed in regulation 5 are generally no longer on the market, and the likelihood of their use in the future is remote.

Proposed Regulation 5 prescribes information to be contained in records of use of agricultural chemicals. A number of information requirements have been removed in an attempt to lower the administrative burden for chemical users.[34] These include removing the requirement to record the name and address of the business or person supplying the chemical product; the batch number and, where applicable, the expiry date of the chemical product; any specific precautions received with the chemical product in addition to the product label; any withholding period; the type of vegetation in the area; the name of the pest or disease to be eradicated; the weather conditions (although in cases of outdoor spraying, the wind speed and direction at the

[34] The current Regulations require 18 separate pieces of information. The proposed Regulations remove 10 of these and add 5 new simpler requirements (ie, a net reduction of 5 reporting requirements).

time still needs to be recorded); and any permit issued under Schedule 1 or Part 7 of the Agvet Code (if any).

Proposed Regulation 5 also clarifies the application times recorded for poison bait intended for pest animal control and also includes some additional details related to holders of a commercial operator licence or agricultural aircraft operator licence. The inclusion of these simplified details in proposed Regulation 5 means that a number of onerous record details for aerial sprayers contained in current Regulation 7 can be removed.

Proposed Regulation 6 is a new Regulation that requires persons other than veterinary practitioners that use a veterinary chemical that is a Schedule 4 Poison to keep prescribed records of such use. These records will assist DPI and industry to verify the use of veterinary chemicals and further enhances the current quality assurance programs in place for veterinary chemical use.

Proposed Regulations 7 (Record of use of veterinary chemical products) is substantially similar to current Regulation 15. Similarly, proposed Regulation 8 (Labels and advice notes accompanying veterinary chemical products), is substantially similar to current Regulation 13, however the proposed Regulations removes some antiquated 'delivery of notice' requirements.

Proposed Regulation 9 (Withholding periods on labels or advice notes) is substantially similar to current Regulation 14. Proposed Regulation 10 is a new regulation that clarifies the labelling offences in relation to veterinary chemical products are 'registered veterinary products' and that such products carry approved labels in accordance with the regulations. Proposed Regulation 11 (Records of use of hormonal growth promotants) is practically identical to current Regulation 16A.

Proposed Regulation 12 (Notification of agricultural spraying near schools or hospitals) is a new regulation. The intention is to balance the rights of those most vulnerable in our community, school children and the sick, with the right to know about spraying activities within 200 metres. A general requirement for notification (eg, notifying all neighbouring properties) was considered during the framing of the regulations but assessed as imposing too great a burden on primary producers.

Proposed Regulation 13 prescribes agricultural chemicals as the class of chemicals requiring a licence. This regulation simplifies current Regulation 8. Proposed Regulation 14 (Aerial spraying equipment) removes the reference to leak-proof cut-off value spray nozzles contained in current Regulation 10.

Proposed Regulation 15 (Testing of stock or agricultural produce at the expense of the owner) combines current Regulations 11 and 16. The proposed regulation is substantially similar to the current Regulations, however the period in relation to an offence is set at 2 years, compared to 5 years for agricultural produce in the current regulations and 12 months in the case of stock.
Proposed Regulation 16 is a new regulation that prescribes a ground for the chief administrator to refuse to grant an authority (ie, licences). The ground is that if the chief administrator is not satisfied that the applicant for the authority has completed a training course in accordance with guidelines published in the Government Gazette

then the chief administrator may refuse to grant the authority. This is a minor administrative amendment to remove a previous uncertainty concerning the chief administrator's authority to refuse to grant, suspend or revoke licences. However, for completeness the cost of prescribed training has been included in the cost calculations below.

Proposed Regulation 17 (Form of acknowledgement of consent to enter and search) is the same as current Regulation 17.

Table 3 – Comparison of current Regulations with proposed Regulations

Current Regulations	Proposed Regulations	Description	Changes
1	1	Objectives	Wording streamlined
2	2	Authorising provision	Wording streamlined
3	3	Commencement/ revocation	n.a
4	4	Definitions	Definitions simplified or removed; some added
5	n.a	Prohibited chemicals	Removed
6	5	Records – agricultural use	Simplified
7	5	Aerial spraying, etc	Removed and incorporated into proposed Regulation 5
8	13	Certain chemicals	Simplified and incorporated into proposed Regulation 13
9	n.a	Chemigation equipment	'Substantive compliance cost' sub- regulation removed
10	14	Aerial Spraying equipment	Simplified
11	15	Equipment testing at owner's expense	Minor changes
12	8	Labels/advice notes for veterinary products	Current regulations 12 and 13 simplified and incorporated into proposed Regulation 8

Table 3 – Comparison of current Regulations with proposed Regulations (cont)

Current Regulations	Proposed Regulations	Description	Changes
13	8	Labels/advice notes for veterinary products used by vets	See above
14	9	Withholding period on labels	Same
15	7	Record of sale of veterinary chemicals	Now only applied to certain poisons, unregistered products, products without an APVMA label.
16	15	Testing of stock at owner's expense	Minor changes. Current regulations 11 and 16 incorporated into proposed Regulation 15.
16A	11	Records of use of hormonal growth promotants	Minor wording changes
17	17	Forms	No change

Following discussions with, and advice received from the Criminal Policy Branch, Department of Justice, the penalties in the proposed regulations have been revised and in all cases the level of penalties have been lowered. This reduction complies with the Premier's Guidelines which states that fines exceeding 20 penalty units should be contained in primary legislation rather than subordinate legislation.[35] Further, the level of penalties have been revised in line with penalties contained in other similar Victorian statutes. This represents a notional reduction of the burden imposed upon business through the proposed Regulation's penalty regime. Table 4 below shows these changes.

Table 4: Penalties Imposed under the Current Regulation compared with the Proposed Regulations

Regulation	Current (Penalty unit)	Proposed (Penalty unit)
Prohibited possession of agricultural chemicals	50	Regulation removed
Record of use agricultural chemical products	30	10
Record of use of veterinary chemical products	50	10
Record of sales or use of veterinary chemical products by veterinary practitioner	50	10
Record of use of hormonal growth promotants	20	10
Notification of agricultural spraying near schools or hospitals	n.a	15 or 20 depending on offence
Aerial spraying equipment	50	15

[35] Premier's Guidelines published under section 26 of the *Subordinate Legislation Act 1994*: see Clause 1.08

The proposed regulations also remove a range of offences, eg, current Regulation 5 – Prohibited possession of agricultural chemical products (50 penalty units); Regulation 7 – Aerial applicator records (50 penalty units); Regulation 9 – Chemigation equipment (50 penalty units); and Regulation 10(1) – Aerial spraying equipment (50 penalty units).

5.3 Interstate Comparison

As noted earlier, in 1995 the Commonwealth took over responsibility for all activity in relation to agricultural and veterinary chemicals, up to and including the point of sale or supply. The states retained control over use of these chemicals, and each state enacted 'Control of Use' legislation that reflected chemical use practices and issues that were relevant to the state. Therefore, all states have similar 'control of use' regimes in place, which include record keeping requirements for higher risk chemicals.

6. AUTHORISING PROVISION

The proposed Regulations are made under sections 27, 45, 47 and 76 of the *Agricultural and Veterinary Chemicals (Control of Use) Act 1992*. An extract of the relevant authorising provisions is contained in Attachment A.

7. EXPECTED COSTS AND BENEFITS OF THE PROPOSED REGULATIONS

The *Subordinate Legislation Act 1994* requires, amongst other things, a RIS to assess the costs and benefits of the proposed Regulations and to consider any other practicable means of achieving the same objectives.

7.1 Methodology

7.1.1 Discounting for Future Effects - Present Value

Every effort was made to identify and quantify the costs and benefits imposed by the proposed Regulations. As far as possible, likely costs were identified and a Present Value of costs was calculated. A discount rate of 3.5 per cent was used over a 10-year period (ie, the life of regulations in Victoria).[36] This allows future costs and benefits to be examined in terms of today's value of costs and benefits. It was not possible to attach a monetary value to the benefits.

[36] Victorian Competition and Efficiency Commission 2006, *Guidance Note on Discounting*, Melbourne, p. 1

7.1.2 Balanced Score Card Approach

Given the difficulties attached to quantifying the benefits of the proposed Regulations, the Balanced Scorecard Approach (BSA) is presented as an alternative assessment tool.[37] The BSA represents a convenient way to assess regulatory proposals and to compare a range of alternative approaches where it is not possible to quantify and assign monetary values to the impacts of a proposed measure. Therefore a BSA evaluation was undertaken to assign values and weightings to qualitative criteria chosen to reflect the costs and benefits of the proposed measure. A qualitative score is assigned to the impact of the proposal on a range of criteria weighted to reflect their relative importance.

7.2 Costs of Proposed Regulations

By their nature, regulations are designed to modify behaviour in order to achieve certain results. These can impose costs known as 'compliance costs'. In simple terms, compliance costs are the costs of complying with regulations. In the context of the recently published *Interim Victorian Standard Cost Model*, these can be divided into 'administrative costs' and 'substantive compliance costs'.

Administrative costs, often referred to as 'red tape', are those costs incurred by businesses to demonstrate compliance with regulation or to allow government to administer the regulation. Administrative costs can include those costs associated with familiarisation with administrative requirements, record keeping and reporting, including inspection and enforcement of regulation; that is the costs of dealing with government. The costs imposed by the proposed Regulations are predominantly 'administrative costs'. In accordance with the requirements under *Measurement of Changes in Administrative Burden*, administrative costs in the RIS are calculated using the *Interim Victorian Standard Cost Model*.[38]

Substantive compliance costs on the other hand are those costs that directly lead to the regulated outcomes being sought and are most commonly capital and production costs. These costs are often associated with content-specific regulation and include, for example, buying new equipment, maintaining the equipment and undertaking specified training in order to meet government regulatory requirements.

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[37] The Balanced Scorecard Approach is described in the *Victorian Guide to Regulation incorporating: Guidelines made under the Subordinate Legislation Act 1994.* Part 5-13 of the guide states that "the balanced scorecard approach is useful where it is not possible to quantify and assign monetary values to the impacts of a proposed measure (e.g. measures that have significant social impacts). Furthermore, it represents a convenient way of comparing a range of alternative approaches. This technique requires judgements about how proposals will contribute to a series of criteria that are chosen to reflect the benefits and costs associated with the proposals. A qualitative score would be assigned, depending on the impact of the proposal on each of the criteria … weightings may be assigned to each of the criterion, reflecting their relative importance in the policy decision-making process, and an overall score can be derived by multiplying the score assigned to each measure by its weighting and summing the result." If a number of options are being compared, then the option with the highest score would represent the preferred approach.

[38] Department of Treasury and Finance 2006, *Interim Victorian Standard Cost Model Manual: Measuring Changes in the Administrative Burden*, Version 1.1, Melbourne, October, p. 2
Standard Cost Model Formula – Administrative Cost = (tariff x time) x (population x frequency)

This section of the RIS examines the likely costs imposed on business by the proposed Regulations in terms of the administrative costs, substantive compliance costs, and the cost to DPI in enforcing the proposed Regulations.

At the outset, it is crucial to recognise that the proposed Regulations do not represent the total costs imposed on business by the legislation, but represent an incremental cost (ie, only those additional requirements imposed by the proposed Regulations). For example, the vast majority of costs associated with controlling the use of agricultural and veterinary chemicals can be attributed to the Act and other associated laws and regulations. In addition, as noted earlier, a significant proportion of businesses would maintain records in the absence of the proposed Regulations as a matter of good business practice or to comply with QA schemes.

7.2.1 Costs to Business

The proposed Regulations have been grouped into categories according to the type of costs they impose on businesses. Each of the 17 proposed Regulations was examined for the likely costs it would impose upon business. Table 5 below shows this grouping and places the regulations into categories of regulatory costs as follows:

- an **administrative cost** on business;
- a **substantive compliance cost** on business; and
- **no cost/negligible** cost on business.

Table 5 – Categories of Regulation by type of Cost

Regulation	Description of Regulation	Type of Regulatory Cost
5	Records of use of agricultural products	Administrative
6	Records of use of veterinary chemical products	Administrative
7	Records of sale or use of veterinary product by veterinary practitioners	Administrative
8	Labels and advice notes accompanying veterinary chemical products	Administrative
11	Records of use of hormonal growth promotants	Administrative
12	Notification of agricultural spraying near schools or hospitals	Administrative
14	Aerial spraying equipment	Substantive compliance cost
16	Clarification of the Chief Administrator's powers to refuse to grant an authority.	Substantive compliance cost
1	Describes the objectives of the Regulations	None
2	Shows the heads of power under which the regulations are made	None
3	Revokes previous regulations	None
4	Provides definitions for the regulations	None
9	Prescribes certain information for 'withholding periods'. This information is already broadly required under Regulation 8.	Negligible
10	Minor administrative amendment to prescribe class of chemicals. This cost/burden is imposed by the Act rather than the regulations.	Negligible
13	Minor administrative amendment to prescribe class of chemicals. This cost/burden is imposed by the Act rather than the regulations.	Negligible
15	Testing of stock or agricultural produce at the expense of the owner. This is a cost recovery charge that arises with respect to offences or sale of contaminated stock or agricultural produce.	Negligible
17	Prescribes a form as required by the Act.	None

The proposed Regulations that impose administrative costs were calculated using the *Victorian Standard Cost Model*. Data used in the model was based on advice from DPI, VCEC Guidance Notes or from information provided by stakeholders. Where data was unavailable, assumptions were made using the best available evidence (see Assumptions Section).

Each regulation that imposed an administrative cost was costed for a full year and then a 10-year Present Value calculation was made to provide a value for the cost of the regulation over its life. A similar calculation was made for proposed Regulations 14 and 16, which represents a substantive compliance cost. In this instance, it is assumed that aerial sprayers will be required to purchase new equipment to comply with the regulations and the new agricultural and veterinary chemical users will need to undertake prescribed training. Attachment B sets out the detailed administrative costs and substantive compliance cost calculations. These are summarised in Table 6 below.

Table 6: Summary – Compliance Costs

Compliance Costs (10-Year Assessment Period)	$M
Administrative burden – record keeping	27.7
Substantive Compliance Costs – aerial spraying equipment	2.6
Total	**30.3**

* Numbers rounded.

7.2.2 Government Administrative Costs

The proposed Regulations would also impose a cost on Government, which is ultimately borne by the community because it is not recovered from the regulated businesses.

DPI advise that seven staff will be responsible for enforcing and administrating the proposed Regulations. The costs in Table 7 below are calculated by obtaining the number of staff, their VPS levels, and applying on-cost uplift factor. It is estimated that 25 per cent of staff time would be devoted to enforcing the proposed Regulations. This figure was discounted over a 10-year period to obtain its Present Value (see Attachment C).

Table 7: Government Administrative Costs

Compliance Costs (10-Year Assessment Period)	$M
DPI administration and enforcement costs	1.7
Total	**1.7**

7.2.3 Total Costs of the Proposed Regulations

The total cost imposed by the proposed Regulations is estimated at **$32 million** over the 10-year life of the regulations, or around $3.2 million per annum. The cost imposed on Victorian business is estimated at **$30.3 million**. This cost represents 0.05 per cent of Gross Farm Product in Victoria. The regulatory burden associated with record keeping imposed on agricultural and veterinary chemical users by the proposed Regulations is in the order of $21.50 per annum per individual. The figure imposed upon veterinary practitioners is in the order of $2,900 per annum, reflecting the higher opportunity cost of time attributed to veterinary practitioners and the significantly larger number of records completed annually. A further cost of **$1.7 million** over 10 years is imposed upon Victorian taxpayers as a result of DPI administering and enforcing the proposed Regulations.

Assumptions used in the calculations are conservative. Therefore the figures above represent the higher limit of the costs imposed by the proposed Regulations.

7.3 Direct Benefits

Unlike the costs associated with the proposed Regulations, the benefits proved more difficult to quantify. While there are a number of private benefits that accrue directly to the user of chemical products, many of the benefits are more diffuse, for example, general benefits to the community or environment through reducing the risk of misuse of agricultural and veterinary chemicals. In addition, Victoria's agricultural and veterinary chemicals 'control of use' regime has been in place for over ten years, and consequently incidents of death or sickness, environmental contamination, dangerous residue levels or trade disruptions caused by misuse of agricultural and veterinary chemicals are not common. Therefore, to a degree the benefits of the proposed Regulations are counterfactual.

The specific benefits associated with the proposed Regulations are discussed below under the headings of the proposed Regulation's objectives and includes reducing risks of:

- adverse health impacts on the general public, the users of chemicals and animal welfare;
- adverse environmental impacts; and
- disruptions to domestic and export trade in agricultural produce and livestock.

7.3.1 Health of the General Public and the Users of Chemical Products

One of the major concerns regarding agricultural and veterinary chemical use is its potential for adverse impacts on human health. As mentioned earlier, the toxic nature of many agricultural and veterinary chemicals can affect the short and long-term health of both users and the general public if misused. The death of a person from chemical exposure is the worst possible short-term outcome.[39] In the longer term, cancers or birth defects could potentially cost the individual (through loss of income earnings capacity) and community (through calls on the health system) millions of dollars.

Record keeping and appropriate labelling assists in ensuring that chemicals are applied correctly. For example, records requiring 'rate of application' or labels clearly mentioning withholding periods may act as a check and help users avoid errors. In addition, in the event of poisoning records can assist in diagnosis. Along

[39] It is recognised that placing a dollar value on human life is extremely complex. It is also recognised that on religious, philosophical or ethical grounds the value of a human life may be regarded inestimable, and indeed should not be calculated. However, on public policy grounds the valuation of a human life can assist in providing better regulatory outcomes. For example, the value of a statistical life (VOSL) may provide agencies with a reasoned estimate of the benefit of a reduction in fatalities likely to result following the implementation of a particular regulation or alternative of regulation. The most comprehensive and recent study in Australia, *The Value of Life and Health for Public Policy*, examined the international literature on VOSLs. While very little VSOL work has been undertaken in Australia, that study concluded that for public policy purposes in Australia, a VOSL of about $2.5 million for a healthy adult would be an appropriate conservative value. It could be expected that the proposed Regulations would also result in a lower number in injuries than would be the case in the absence of the proposed Regulations.

similar lines, risks to the health and welfare of animals may also be reduced as a consequence of record keeping.

7.3.2 Protection of the Environment

The record keeping requirements under the proposed Regulation would assist in reducing or avoiding potential environmental impacts of agricultural chemicals, by reminding pesticide users to check their use patterns and check label requirements such as registered uses and application rates. In many cases this reminder of good practice would improve pesticide application performance independent of any deterrent effect from enforcement.

7.3.3 Protection of Trade

Agricultural sector QA programs have as their primary objective the avoidance of restrictions on Australian agricultural exports. Detailed record keeping is a requirement of industry QA programs to enable auditors to ensure that accredited members are complying with pesticide use programs and thereby avoiding any increase in the risk of trade restrictions.

The existence of records provides useful information to primary producers about their compliance with withholding periods and spray rates. These factors should reduce the risk of violations of maximum residue levels and thereby reduce the likelihood of adverse impacts on export trade or impacts on the demand for products from domestic consumers if contaminated produce slips through domestic screening programs.

7.4 Other Benefits

Aside from the benefits flowing directly from meeting the regulatory objectives, other important secondary benefits are likely to flow from the proposed Regulations.

7.4.1 Reduced Risk of Lowered Agricultural Production Value

The value of agricultural production can be lowered in two ways through pesticide mis-use. The first is where a residue violation occurs. If record keeping can provide information that ensures that agricultural produce is not rejected at the processing or storage site, this provides a benefit to the individual business of avoiding the cost of having that produce condemned.

The second is where problems occur with diseases or blemishes on crops thus reducing production. These problems may be caused by incorrect application of pesticides. Record keeping can help with this by allowing primary producers to identify whether the application has caused the problem, or whether a biological agent is responsible and chemical use has been ineffective.

7.4.2 Compliance and Enforcement

Records kept by primary producers and veterinary practitioners can assist in the efficiency of investigations of possible breaches of the Act − sale and use records essentially provide the 'paper trail'. This not only assists authorities, but can benefit record keepers by providing evidence against an allegation of a breach. Presumably, without a requirement to keep records, DPI would need to devote greater resources to compliance and enforcement.

Under this theme, the RIS also notes the increasing risk of bio-terrorism − record keeping can assist authorities in investigating such matters.

7.4.3 Information for Users

Records can help individual businesses to identify changes in pesticide use patterns over time and/or help with the implementation of integrated pest management strategies. This potential benefit arises from pesticide users being able to determine more accurately the amounts of pesticide they need to use for particular pests. For instance, users can identify whether pest problems are requiring progressively greater amounts of pesticide or more frequent pesticide applications over time. This helps to determine pesticide effectiveness, thereby enabling changes to control programs as necessary to manage pest species more effectively and, in agricultural situations, reduce the risk of future yield loss.

7.5 Assessment of Costs and Benefits

The Balanced Score Card approach provides a useful tool to assess the relative benefits of the proposed Regulations and alternatives given the difficulties in attaching a monetary value to the benefits and assists in the overall assessment of the cost and benefits.

This RIS has identified three criteria to assess the relative benefits of the proposed Regulations. These are:

- achieving the regulations' objectives of protecting health and the environment in an efficient, effective and timely manner;
- likely compliance; and
- enforceability.

These criteria are given in level of importance by attaching a proportional weighting out of a possible 100 per cent.

Achieving the regulations' objectives is given a relatively high weighting of 50 per cent since this is the overall purpose of the intervention. Compliance is also weighted relatively highly at 30 per cent. This is because the viability and integrity of the 'control of use' regime relies on high levels of compliance. Enforceability is an important element of any regulatory regime and can indirectly assist in achieving higher levels of compliance if enforcement is effective. This criterion receives a weighting of 20 per cent. These criteria are not mutually exclusive (eg, high levels of

compliance and effective enforceability are likely to contribute to achieving the regulatory objectives).

The criteria have then been given a score on the scale of zero to +1.0, reflecting the relative effectiveness of the proposed Regulations in delivering the regulatory objectives.

The proposed Regulations score 1.0 with respect to achieving the objectives in an efficient, effective and timely manner. Experience has demonstrated that relatively few serious incidents occur each year and it is contended that the current regulatory requirements have contributed to this situation. Compliance scores relatively highly at 0.75. While experience has shown that compliance levels are high, each year incidents of spray drifts and unacceptable residue are detected. Enforceability also scores relatively highly at 0.75. The record keeping requirements are the key to this. Enforceability relies on audits or complaints investigations, and since DPI has limited resources it cannot check all chemical users. Annual returns to DPI are not required – this would entail considerable additional administrative costs. The proposed system is based on self assessment.

Table 8 shows that the weightings and assigned scores result in an overall score of +90.

Table 8: Balanced Score Card Assessment of Benefits of Proposed Regulations

Criteria	Weighting	Assigned Score	Weighted Scored*
Achieve the regulatory objectives in an efficient, effective and timely manner	50%	1.0	50
Compliance	30%	0.75	25
Enforceability	20%	0.75	15
Total	**100%**		**+90**

* Numbers rounded

Decision Criteria

This RIS identified and quantified the likely costs to business and government, resulting from the proposed Regulations. The benefits, however, were assessed against a qualitative framework. This RIS acknowledges conceptual difficulties regarding comparing the quantitative and qualitative approaches, however, in the absence of quantitative data with respect to benefits from the proposed Regulations, the BSA was seen as providing a valuable alternative perspective as to the merits of the proposal.

The total incremental costs imposed on business by the proposed Regulations are $30.3 million over the life of the regulations, or around $3 million per annum. This cost represents 0.05 per cent of Gross Farm Product in Victoria. In addition, the regulatory burden associated with record keeping imposed on agricultural and veterinary chemical users by the proposed Regulations is in the order of $21.50 per annum. A further cost of $1.7 million is imposed upon Victorian taxpayers as a result of administering and enforcing the proposed Regulations.

Given that GFP for Victoria was $6.4 billion and the value of exports of agricultural commodities from Victoria amounted to $1.7 billion in 2004-05, it is assessed that the proposed Regulations impose only relatively minor costs and are outweighed by the

benefits of contributing to Victorian farm and stock product integrity and the associated economic and environmental benefits.

As illustrated above, the downside risk of not proceeding with the proposed Regulations. For example, the cost forgone of one year's Victorian exports of canola to Japan is roughly equal to the entire cost of the proposed Regulations over a 10-year period. Similarly, a doubling of workers' compensation claims related to agricultural chemicals would increase claims by around $7.7 million over a 10-year period.

While not formally assessed, this RIS also notes that there has been a substantial shift in community expectations regarding protection of the environment and 'clean green' produce. Consumers increasingly expect their food to be guaranteed free from contaminants and chemical residues, as well as meeting other requirements such as taste, size, colour, freshness and lack of blemishes. Widely publicised global food scares such as BSE, foot and mouth, and dioxin contamination in Belgium may have contributed to this heightened awareness.

Based on the assessment of the costs and benefits associated with the proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007, it is concluded that the benefits of the proposed Regulations outweigh the costs.

8. ALTERNATIVES TO THE PROPOSED REGULATIONS

The *Subordinate Legislation Act 1994* requires that a RIS identifies practicable alternatives to the proposed Regulations and their relative costs and benefits compared to the proposed Regulations. Conversely, the RIS is not required to identify alternatives which are not feasible, or which are beyond the scope of the existing Act.

Maintaining the status quo or the 'do nothing option' is not considered an alternative (see the discussion on the 'Base Case' in Section 3.4). Given that, the alternatives identified in this RIS are:

- education campaign;
- industry codes;
- negative licensing; and
- variation of the proposed Regulations.

Other alternatives examined but not considered practicable or were unduly costly included extending the coverage of existing legislation or offering economic incentives for compliance.

8.1 Base Case

As discussed in Section 3.2, the 'base case' describes the regulatory environment in place in the absence of the proposed Regulations. In broad terms, the base case describes those laws and regulations currently in place which may cover activities dealt with by the proposed Regulations and their likely effectiveness. While the base case described indicates that the prevailing regulatory environment would go some way to addressing the problem of agricultural and veterinary chemical misuse, the nature and extent of the risks are assessed as requiring additional regulatory safeguards.

While it is not considered a feasible alternative, the BSA assessment of the base case is presented here for the purposes of completeness. Each criterion is awarded a score of zero reflecting the default position (ie, the regulatory position in the absence of the proposed Regulations). The base case scenario is assessed below in Table 9 and receives a net score of zero.

Table 9: Balanced Score Card Assessment of the Base Case

Criteria	Weighting	Assigned Score	Weighted Scored
Achieve the regulatory objectives in an efficient, effective and timely manner	50%	0.00	0
Compliance	30%	0.00	0
Enforceability	20%	0.00	0
Total	**100%**		**0**

8.2 Education Campaign

As an alternative non-regulatory means to meet the objectives of the proposed Regulations, DPI could undertake an education campaign aimed at primary producers and veterinary practitioners highlighting the benefits of record keeping as part of business best practice.

DPI has advised that an effective campaign would cost in the order of $1.75 million in the first year (ie, development and roll-out of campaign, additional staff, print media, advertising, materials, etc), around $100,000 in years 2 and 3 and $75,000 per annum thereafter. This provides a discounted cost over the 10-year period of around $2.3 million (see Attachment C).

The main advantage of this alternative is that it would address information needs and should improve the rate of (voluntary) compliance. The main disadvantage is that the viability of the control of use regime depends upon a compliance rate as close as possible to 100 per cent. By itself, the effectiveness of this measure is likely to be limited given the absence of any enforcement mechanism.

Education and social marketing by government can be an important policy tool in achieving compliance (eg, *Wipe Off 5* compliance with speed limits) or behavioural change (eg, *Only a Little Bit Over?* drink driving campaign). (It is worth pointing out that these campaigns deal with issues that attract significant sanctions and are rigorously enforced.) However in terms of achieving the objectives of the proposed Regulations, an education and information campaign by itself is not considered efficacious. This is because even a relatively small proportion, say 5 per cent, of non-compliance could compromise the entire system. Therefore, this alternative by itself is not considered a practicable means of achieving the stated regulatory objectives.

Table 10: Balanced Score Card Assessment of Benefits/Costs of Education Campaign

Criteria	Weighting	Assigned Score	Weighted Scored
Achieve the regulations' objectives in an efficient, effective and timely manner	50%	+0.75	37
Compliance	30%	+0.50	15
Enforceability	20%	0.00	0
Total	**100%**		**+52**

* Numbers rounded

Decision Criteria

A comprehensive education campaign would contribute towards achieving the regulatory objectives (especially if a high level of voluntary compliance is assumed). However, it is unlikely that this alternative would be as effective as the proposed Regulations given the voluntary nature of compliance associated with an education campaign. Enforceability would prove difficult under this alternative. Consequently, this alternative received a net score of +52.

8.3 Industry Codes/Quality Assurance Programs

As noted earlier, a number of industry associations and QA programs require members to keep records of chemical use. An alternative to the proposed Regulations could be to exempt primary producers who participate in such schemes from the proposed Regulations. The main benefit of industry codes is that they are usually associated by industry buy-in, hence compliance is high. In addition, they can be tailored to the needs of particular industries and are generally more flexible than regulations. The main disadvantage of this alternative is that potentially multiple non-standard record keeping regimes would emerge and that enforcement may prove difficult.

Table 11: Balanced Score Card Assessment of Benefits/Costs of Industry Code

Criteria	Weighting	Assigned Score	Weighted Scored
Achieve the regulatory objectives in an efficient, effective and timely manner	50%	+0.90	+45
Compliance	30%	+0.75	+23
Enforceability	20%	+0.50	+10
Total	**100%**		**+78**

* Numbers rounded

Decision Criteria

This alternative scores relatively highly and assumes the same level of compliance to the proposed Regulations, however on efficiency grounds it rates slightly below the proposed Regulations in terms of achieving the objectives of reduced risks to health, the environment, animal welfare and trade from agricultural and veterinary chemical use. In addition, it is likely enforceability would prove more difficult than the proposed Regulations, and the Government may lose discretion concerning areas it considers necessary to regulate. Of the alternatives, this option received the highest net score of +78. This compares to the score of +90 for the proposed Regulations.

8.4 Negative Licensing

Negative licensing is designed to ensure that individuals or producers who have demonstrated, by their prior action, that they are incompetent or irresponsible are precluded from operating in a particular industry. For example, a person who had been convicted of breaches several times could be prohibited from using agricultural and veterinary chemicals or be able to use these only under strict conditions. This approach ensures that the most serious offenders are removed from the industry without, at the same time, placing an undue burden of licensing/registration on the entire industry.

The advantage of this alternative is that those with poor track records of misusing agricultural or veterinary chemicals could be either barred from the industry (eg, an ACUP could be cancelled) or be required to keep records. The main disadvantage of this alternative is that the system is essentially reactive, and significant damage could be done to the reputation of Victoria's primary industries while sanctions are being imposed upon a person. As mentioned above, the viability of the control of use

regime depends upon a compliance rate as close as possible to 100 per cent. It is assessed that negative licensing is not the most effective regulatory mechanism to ensure this.

Table 12: Balanced Score Card Assessment of Benefits/Costs of Negative Licensing

Criteria	Weighting	Assigned Score	Weighted Scored
Achieve the regulatory objectives in an efficient, effective and timely manner	50%	0.50	+25
Compliance	30%	0.75	+23
Enforceability	20%	0.75	+15
Total	**100%**		**+63**

* Numbers rounded

Decision Criteria

As noted above, negative licensing is essentially a reactive system and significant damage could be inflicted on the reputation of Victoria's primary industries while a person is going through the process of being prohibited from the industry. Hence, a score of 0.50 is assigned to the criterion of achieving the regulatory objectives in an efficient, effective and timely manner. If properly enforced through audits and investigations, this alternative could result in relatively high levels of enforcement and compliance. This alternative receives a net score of +63.

8.5 Variation of the Proposed Regulations

In a number of cases, there are no practicable regulatory alternatives other than to alter the scope or extent of a Regulation. For example, section 30(1)(b) of the Act provides a person must not carry on a business, or offer a service for fee or reward, which involves the use of a chemical product, fertiliser or stock food that is prescribed. Proposed Regulation 13 prescribes this class of chemical products as 'agricultural chemical products'. In this example, the only practicable alternative would be to specify different classes of chemicals.

It should be added that the Regulations as proposed have the function of prescribing operational aspects of the Act. If the proposed Regulations did not specify particular requirements, then there is a danger that the record keeping requirements for agricultural or veterinary chemicals be 'over engineered', thereby adding to overall costs. That is, by prescribing precisely what information is required to be kept in record creates regulatory clarity and certainty for users.

It is not intended here to examine the costs and benefits of the almost infinite number of possible variations of the proposed Regulations. It is noted, however that the proposed Regulations have been drafted following consultation with key stakeholders and encapsulates the experience gained over the last ten years. Given the nature of this alternative a BSA assessment is considered unnecessary.

8.6 Summary of Feasible Alternatives

The above analysis suggests that:

- the benefits to society of the proposed measure will exceed the costs (ie, there is a net benefit); and
- the benefits of the proposed measure are greater than those associated with any practicable alternative.

Table 13: Summary of Balanced Scorecard Assessments compared to Proposed Regulations

Regulatory Proposal	BSA Assessment
Base case scenario	**0**
Proposed Regulations	**90**
Education Campaign	**52**
Industry Code	**78**
Negative Licensing	**63**

9. CHANGE IN THE ADMINISTRATIVE BURDEN

The *Reducing the Regulatory Burden* initiative commits the Victorian Government to reducing both the administrative and compliance burdens of regulation. Accordingly, this RIS uses the Victorian Standard Cost Model and *Measurement of Changes in Administrative Burden* to inform its cost benefit analysis and to measure any changes to the administrative burden. For the purposes of the measurement of change in the administrative burden, the existing burden forms the base case against which the change is measured.[40]

Table 3 on page 22 highlights the main changes between the current and proposed regulations. As noted previously, following extensive consultation the proposed Regulations have been simplified and streamlined in order to lower the regulatory burden. For example, record keeping requirements have been generally simplified, a number of regulations have been removed (including certain chemigation equipment requirements which imposed a substantive compliance cost), and in all cases the level of penalties has been lowered.

It is extremely difficult to quantify reductions in the regulatory burden from, for example, removing the chemigation equipment requirements or lower penalties, however for illustrative purposes Table 14 below shows the new costs of proposed Regulations 6 and 12 against an estimated saving of $1.4 million from streamlining recording requirements (assumes that current forms take 7 minutes to complete compared with the reduced requirements under the proposed Regulations, which is estimated will require 5 minutes to complete). It should be noted that the only significant additions in the proposed Regulations is the requirement to keep records of veterinary chemical use and a requirement to notify nearby schools and hospitals

[40] Department of Treasury and Finance, 2006, *Measurement of Changes in Administrative Burden: Interim Guidelines issued by the Treasurer*, Melbourne, October 2006, p. 11

prior to agricultural spraying. This example suggests that the regulatory burdens from new Regulations 6 and 12 are more than offset by other changes to the current Regulations.

Table 14 – Differences in Regulatory Burden – Administrative Costs (10-Year Assessment Period)

Current Regulations	Proposed Regulations	Description	Change $ '000s
6, 7	5	Records – agricultural chemical use	- 1,500
-	6	Records – veterinary chemical use	+ 480
-	12	Notification of spraying	+ 8

Therefore, in accordance with the Interim Guidelines issued by the Treasurer on 26 October 2006, *Measurement of Changes in Administrative Burden*, it has been determined that the regulatory changes in the Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007 **will not lead to a material change in the administrative burden** on business or not-for-profit organisations in Victoria (see Attachment E).

This assessment is based on calculations made using the Victorian Standard Cost Model, which estimated the annual administrative costs of the proposed Regulations on business to be in the order of $3 million compared with the current Regulation which impose an annual cost of at least $3.3 million.

10. CONSULTATION

The proposed Regulations have been remade following extensive consultation with stakeholders. In November 2005 a discussion paper, *Review of the Agricultural and Veterinary Chemicals (Control of Use) Regulations 1996 – Issues & Options*, was circulated to key stakeholders. This discussion paper was advertised in *The Age*, *The Weekly Times* and *Stock & Land* inviting comments and submissions on the proposed Regulations. Building on the initial round of stakeholder feedback, in May 2006 a further paper, *The Proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2006 – A Regulatory Proposal for Comment*, was circulated to stakeholders for comment. In all, over 35 submissions were received.

The vast majority of comments were supportive of Victoria's agricultural and veterinary chemical control of use regulatory framework. A number of stakeholders provided detailed comments on technical aspects of the current Regulations and several changes were incorporated into the proposed Regulations (eg, refining the definition of 'mister'; allowing weather station data to be used in relation to aerial spraying; removal of 'batch numbers' from the reporting requirement; and removal of requirements to deliver advice notices 'in person').

More generally, major issues raised by stakeholders included:

- calls for record keeping exemptions for industries that already keep such information as part of a QA program or industry accreditation (eg, Victoria's dairy industry has legislative requirements to keep records of chemical use). This was considered, however, it was regarded that any reduction in administrative burden would be outweighed by the potentially multiple non-standard reporting systems, which would make data collation and enforcement difficult.

- broad support for the new notification requirements, although some stakeholders queried whether such notification should be extended to other sensitive areas, eg, public land, old age homes, water catchments. While the proposed Regulation is restricted to schools and hospitals, stakeholders strongly opposed a universal notification regime (ie, notifying all neighbours) as imposing an unreasonable burden on primary producers and commercial operators.

- calls for national standards regarding off-label spraying, control of use, reporting requirements, etc. DPI is currently represented on a number of joint Commonwealth/State committees and is working towards this objective in several areas.

In addition, a number of telephone interviews were conducted to assist in providing data for the calculations used in the Victorian Standard Cost Model. This included calling six rural veterinary practitioners to determine the number of notices and labels issued per annum; discussions with the Victorian Farmers Federation to estimate the frequency of HGP implant usage; discussions with the Veterinary Practitioners Registration Board of Victoria to determine the number of rural veterinary practitioners; and a telephone interview with the Australian Veterinary Association (Victorian Division) to obtain an hourly rate figure to represent the cost of a veterinary practitioner's time taken to fill out records.

This RIS represents another step in the consultation process and DPI welcomes comments or suggestions with respect to the nature, extent, and likely impacts of the proposed Regulations, and any variations that may improve the overall quality of the proposed Regulations.

The *Subordinate Legislation Act 1994* requires that the public be given at least 28 days to provide comments or submissions regarding the proposed Regulations. The consultation period for this RIS will be 35 days, with written comments required by no later than **4:00pm, 25 May 2007**. Given the extensive stakeholder consultation during the remaking of the proposed Regulation, this period is considered adequate.

11. COMPETITION IMPACTS

The guiding principle in assessing competition impacts is that regulations should not restrict competition unless it can be demonstrated that the benefits of the restriction to the community as a whole outweighs the costs, and that the objectives of the regulations can only be achieved by restricting competition.

The RIS concludes that there is nothing in the proposed Regulations which:

- allows only one participant to supply a product or service;
- requires producers to sell to a single participant;
- limits the number of producers of goods and services to less than four;
- limits the output of an industry or individual producers;
- discourages entry by new persons into an occupation or prompts exit by existing providers;
- imposes restrictions on firms entering or exiting a market;
- introduces controls that reduce the number of participants in a market;
- affects the ability of businesses to innovate, adopt new technology, or respond to the changing demands of consumers;
- imposes higher costs on a particular class or type of products or services;
- locks consumers into particular service providers, or makes it more difficult for them to move between service providers; and/or
- imposes restrictions that reduce range or price or service quality options that are available in the marketplace.

No restrictions on competition have been identified in connection with the proposed Regulations. Therefore, the proposed Regulations are considered to meet the 'competition test'.

However, the requirements under proposed Regulation 14, which prescribes certain equipment to be used during aerial spraying, warrants a brief discussion. The mandatory equipment relates to determining the direction of the wind, which is required to minimise the chance of spray drift. The regulation allows an aerial sprayer to choose between four types of technologies – a smoke generating device at ground level, a smoke generating device fitted to the aircraft, a wind sock, or information from an automatic weather station – to determine wind direction. Given the broad choice of technologies and relatively low cost of acquiring this equipment (eg, a wind sock at base level), it is not anticipated that the proposed Regulation will affect the ability of businesses to innovate or adopt new technology.

It is also noted that the figure imposed upon veterinary practitioners of around $2,900 per annum from the proposed Regulations is not considered a barrier to entry given to overall cost structure and revenue stream of that profession.

12. SMALL BUSINESS IMPACT

In 2006 there were around 18,350 ACUP holders, around 820 Commercial Operators, 30 Aerial Operators and around 800 rural veterinary practitioners operating Victoria. As discussed earlier, these groups broadly represent the businesses affected by the proposed Regulations. These groups consist largely of small business and sole traders. Consequently, the impact of the proposed Regulations will almost entirely fall upon small business.[41]

This RIS has identified that the proposed Regulations will continue to impose in aggregation a significant administrative cost burden. However, DPI has undertaken a number of measures to mitigate this burden. For example, the proposed Regulations prescribe what information must be kept in relation to chemical use, however they do not prescribe the form in which the records should be kept. To lower the cost of record keeping, DPI has developed a number of standard forms (eg, a Chemical Record keeping form for ACUP holders; Chemical Record keeping form for Commercial Operators; HGP Record book, etc), which contain the relevant fields of prescribed information required by the regulations.

More generally, DPI has a Customer Service Centre which operates from Monday to Friday, 8am-8pm, and can provide assistance to callers about the record keeping requirements or compliance with the regulations. If the query cannot be answered immediately it is referred to the Chemical Standards Branch and is usually answered within 24 hours.

The assessment of this RIS is that the burden on individual businesses is relatively minor – especially when considered in the context of the considerable benefits to those businesses and the wider community.

13. ENFORCEMENT AND COMPLIANCE

A measure of the effectiveness of the proposed Regulations is the likely level of self-compliance with them by business. Evidence since 1996 has indicated that compliance with the regulations is high. This high level of compliance is inferred from the relatively few cases of unacceptable residue levels found each year by DPI. The Act and regulations provide for a range of offences, penalties and enforcement provisions to ensure that chemical users meet community expectations for health, safety and environmental protection. A failure to comply with the legislative and regulatory provisions may lead to DPI taking enforcement action.

Fresh Victorian produce is closely monitored by DPI to identify the presence of residues from farm chemicals and environmental contaminants. DPI conducts an annual residue testing program for chemicals and other contaminants in fresh produce. The program is called the Victorian Produce Monitoring Program (VPMP), and aims to ensure that the application of agricultural chemicals to agricultural produce is appropriate, and meets national food safety standards.

[41] The standard ABS small business definition refers to management units with less than 20 employees.

The main objective of the VPMP is to confirm that agricultural chemicals are being used according to good agricultural practice and that produce is free from unacceptable levels of agricultural chemicals and heavy metal residues. In addition to the targeted VPMP monitoring, DPI also conducts larger random testing programs for export oriented horticultural industries. The information generated from these programs helps manage potential risks of farm chemical use and to confirm that produce is free from unacceptable residues.

DPI staff also conduct 'trace-back' investigations, whereby chemical residues are investigated to ensure compliance with maximum residue limits for food produce. Other investigations include ensuring compliance with provisions of the legislation and monitoring compliance with permits issued by Chemical Standards Branch. While not directly related to the proposed Regulations, the present system seeks to ensure operators receive appropriate training in handling, storage and use of certain chemicals.

To facilitate compliance, DPI undertakes education and awareness programs. These activities include attending field days, providing information to industry and community groups, and implementing targeted education, extension and awareness programs for specific primary industries.

14. EVALUATION

Given that the Agricultural and Veterinary Chemicals (Control of Use) Regulations 1996 are generally considered to have operated effectively and efficiently for over a decade and given that two discussion papers have been circulated to stakeholders to evaluate the operation of the regulations, no formal review is planned for the proposed Regulations once they come into effect.

However, CSB has an ongoing role to monitor the efficiency and effectiveness of the Regulations. It ensures that it is appraised of operational matters through regular meetings with DPI's Catchment and Agricultural Services under the auspices of the Chemical Standards Coordinating Committee, which meets every 3 months. In addition, DPI has established an advisory body under the Act, the Victorian Agricultural Chemicals Advisory Committee, to advise the Chief Administrator on regulations and controls on the application of agricultural chemicals. Membership of the Committee includes CSB staff, industry representatives, academics and peak farming bodies. This Committee provides DPI with an additional source of information concerning the effectiveness of the operations of the Regulations.

Further, the Commonwealth Product Safety & Integrity Committee (PSIC), of which Victoria is a member, has established detailed performance metrics[42], against which Victoria's performance in managing agricultural chemicals is assessed annually.

[42] The Agvet Chemical System Performance measurement has been developed nationally in line with the Council of Australian Governments *Principles and Guidelines for National Standard Setting and Regulatory Action by Ministerial Councils and Standard-Setting Bodies (November 1997).* Performance is measured in areas such as 'Primary produce meets both domestic and international MRL's and other standards'; 'Minimal adverse experiences from legal agvet chemical use'; 'Reduced risk options for pest and disease control adopted'; 'Avoid off-target spray drift incidents'; etc.

15. CONCLUSION

This Regulatory Impact Statement concludes that:

- **the benefits to society of the proposed Regulations exceed the costs;**
- **the benefits of the proposed Regulations are greater than those associated with any practicable alternative;**
- **the proposed Regulations do not restrict competition; and**
- **the proposed Regulations will not lead to a material increase in the administrative burden on industry.**

*** * * * ***

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Legislation

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ASSUMPTIONS

1. The discount rate used in this RIS is **3.5 per cent**. In doing so, the RIS adopts the rate published in the Victorian Competition and Efficiency Commission, *Guidance Note on Discounting*, 2006, Melbourne.

2. The cost of staff time used to calculate 'administrative costs' is **$55.44** per hour, which is based on the methodology contained in the Victorian Competition and Efficiency Commission, *Guidance Note on Suggested Default Methodology and Value for Staff Time in BIA/RIS Analysis*, 2006, Melbourne. The figure provided in the guidance note of $54.90 per hour has been updated in this RIS to take account of the latest release of Average Weekly Earnings, Australia, ABS Cat. 6302.0 (August 2006). The choice of $55.44 per hour as a representative figure seems reasonable given that those who fill in forms are unlikely to be either senior management nor very junior staff. ABS data on hourly rural labour rates appeared too low (ie, $16.10 per hour) (ABS Cat 6306.0 - Data Cube Table 1)

3. In the absence of the proposed Regulations, many primary producers would keep detailed records of agricultural and veterinary chemical use. For example, in many instances the market QA programs require primary producers to keep records regarding chemical use and withholding periods. For example, the majority of the red meat industry has signed up to the Livestock Production Assurance programs, CattleCare and FlockCare. Similar QA programs exist in the dairy, egg and poultry industries. Furthermore, horticulture producers supplying major retailer are required to keep records of chemical use (more than 75 per cent of fresh produce is purchased by Woolworths and Coles). In addition to QA programs, users of agricultural chemicals in Victoria are required to hold an Agricultural Chemical User Permit (ACUP). Before a person can apply for an ACUP they must have completed a prescribed training course. The most common course in Victoria (over 95 per cent of trainees) is conducted by ChemCert Victoria. Such training contains modules, for example RTC 3704A - Prepare and Apply Chemicals, which emphasises the importance of record keeping as part of business best practice.

   Given the requirements demanded by QA programs along with best business practice associated with training, it is assumed that **50 per cent** of Victorian primary producers would keep detailed records on chemical usage even in the absence of the proposed Regulations.

4. The Commonwealth body, APVMA, has responsibility for activity in relation to agricultural and veterinary chemicals, up to and including the point of sale or supply. This includes labelling requirements. For example, national statutory requirements that apply to labels for veterinary chemical products include the: *Agricultural and Veterinary Chemicals Act 1994*; *Agricultural and Veterinary Chemicals Code Act 1994* and its schedule, the Agricultural and Veterinary Chemicals Code (the Agvet Code), Agricultural and Veterinary Chemicals Code Regulations, and the Code of Practice for Labelling Veterinary Chemical Products (the Vet Labelling Code). These provide comprehensive guidelines concerning information that labels for veterinary chemical products must contain and to a degree mirror the proposed Regulations. In addition, the Veterinary Practitioners

Registration Board of Victoria sets standards of appropriate veterinary practice and facilities by issuing Guidelines. The Board's Guideline 6 deals with the *Supply and Use of Drugs in Veterinary Practice*. This is the minimum standard which is expected of all registered veterinary practitioners in Victoria. The dispensing and record keeping requirements under these guidelines are similar to the proposed Regulations.

Given the Veterinary Practitioners Registration Board of Victoria Guideline 6 and other broad legislative requirements, it is assumed that **25 per cent** of the cost of record keeping and labelling requirements is attributable to the proposed Regulations. Given this professional requirement the incremental cost is lower than that assumed for primary producers.

Attachment A

AUTHORISING PROVISIONS – AGRICULTURAL AND VETERINARY CHEMICALS (CONTROL OF USE) ACT 1992

76. Regulations

(1) The Governor in Council may make regulations for or with respect to any matter or thing required or permitted by this Act to be prescribed, or necessary to be prescribed to give effect to this Act.

(2) Without in any way limiting sub-section (1), regulations may be made under this Act for or with respect to the things specified in sections 24(2), 27, 45, 52A and 47.

(3) A power conferred by this Act to make regulations may be exercised—

(a) either in relation to all cases to which the power extends, or in relation to all those cases subject to specified exceptions, or in relation to any specified case or class of case; and

(b) so as to make, as respects the cases in relation to which the power is exercised—

(i) the same provision for all cases in relation to which the power is exercised, or different provisions for different cases or classes of case, or different provisions for the same case or class of case for different purposes; or

(ii) any such provision either unconditionally or subject to any specified condition.

(4) Regulations made under this Act may be made—

(a) so as to apply—

(i) at all times or at a specified time; or

(ii) throughout the whole of the State or in a specified part of the State; or

(iii) as specified in both sub-paragraphs (i) and (ii); and

(b) so as to require a matter affected by the regulations to be—

(i) in accordance with a specified standard or specified requirement; or

(ii) approved by or to the satisfaction of a specified person or a specified class of persons; or

(iii) as specified in both sub-paragraphs (i) and (ii); and

(c) so as to apply, adopt or incorporate any matter contained in any document, code, standard, rule, specification or method formulated, issued, prescribed or published by any person whether—

(i) wholly or partially or as amended by the regulations; or

(ii) as formulated, issued, prescribed or published at the time the regulations are made or at any time before then; or

(iii) as formulated, issued, prescribed or published from time to time; and

(d) so as to confer a discretionary authority or impose a duty on a specified person or a specified class of persons; and

(e) so as to provide in a specified case or class of case for the exemption of persons or things or a class of persons or things from any of the provisions of the regulations, whether unconditionally or on specified conditions and either wholly or to such an extent as is specified; and

(f) so as to impose a penalty not exceeding 50 penalty units for a contravention of the regulations.

* * * * *

27. Regulations about manufacture, sale and use

The Governor in Council may make regulations in accordance with section 76 for or with respect to—

(a) prohibiting the possession of a chemical product, fertiliser or stock food;

(b) regulating the manufacture of a fertiliser or stock food;

(c) regulating the packaging of a fertiliser or stock food;

(d) prohibiting the sale of an agricultural chemical product, a fertiliser or a stock food if the seller does not hold a permit under this Act or a prescribed qualification;

(e) prohibiting the sale of a chemical product, fertiliser or stock food if the buyer does not hold a permit under this Act or a prescribed qualification;

(f) regulating the mixing together of chemical products, fertilisers or stock foods;

(g) requiring a seller to keep records of the sale of a chemical product, fertiliser or stock food;

(h) requiring a user to keep records of the use of a chemical product, fertiliser or stock food;

(i) prescribing—

(i) particulars that must be written on labels or advice notes and the manner in which, and method by which, they must be written;

(ii) matters or things that must not be written on labels or advice notes;

(iii) the manner in which advice notes must be supplied to buyers of veterinary chemical products, fertilisers, stock foods or meal of animal origin;

(iv) the manner in which labels must accompany veterinary chemical products, fertilisers, stock foods or meal of animal origin.

* * * * *

45. Information and notice

(1) The Minister may issue codes of practice dealing with information to be provided about agricultural spraying and notice to be given of proposed agricultural spraying.

(2) A person is not guilty of an offence only because of a contravention of a code of practice issued under sub-section (1).

(3) The Governor in Council may, not earlier than 2 years after the commencement of this sub-section, make regulations in accordance with section 76 for or with respect to—

(a) requiring the occupier of land to provide the prescribed information to any person who is employed or contracted to carry out agricultural spraying on that land—

(i) of a prescribed agricultural chemical product; or

(ii) in a prescribed manner; and

(b) requiring the person who is employed or contracted to carry out agricultural spraying on land—

(i) of a prescribed agricultural chemical product; or

(ii) in a prescribed manner—

to provide the prescribed information to the occupier of that land; and

(c) prohibiting the person who is employed or contracted to carry out agricultural spraying on land—

(i) of a prescribed agricultural chemical product; or

(ii) in a prescribed manner—

from starting the spraying without first having received the prescribed information; and

(d) requiring the occupier of land who intends to have agricultural spraying carried out on that land—

(i) of a prescribed agricultural chemical product; or

(ii) in a prescribed manner—

to make every reasonable effort to inform the prescribed persons, or persons of the prescribed class, of the proposed time of spraying and any other prescribed information.

(4) The regulations may impose a penalty not exceeding 200 penalty units for a contravention.

* * * * *

47. Regulations for spraying equipment

The Governor in Council may make regulations in accordance with section 76 for or with respect to regulating equipment used or to be used for the purpose of agricultural spraying, including but not limited to regulations prescribing—

(a) specifications for the equipment; and

(b) testing of the equipment; and

(c) maintenance of the equipment.

* * * * *

Attachment B

Summary of Costs Imposed by the Proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007 (Discounted 10-Year Period)			
Administrative Costs			
Regulation	Description		
5	Records of use of agricultural products		$3,650,158
6	Records of use of veterinary chemical products		$480,284
7	Records of sale or use of veterinary product by veterinary practitioners		$11,698,802
8	Labels and advice notes accompanying veterinary chemical products		$11,698,802
11	Records of use of hormonal growth promotants		$142,617
12	Notification of agricultural spraying near schools or hospitals		$7,712
		Sub-total	*$27,678,376*
Substantive Compliance Costs			
Regulation			
14	Aerial spraying eqipment		$349,297
16	Training costs for licences		$2,258,790
		Sub-total	*$2,608,087*
DPI Administrative and Enforcement Costs			
		Sub-total	*$1,731,509*
		Total	**$32,017,973**
		Annual Cost	**$3,201,797**

Costs imposed on Business by the Proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007				
Price		**Quantity**		**Administrative Cost**
Proposed Regulation 5 - Records of use of agricultural products				
Tariff [1]	*Time* [2]	*Population* [3]	*Frequency* [4]	
$55.44	0.083	19,000	10	**$877,800**

Proposed Regulation 5 - Discounted (10-Years)				
Year	**Administrative Cost ($)**	**Discounted Administrative Cost ($)**		
1	$877,800	$848,116		
2	$877,800	$819,436		
3	$877,800	$791,725		
4	$877,800	$764,952		
5	$877,800	$739,084		
6	$877,800	$714,091		
7	$877,800	$689,943		
8	$877,800	$666,611		
9	$877,800	$644,069		
10	$877,800	$622,289		
			Sub-Total	$7,300,316
		Incremental Cost of Regulation (50%) [5]	***Total***	**$3,650,158**

Notes:

1. Hourly rate from *Guidance Note on Suggested Default Methodology and Value for Staff Time in BIA/RIS Analysis.* ABS data on farm labourers wages was dated and considered too low. ABS Cat 6306.0 - Data Cube Table 1 estimated hourly farm labourer wages at $16.10 per hour (May 2004)
2. Assumes that each form takes 5 minutes to complete.
3. In 2006 the actual numbers were 18,346 ACUP holders plus 817 Commercial Operators Licensees.
4. Following stakeholder consultation DPI advise that a conservative estimate is that each permit holder would fill out 10 forms per annum.
5. See Assumption 3. Assumes that in the absence of the proposed Regulations 50 per cent of agricultural chemical users would keep records in any case.

Costs imposed on Business by the Proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007				
Price		**Quantity**		**Administrative Cost**
Proposed Regulation 6 - Records of use of veterinary chemical products				
Tariff [1]	*Time* [2]	*Population* [3]	*Frequency* [4]	
$55.44	0.083	5000	5	**$115,500**

Proposed Regulation 6 - Discounted (10-Years)				
Year	**Administrative Cost ($)**	**Discounted Administrative Cost ($)**		
1	$115,500	$111,594		
2	$115,500	$107,820		
3	$115,500	$104,174		
4	$115,500	$100,652		
5	$115,500	$97,248		
6	$115,500	$93,959		
7	$115,500	$90,782		
8	$115,500	$87,712		
9	$115,500	$84,746		
10	$115,500	$81,880		
			Sub-Total	**$960,568**
		Incremental Cost of Regulation (50%) [5]	***Total***	**$480,284**

Notes:

1. Hourly rate from *Guidance Note on Suggested Default Methodology and Value for Staff Time in BIA/RIS Analysis.* ABS data on farm labourers wages was dated and considered too low. ABS Cat 6306.0 - Data Cube Table 1 estimated hourly farm labourer wages at $16.10 per hour (May 2004)
2. Assumes that each form takes 5 minutes to complete.
3. Such use of veterinary chemical products need not necessairly be undertaken by a veterinary practitioner.
4. Following stakeholder consultation DPI advise that a conservative estimate is that users would fill out 5 forms per annum.
5. See Assumption 3. Assumes that in the absence of the proposed Regulations 50 per cent of veterinary chemical users would keep records in any case.

Costs imposed on Business by the Proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007				
Price		**Quantity**		**Administrative Cost**
Proposed Regulation 7 - Records of sale or use of veterinary product by veterinary practitioners				
Tariff [1]	*Time* [2]	*Population* [3]	*Frequency* [4]	
$95.91	0.083	800	880	**$5,626,720**

Proposed Regulation 7 - Discounted (10-Years)				
Year	**Administrative Cost ($)**	**Discounted Administrative Cost ($)**		
1	$5,626,720	$5,436,444		
2	$5,626,720	$5,252,603		
3	$5,626,720	$5,074,979		
4	$5,626,720	$4,903,361		
5	$5,626,720	$4,737,547		
6	$5,626,720	$4,577,340		
7	$5,626,720	$4,422,551		
8	$5,626,720	$4,272,996		
9	$5,626,720	$4,128,499		
10	$5,626,720	$3,988,888		
			Total	**$46,795,210**
		Incremental Cost of Regulation (25%) [5]	***Total***	**$11,698,802**

Notes:

1. Hourly rate advised by Australian Veterinary Association (Victoria) - Rural Practices Fee Survey 2002 - Item 'Report Writing'
2. Assumes that each form takes 5 minutes to complete.
3. Advised by the Veterinary Practitioners Registration Board of Victoria that there are 750 to 800 rural veterinary practitioners that would be subject to the proposed Regulations.
4. Assumes that 4 non-standard APVMA labels/advice notes are written each day. Frequency proved extremely difficult to quantify. Large veterinary practices may issue 10 labels/notices per day, while a smaller practice may issued 2 per week. These figures apply to rural veterinary practitioners and are based on stakeholder consultation. A working year is assumed to have 44 weeks (220 days).
5. See Assumption 4. Assumes that the incremental cost of the proposed Regulation is 25 per cent.

Costs imposed on Business by the Proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007				
Price		**Quantity**		**Administrative Cost**
Proposed Regulation 8 - Labels and advice notes accompanying veterinary chemical products				
Tariff [1]	*Time* [2]	*Population* [3]	*Frequency* [4]	
$95.91	0.083	800	880	**$5,626,720**

Proposed Regulation 8 - Discounted (10-Years)				
Year	**Administrative Cost ($)**	**Discounted Administrative Cost ($)**		
1	$5,626,720	$5,436,444		
2	$5,626,720	$5,252,603		
3	$5,626,720	$5,074,979		
4	$5,626,720	$4,903,361		
5	$5,626,720	$4,737,547		
6	$5,626,720	$4,577,340		
7	$5,626,720	$4,422,551		
8	$5,626,720	$4,272,996		
9	$5,626,720	$4,128,499		
10	$5,626,720	$3,988,888		
			Total	**$46,795,210**
		Incremental Cost of Regulation (25%) [5]	***Total***	**$11,698,802**

Notes:

1. Hourly rate advised by Australian Veterinary Association (Victoria) - Rural Practices Fee Survey 2002 - Item 'Report Writing'
2. Assumes that each form takes 5 minutes to complete.
3. Advised by the Veterinary Practitioners Registration Board of Victoria that there are 750 to 800 rural veterinary practitioners that would be subject to the proposed Regulations.
4. Assumes that 4 non-standard APVMA labels/advice notes are written each day. Frequency proved extremely difficult to quantify. Large veterinary practices may issue 10 labels/notices per day, while a smaller practice may issued 2 per week. These figures are apply to rural vets and are based on stakeholder consultation. A working year is assumed to have 44 weeks (220 days).
5. See Assumption 4. Assumes that the incremental cost of the proposed Regulation is 25 per cent.

Costs imposed on Business by the Proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007				
Price		**Quantity**		**Administrative Cost**
Proposed Regulation 11 - Records of use of hormonal growth promotants				
Tariff[1]	*Time*[2]	*Population*	*Frequency*[3]	
$55.44	0.083	n.a	7,424	**$34,297**

Proposed Regulation 11 - Discounted (10-Years)				
Year	**Administrative Cost ($)**	**Discounted Administrative Cost ($)**		
1	$34,297	$33,137		
2	$34,297	$32,017		
3	$34,297	$30,934		
4	$34,297	$29,888		
5	$34,297	$28,877		
6	$34,297	$27,901		
7	$34,297	$26,957		
8	$34,297	$26,046		
9	$34,297	$25,165		
10	$34,297	$24,314		
			Subtotal	**$285,235**
		Incremental Cost of Regulation (50%)[4]	***Total***	**$142,617**

Notes:

1. Hourly rate from *Guidance Note on Suggested Default Methodology and Value for Staff Time in BIA/RIS Analysis*
2. Assumes that recording of the prescribed information will take 5 minutes.
3. In 2006 approximately 185,000 Hormonal Growth Promontant (HGP) units were sold to end users. It is assumed that 25 head of stock are implanted HGPs each session. This results in 7,424 separate session per annum.
4. See Assumption 3. Assumes that in the absence of the proposed Regulations 50 per cent of agricultural chemical users would keep records in any case.

Costs imposed on Business by the Proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007				
Price		**Quantity**		**Administrative Cost**
Proposed Regulation 12 - Notification of agricultural spraying near schools or hospitals				
Tariff [1]	*Time* [2]	*Population* [3]	*Frequency*	
$55.44	0.17	50	1	**$462**

Proposed Regulation 12(2) - Discounted (10-Years)				
Year	**Administrative Cost ($)**	**Discounted Administrative Cost ($)**		
1	$462	$446		
2	$462	$431		
3	$462	$417		
4	$462	$403		
5	$462	$389		
6	$462	$376		
7	$462	$363		
8	$462	$351		
9	$462	$339		
10	$462	$328		
			Sub-Total	$3,842

Proposed Regulation 12 - Notification of agricultural spraying near schools or hospitals				
Tariff	*Time*	*Population*	*Frequency*	
$55.84	0.17	50	1	$465

Proposed Regulation 12(4) - Discounted (10-Years)				
Year	**Administrative Cost ($)**	**Discounted Administrative Cost ($)**		
1	$465	$450		
2	$465	$434		
3	$465	$420		
4	$465	$406		
5	$465	$392		
6	$465	$379		
7	$465	$366		
8	$465	$353		
9	$465	$341		
10	$465	$330		
			Sub-Total	$3,870
			Total [4]	**$7,712**

Notes:
1. Hourly rate from *Guidance Note on Suggested Default Methodology and Value for Staff Time in BIA/RIS Analysis* and includes the cost of a telephone call.
2. Assumes short letter/telephone call would take 10 minutes.
3. This is a new regulation and it is difficult to estimate how many notifications will be made. It is therefore assumed that 50 notifications will occur each year in Victoria.
4. There are two reporting elements to this regulation. Firstly, the occupier of land who employs a contractor must advise that contractor whether or not there is school or hospital within 200 metres. The occupier of the land must also advise any such school or hospital that spraying is to carried out.

Costs imposed on Business by the Proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007		
Price of Smoke Generator ($)[1]	**Quantity[2]**	**Total**
1,500	28	42,000

Proposed Regulation 14 - Aerial spraying eqipment (Discounted 10-Years)		
Year	**Annual cost of Smoke Generator ($)**	**Discounted Administrative Cost ($)**
1	$42,000	$40,580
2	$42,000	$39,207
3	$42,000	$37,882
4	$42,000	$36,601
5	$42,000	$35,363
6	$42,000	$34,167
7	$42,000	$33,012
8	$42,000	$31,895
9	$42,000	$30,817
10	$42,000	$29,775
	Total[3]	**$349,297**

Notes:

1. DPI advise that the cost of a smoke generator is in the order of $1,300 to $1,500.
2. DPI advise that there are currently 28 licensed aerial sprayers in Victoria.
3. This is an extremely conservative estimate. A RIS requires that the impact of remade regulations be assessed anew. In practice, many aerial sprayers would already possess a smoke generator, so the actual cost of this regulation may be significantly lower than that stated here. In addition, proposed Regulations 14 also allows for the use of a windsock or weather station information, if that station is close to the point of spraying.

Costs imposed on Business by the Proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007			
Licence Type	**Trainees Per Annum (new cohort) (Quantity)[2]**	**Cost of Licence ($) (Tariff)[3]**	**Total**
Agricultural Chemical User Permit[1]	1000	250	250,000
Commercial Operators Licence	80	200	16,000
Agricultural Aircraft Operators Licence	4	400	1,600
Pilot (Chemical Rating) Licence	2	2000	4,000
		Total	**$271,600**

Proposed Regulation 16 - Training cost for licences (Discounted 10-Years)			
Year		**Annual cost ($)**	**Discounted Administrative Cost ($)**
1		$271,600	$262,415
2		$271,600	$253,542
3		$271,600	$244,968
4		$271,600	$236,684
5		$271,600	$228,680
6		$271,600	$220,947
7		$271,600	$213,475
8		$271,600	$206,256
9		$271,600	$199,281
10		$271,600	$192,542
		Total	**$2,258,790**

Notes:

1. There are currently around 18,350 ACUP holders. An ACUP is valid for 10 years and renewals are in the order of 2000 per annum. Training is require once for the initial application, therefore it is assumed that 50% of applicants have already undertaken training.
2. DPI Licence database
3. DPI provide advice on average cost by licence type. These figures represent the upward estimate.

Attachment C

Costs imposed on DPI by the Proposed Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007					
Staff	**Number**	**VPS Salaries[1]**	**VPS Salaries plus On-costs ($)[2]**	**Enforcement proposed regulations[3]**	**Direct Salary Cost ($)**
Science A (VPS G3)	2	52,366	91,641	25%	45,820
Science B (VPS G4)	2	62,490	109,358	25%	54,679
Science C (VPS G5)	2	74,648	130,633	25%	65,317
Science D (VPS G6)	1	96,877	169,534	25%	42,383
				Total	**208,199**

Year	Direct Salary Cost ($)	Discounted Costs ($)[4]
1	208,199	201,158
2	208,199	194,356
3	208,199	187,784
4	208,199	181,433
5	208,199	175,298
6	208,199	169,370
7	208,199	163,643
8	208,199	158,109
9	208,199	152,762
10	208,199	147,596
	Total	**$1,731,509**

Notes:

1. Assumes mid-point value range of VPS Grades.
2. Salary on-cost uplift factor 1.75 as per VCEC Guidance *Note on Suggested Default Methodology and Value for Staff Time in BIA/RIS Analysis*
3. DPI advise that approximately 25 per cent of the Compliance Unit's activities will be devoted to enforcing and administering the proposed Regulations.
4. Discount rate of 3.5 per cent applied as per VCEC Guidance *Note on Discounting.*

Attachment D

Alternative to Proposed Regulations - Cost of Education Campaign[1]		
Year	**Cost of Education Campaign ($)**	**Discounted Cost ($)**
1	1,750,000	1,690,821
2	100,000	93,351
3	100,000	90,194
4	75,000	65,358
5	75,000	63,148
6	75,000	61,013
7	75,000	58,949
8	75,000	56,956
9	75,000	55,030
10	75,000	53,169
	Total	**$2,287,989**

Note:

1. DPI advise that the cost of an education campaign (ie, additional staff, materials, advertising costs, etc) would be in the order of $1,750,000 in year 1, $100,000 in years 2 and 3, and $75,000 per annum thereafter.

Attachment E

STATEMENT OF NO MATERIAL IMPACT

Administrative Burden Statement

In accordance with the Interim Guidelines issued by the Treasurer on 26 October 2006, *Measurement of Changes in Administrative Burden*, it has been determined that the regulatory changes in the Agricultural and Veterinary Chemicals (Control of Use) Regulations 2007 will not lead to a material change in the administrative burden on business or not-for-profit organisations in Victoria.

This assessment is based on calculations made using the Victorian Standard Cost Model, which estimate the annual administrative costs of the proposed Regulations on business to be in the order of $3 million compared with the current Regulation which impose an annual cost of at least $3.3 million.

The proposed Regulations have streamlined and simplified the current Regulation with the aim of lowering the regulatory burden on business. This includes removing some regulations and lowering penalties. The only significant additions to the proposed Regulations are the requirement to keep records of veterinary chemical use and a requirement to notify nearby schools and hospitals prior to agricultural spraying. It is estimated that these requirements will result in a new administrative burden for Victorian primary producers of approximately $488,000 over a 10-year period, however these costs are more than offset by changes elsewhere in the regulations.

The average cost imposed on individual primary producers from recording the use of agricultural chemicals, recording the use of veterinary chemical products, recording the use of hormonal growth promotants, and notifying of agricultural spraying near school or hospitals is in the order of $21.50 per annum. The figure imposed upon veterinary practices from recording the sale or use of veterinary chemicals and ensuring the labels or advice notes accompany such products is in the order of $2,900 per annum, reflecting the higher opportunity cost of time attributed to veterinary practitioners and the significantly larger number of records completed annually.