Australian Government

Department of Agriculture

Regulations for Honey Levy Reforms

REGULATION IMPACT STATEMENT

OFFICE OF BEST PRACTICE REGULATION ID NO. 17593

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Contents

List of acronyms

ABARES	Australian Bureau of Agricultural and Resource Economics and Sciences
AFB	American Foulbrood
AHBIC	Australian Honey Bee Industry Council
AHA	Animal Health Australia
BAACT	Beekeepers Association of the ACT
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DPI	Department of Primary Industries
EADR	Emergency Animal Disease Response
EADRA	Emergency Animal Disease Response Agreement
EPPR	Emergency Plant Pest Response
EPPRD	Emergency Plant Pest Response Deed
GVP	gross value of production
LPGs	Australian Government Levy Principles and Guidelines
NBBP	National Bee Biosecurity Program
NBPSP	National Bee Pest Surveillance Program
NRS	National Residue Survey
NTBKA	Northern Territory Beekeeper's Association
PHA	Plant Health Australia
R&D	research and development
RIRDC	Rural Industries Research and Development Corporation
RIS	regulation impact statement

Section 1: Background

The Australian Honey Bee Industry Council (AHBIC), the peak body for the honey industry in Australia, has made a submission to the Australian Government that proposes reforms to the biosecurity components of the levy and export charge[1] on honey to fund improved biosecurity activities.

These reforms would be implemented through changes to existing levy arrangements under the Primary Industries (Excise) Levies Regulations 1999, the Primary Industries (Customs) Charges Regulations 2000, Primary Industries Levies and Charges Collection Amendment (Honey) Regulations 2015, and the Primary Industries Levies and Charges (National Residue Survey Levies) Regulations 1998.

Currently, a levy is imposed on honey at a rate of 2.3 cents per kilogram. The components of this levy are, per kilogram:

- 1.5 cents research and development (R&D) levy
- 0.1 of a cent national residue survey (NRS) levy
- 0.7 of a cent Emergency Animal Disease Response (EADR) levy

AHBIC, on behalf of the honey industry, has requested that the government:

- cease the statutory EADR levy of 0.7 cents per kilogram, which is paid to Animal Health Australia (AHA)
- introduce a statutory Emergency Plant Pest Response (EPPR) levy of 2.9 cents per kilogram, to be paid to Plant Health Australia (PHA)
- introduce a PHA membership levy of 0.1 of a cent per kilogram, to be paid to PHA
- increase the threshold for producers at which the levy applies to retail sales and use of honey in the production of other goods from 600 kg per annum to 1,500 kg per annum.[2]

The requested reforms to the biosecurity levies aim to facilitate the transition of the honey industry to align with the plant, rather than the animal sector, increase cost efficiency in collecting the levies and to allow the honey industry to make further financial provision for its biosecurity obligations and proposed future activities. No changes to the R&D and NRS levy components are proposed.

The government supports a shared responsibility for biosecurity and partners with key industry bodies as members of AHA and PHA and under the formal eradication response arrangements that each company administers.

The biosecurity levies system provides for industry members and signatories to the emergency response deeds to collect funds to meet their membership obligations to each company, contribute financially to national cost-shared eradication responses and undertake biosecurity projects of significance to their sector.

1.1 Honey industry profile

1.1.1 Structure

In the main, the honey industry consists of large, commercial operators and a high proportion of smaller beekeepers.

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[1] Subsequent references to the honey producer levy include the export charge. The rates that apply to the levy and charge are identical. However, the threshold for payment discussed in this document applies only to the levy.

[2] Subsequent references to retail sales will include any additional honey used by the producer in the production of other goods, which also contributes to the annual total relating to the threshold.

There are approximately 12,400 registered beekeepers in Australia with around 528,000 hives (AHBIC 2014). Around 102,000 hives are used for paid pollination and between 80,000 and 100,000 hives provide pollination services on a mutually beneficial basis (honey production).

Over 70 per cent of hives are operated by commercial beekeepers with more than 200 hives. Most commercial beekeepers operate between 400-800 hives, but some have more than 3,000 hives. (Rodriguez *et al* 2003). The distribution of beekeepers in the six main beekeeping states is shown in Figure 1 below. There are relatively few beekeepers in the Australian Capital Territory and Northern Territory, with the majority being non-commercial beekeepers.

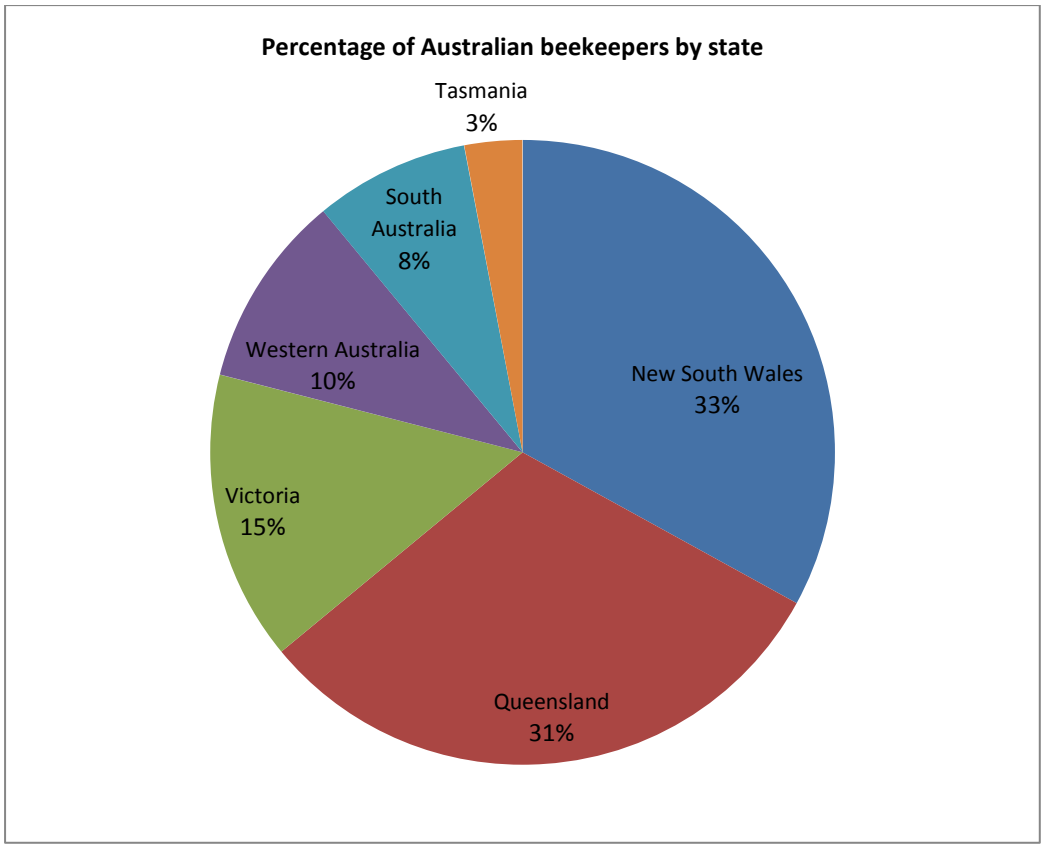

Figure 1: Percentage of Australian beekeepers by state

Australia has a large proportion of small-scale beekeepers. In 2008, of the 9918 beekeepers registered at that time, the Australian Bureau of Agricultural and Resource Economics and Sciences (ABARES) estimated that 83 per cent of Australian beekeepers operated fewer than 50 hives (Hafi *et al.* 2011). Defining commercial production as 50 hives or more, ABARES (2008) estimated that the 20 per cent of commercial beekeepers operating in excess of 500 hives produce 60 per cent of the honey sold. This is shown in Figure 2 below.

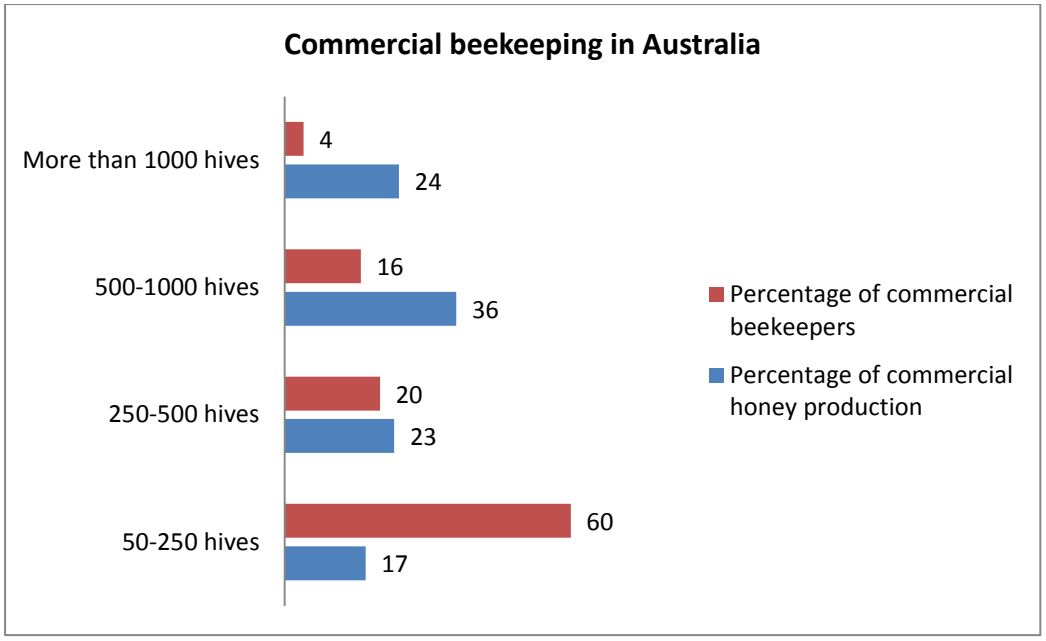

Figure 2: Commercial beekeeping in Australia

The levy is paid by levy agents who may or may not themselves be beekeepers.[3] In some cases, agents (for example, Capilano Honey Limited) may buy honey from beekeepers for retail sale. The levy threshold is based on annual volumes of honey retail sales or use (in the production of other products). Therefore, beekeepers who do not conduct retail sales of honey or use their honey to produce other products are not levy agents and do not directly pay a levy. However, the agents who buy their honey may recover the cost of the levy from those producers.

1.1.2 Industry Representation

The honey industry's peak body AHBIC is made up of the beekeeping associations in the six main beekeeping states, including:

- NSW Apiarists' Association
- Queensland Beekeepers Association
- South Australian Apiarists' Association
- Tasmanian Beekeepers' Association
- Victorian Apiarists' Association
- Western Australian Farmers Federation - Beekeepers Section

AHBIC members also include pollinators (National Council of Crop Pollinators), Queen bee breeders (The Australian Queen Bee Breeders Association), Honey packers (Honey Packers and Marketers Association) and associate members (e.g. Capilano Honey Limited). Amateur beekeeping associations (such as the Amateur Beekeepers' Association of NSW Inc.) are also widely represented throughout each state and territory.

As noted above, there are relatively few beekeepers in the ACT and NT. However, beekeepers who choose to become members are represented in these territories by the Beekeepers Association of the ACT (BAACT) and the Northern Territory Bee Keepers Association (NTBKA) respectively. The BAACT and NTBKA are not members of AHBIC.

[3] In this document, references to agents, when discussing production of honey, will mean those agents who are beekeepers and exclude those who collect or buy honey from beekeepers for sale.

1.2 Honey production and trade

1.2.1 Volume and Value

The Australian honey industry produces between 20,000 and 30,000 tonnes of honey annually (ABARES 2014). Other honey bee products include paid pollination services, beeswax production, queen bee and packaged bee sales.

In 2014, ABARES determined that the gross value of production (GVP) of the honey industry in 2012-13 was $88 million, with a forecasted GVP of $92 million in 2013-14 (ABARES 2014).

The relatively small honey industry GVP understates the industry's value to agriculture and the economy in general through pollination services as 65 per cent of Australia crops are dependent on honey bees for pollination. ABARES (2014) forecasts the export value of crops to be $21.675 billion in 2013-14 from a gross value of production of almost $30 billion.

Pollination services from honey bees contribute $4 - $6 billion annually to the Australian economy (Commonwealth of Australia 2008) and are essential for some crops such as almonds and avocados which rely 100 per cent on honey bee pollination while for others it raises yield and quality. Honey bees also contribute to wool, meat and dairy production through pollination of some pastures such as lucerne and clover.

Approximately 70 per cent of Australian honey is produced from native flora. Exports of Australian honey averaged 4630 tonnes per year for the three years to March 2014. The top five export destinations for Australian honey in the 2013 financial year were Singapore, Malaysia, UAE, China and Hong Kong. For the first three quarters of the 2014 financial year the top five are UK, Singapore, China, Hong Kong and Malaysia. Imports of honey to Australia averaged 3,170 tonnes per year for the three years to March 2014 (AHBIC 2014).

Queen bee breeding is specialised and there are growing markets, especially in North America, for Australian queen and package bees, although the USA have a current ban on the importation of live bees from Australia. While this sector of the honey industry is relatively profitable, changes to Australia's favourable pest and disease could result in export restrictions with other major constraints including freight costs and the limited number of skilled queen bee breeders (AHBIC 2014).

The major pollination season is from August to October and the main honey production period is from October to March.

1.3 Levy history

A levy on honey set at half a penny per pound was first introduced under the *Honey Levy Act 1962.* The threshold for producers for payment of the levy of retail sales above 600 kg was introduced in 1963 by the Australian Honey Board.

Since then many changes have occurred. In 1999 the *Primary Industries (Excise) Levies Act 1999* and the *Primary Industries (Customs) Charges Act 1999* commenced operation. They simplified levy legislation by replacing several similar Acts, including the *Honey Levy Act 1962*, which had each dealt with imposing levies (or charges) on a single commodity.

An EADR levy on honey was introduced in 2003 and the *Australian Animal Health Council (Live-stock Industries) Funding Act 1996* was amended to enable EADR levy funds to be disbursed to AHA. This Act also sets out the uses to which those funds can be put, and the priorities that AHA must apply regarding those uses. The Act provides for

AHA to transfer EADR levy funds to PHA for specified purposes where the commodity on which the levy is paid is honey.

The most recent change to the EADR levy and charge was implemented on 1 October 2009, when it was increased from 0.5 to 0.7 of a cent per kilogram.

1.3.1 National Cost-Sharing Emergency Response Arrangements

PHA is the national coordinator of the government-industry partnership for plant biosecurity in Australia. The PHA structure brings governments and industry together as 'members' and co-funders, and provides the mechanism for the partnership to function. The partnership recognises that governments (representing the wider Australian community) together with plant producers and their industries, are beneficiaries of effective biosecurity outcomes, such as improved productivity, product quality, market access, trade, profitability, sustainability and environmental preservation. PHA members benefit from the partnership through the mutually-agreed directions, collective responses and solutions to plant biosecurity challenges.

The Emergency Plant Pest Response Deed (EPPRD) is a legally-binding agreement between PHA, the Australian Government and state and territory governments, and signatory industries. It encompasses the management and funding of agreed responses to emergency plant pest incursions. Under the EPPRD, the government has agreed in principle to underwrite an industry's share of the cost of a response to a pest incursion, provided the industry can demonstrate a repayment mechanism, usually by way of an EPPR levy.

AHBIC became a member of PHA in 2005 and a signatory to the EPPRD in 2009.

AHA and the EADRA are the equivalent organisation and response deed for animal health and emergency animal disease responses. Previously, the diseases of bees were dealt with under the EADRA as an animal issue through AHBIC's membership of AHA and signatory status with the EADRA. This has changed in recognition that the honey industry and those that it provides pollination services to are members of PHA and parties to the EPPRD. This change has allowed pollination-reliant industries to participate in and contribute to the decision making and funding of a response to a pest of bees that would impact on the productivity and viability of their industries (by impacting pollination).

The change to the EPPRD will also facilitate the appropriate categorisation of pest bees which had proved problematic under EADRA as pest bees are a vector rather than a disease causing organism.

The alignment of the honey industry with the plant sector is supported by the Department of Agriculture (the department) which now manages bee pest and disease matters through the Australian Chief Plant Protection Office, instead of the Australian Chief Veterinary Office. This alignment is also supported at the state and territory level.

Therefore, if an incursion occurred of a pest of bees (such as Varroa mite) the emergency response would be managed under the EPPRD, and would involve coordination and decision making across plant health officials at the national level and affected industry parties who are contributing financially to any eradication response.

The importance of defined national cost-shared arrangements for pest and disease eradication and an established mechanism for the honey industry to meet its financial obligations was demonstrated by the cost-shared response to Asian honey bees. Although the response ceased in 2011 as it was not feasible to eradicate the bees, AHBIC, on behalf of the honey industry, contributed to the eradication response through financial reserves.

The honey industry also contributed to the subsequent Asian honey bee transition to management programme highlighting the benefit of having financial capacity to contribute to biosecurity activities of significance to their industry in partnership with governments.

Section 2: Assessing the Problem

AHBIC's submission to the government addresses three problems for which the honey industry is seeking solutions:

- inefficiencies in levy arrangements
- an outdated exemption threshold for levy payment
- a need for additional funds to support increased and sustainable investment in biosecurity.

2.1 Inefficiencies in levy arrangements

The honey industry is seeking to reform its levy arrangements so that they better align with its sectoral biosecurity arrangements.

AHBIC is a member of both AHA and PHA and a signatory to the EADRA and EPPRD and pays an annual membership subscription fee to both organisations. Over the last several years, management of honey bee and pollination-related biosecurity has shifted to the plant sector but the levy arrangements for honey do not reflect this change.

All relevant activities are now undertaken by PHA, but funded through AHA as the recipient body for the current levy.

While legislation allows it, this arrangement is neither efficient nor cost effective, as it necessitates continued AHBIC membership in AHA solely to enable the transfer of funds to PHA.

If honey biosecurity levies can be collected and disbursed directly to PHA, AHBIC will be able to cease its AHA membership and withdraw as a signatory to the EADRA. This will result in a reduction of costs to the honey industry.

2.2 Outdated exemption threshold

Honey producers whose annual retail sales are below the set threshold of 600 kg are exempt from the levy. In its business case, AHBIC argues that is not cost beneficial to collect levies from producers with so few hives and who produce such little honey that the cost of collecting the levy exceeds the levy revenue they contribute. AHBIC considers that raising the threshold for payment for producers to 1500 kg in annual retail sales would increase the cost efficiency of collecting the levy, while still maintaining an equitable approach. The levy would still be collected from most of the industry and any cost efficiency realised in this way will benefit the whole industry.

A reduction in red tape for industry will also be achieved by raising the threshold, as the number of producers who need to keep records and fill in returns for the purposes of levy payment is likely to decrease. These savings will be achieved with only a small reduction in levy revenue expected. For example, based on 2013-14 levy collection data, if the proposed threshold had been applied during that period, 48 out of the 182 levy agents (26 per cent) would not have been required to pay the levy. Yet levy revenue would only have been reduced by $1232, or 0.8 per cent of the total levy revenue for that financial year.

2.3 Increased and sustainable investment in biosecurity

The honey industry faces a number of risks, including the potential entry and spread of exotic pests and diseases (for example Varroa mite), economic pressures on the honey industry, and reduced access by beekeepers to areas of native flora (RIRDC 2009).

The impact of an exotic pest or disease incursion is considered to be the most significant risk. Australia is the only inhabited continent free from the Varroa mite (*Varroa destructor)* which is regarded as the major international threat to the honey industry.

An incursion of Varroa mite is assessed as an extreme risk in the Honey Bee Industry Biosecurity Plan 2013 developed by PHA through a partnership approach using government and industry resources and expertise. The Commonwealth Scientific and Industrial Research Organisation (2014) identifies the nationwide loss of pollination services from feral honey bees, through threats such as Varroa mite, to be a potential megashock to Australia's plant industries.

Australia is also free from other significant pests of honey bees including *Varroa jacobsoni,* Tropilaelaps mites (*Tropilaelaps* clareae and *T. mercedesae*) and Tracheal mite (*Acarapis woodi*).

The introduction or establishment of these pests in Australia would be damaging for the honey industry causing huge losses of in both honey production and pollination services as well as the virtual elimination of feral honey bee colonies. In the case of other countries, Varroa mite incursions have resulted in the disappearance of 95-99 per cent of unmanaged feral hives (Hafi, *et al* 2011). Feral honey bee colonies currently provide a free pollination service for a variety of agricultural and horticultural crops on which many horticultural industries rely.

In addition to impacts to production and pollination services, incursions of exotic pests or diseases would also increase beekeepers costs, reduce productivity and limit the extensive movement of hives around Australia.

Existing pests and diseases also cause significant economic, social and environmental harm and need strategic management to limit the impact to individual beekeepers and the broader industry and economy. Significant existing and established bee pests and diseases, and pest bees, include American Foulbrood (AFB), Asian honey bee, Black queen cell virus, Braula fly, Chalkbrood disease, European foulbrood, Greater and Lesser wax moth, Nosemosis, Sacbrood virus and Small hive beetle. (PHA 2012). Distribution in Australia varies, with some of these existing pests and diseases found only in limited areas, while other are established throughout Australia. The honey industry considers that problems caused by such pest and diseases are on the increase and that current state-based policies and systems are no longer effective. (AHBIC 2014)

AgEconPlus (2007) survey data for New South Wales (NSW) showed that there was an almost four-fold increase in the number of identified AFB outbreaks between the decade ending in 1990 and that ending in 2000, from 54 to 208, with an additional 217 outbreaks identified in the following 5.5 years until the survey was taken. Beekeepers reported an average of 17 months to eradicate for each outbreak, with the longest time for eradication being 72 months. The average cost per beekeeper of dealing with an outbreak of AFB is $13 000. The highest reported cost to a beekeeper for an outbreak was $84 000. Outbreaks increase labour cost and result in loss of production and loss of use of apiary sites.

While the survey shows that some beekeepers reported that the NSW Department of Primary Industries (DPI) had been helpful following an outbreak, others noted that there had been an increase in incidences of AFB since the number of DPI bee inspectors had decreased. One of the reasons suggested for this was that reduced state resources dedicated to honey bees meant that activities conducted by DPI inspectors, and which could not be conducted by beekeepers, were happening less often. These included trace-back and trace-forward activities after an outbreak and the ordering of the destruction of diseased hives.

Overseas experience has also shown that if major established diseases are not properly controlled when a pest such as Varroa mite arrives, the dual effect is compounded.

Further, the techniques used in effective biosecurity management of hives, where there is education and awareness of exotic pests, improves the chances that an exotic bee pest or pest bee entering Australia will be detected earlier than if these practices were not being employed.

For all of these reasons, the honey industry has concluded that increased national coordination, industry leadership and sustainable sources of funding for increased biosecurity are urgently needed. Honey industry members wish to increase industry investment in biosecurity, but will need to raise additional funds in order to do this.

Section 3: Industry proposal

AHBIC, the peak industry body for the honey bee industry in Australia, has submitted a proposal for levy reform to the Australian Government. This proposal is outlined below. The proposal has been the subject of comprehensive industry consultation, and has informed the options the government is considering.

AHBIC, on behalf of the honey industry, has proposed that the government:

- cease the statutory EADR levy of 0.7 of a cent per kilogram, which is paid to Animal Health Australia (AHA)
- introduce a statutory Emergency Plant Pest Response (EPPR) levy of 2.9 cents per kilogram, to be paid to Plant Health Australia (PHA)
- introduce a PHA membership levy of 0.1 of a cent per kilogram, to be paid to PHA
- increase the threshold for producers at which the levy applies to retail sales and use of honey in the production of other goods from 600 kg per annum to 1,500 kg per annum.[4]

The industry considers that the proposed reforms will resolve the three problems it has identified (see Section 2) by:

- increasing the efficiency of levy arrangements for the honey industry by aligning its levy arrangements with its plant sector biosecurity arrangements
- increasing the cost efficiency of collecting the levies by exempting from levy payment very small producers whose annual retail sales are at a level where it is very likely that the cost of collecting the levy will exceed the revenue collected
- enabling the honey industry to make further financial provision for its biosecurity obligations and proposed future activities.

As part of its request to reform the biosecurity levies, AHBIC proposes to raise additional funds to support its national biosecurity activities. The main activities proposed are to:

- more sustainably fund the established National Bee Pest Surveillance Program (NBPSP) which targets exotic bee pests and pest bees
- fund the proposed National Bee Biosecurity Program (NBBP), which will use an integrated approach to target both exotic, existing and established bee pests and pest bees.

The NBPSP is supported by funding from the government in partnership with AHBIC, the former Horticulture Australia Limited and the Rural Industries Research and Development Corporation. It replaced the National Sentinel Hive Program which was previously solely funded by the government.

[4] Subsequent references to retail sales will include any additional honey used by the producer in the production of other goods, which also contributes to the annual total relating to the threshold.

AHBIC's contributions to the NBPSP are currently drawn from its reserves and it does not see this as sustainable.

AHBIC is also proposing, as part of the NBBP, to take more active responsibility for the management of existing and established pests and diseases of honey bees in Australia. The NBBP incorporates existing aspects of established pest and disease management and control and will be coordinated by a bee biosecurity officer in every state in a collaborative industry-state agency relationship. The NBBP also makes use of the synergies that exist between biosecurity approaches for exotic and existing/established pests, through an integrated approach. This will provide increased capacity and capability, and improve the preparedness of industry and jurisdictions to act quickly and effectively in the event of an exotic pest incursion. The planned education of beekeepers in detection and surveillance techniques, as well as the introduction of a compulsory Code of Practice for commercial beekeepers, will further enhance that capability.

AHBIC invested in ensuring its proposed activities represented the greatest benefit for its industry, including preparing a benefit:cost analysis of options. AHBIC also consulted extensively with its members on the proposed activities and gained support at every state beekeeping association conference for the establishment of an industry led bee biosecurity strategy and in-principle agreement to an increase in the honey levy to fund the biosecurity strategy. The NBBP was also developed in consultation with relevant state government agencies.

Section 4: Options

4.1 Objective of government action

The objective of government action is to help maintain and strengthen the viability of the Australian honey industry. The government acknowledges the problems that the honey industry has identified, and which were discussed in section 2. Part of the stated government objective is to identify if, and how, government intervention may be required in order for these problems to be resolved. The options considered reflect this analysis.

4.2 Options that may achieve the objective

4.2.1 Option 1 – Maintaining the status Quo

Under option 1, existing arrangements would be maintained. Under this option, the honey levy would remain at 2.3 cents per kilogram. The EADR component of that levy would remain at 0.7 of a cent per kilogram, payable to AHA. The AHBIC contribution to the NBPSP may continue to be funded from the honey levy contingency fund[5], only as long as this remains sustainable.[6] This would be a decision to be made between AHBIC and PHA. No additional resources would be made available to finalise or implement the NBBP.

4.2.2 Option 2 – Implement reforms with no increase to levy rate

Under option 2, the government would implement only changes to the statutory levy arrangements for honey that aim to increase the cost efficiency of those arrangements for the honey industry, but with no overall increase to the levy. The EADR levy of 0.7 of a

[5] The honey levy contingency fund is the fund in which unspent levy revenue paid to AHA is held in reserve for future use. Under option 4, this fund would be transferred to a similar reserve fund managed by PHA.

[6] This does not necessarily mean until no funds remain. The industry may choose to hold a certain minimum amount in reserve at all times, in order to be prepared for contingencies such as an emergency response.

cent per kilogram would be removed and replaced with a PHA levy of 0.1 of a cent per kilogram and an EPPR levy of 0.6 of a cent per kilogram. The threshold for producers for payment of the levy would be increased from 600 kg to 1500 kg annual retail sales. Marginal regulatory savings are expected for those producers no longer liable to pay the levy however, no material change is expected for agents who will pay the PHA levy instead of the AHA one.

The AHBIC contribution to the NBPSP may continue to be funded from the honey levy contingency fund, only as long as this remains sustainable. This would be a decision to be made between AHBIC and PHA. Under option 2, the planned NBBP is unlikely to be finalised or implemented.

4.2.3 Option 3 – Implement reforms and a voluntary contribution system

Under option 3, the government would implement only changes to the statutory levy arrangements for honey that aim to increase the cost efficiency of those arrangements for the honey industry, but with no overall increase to the levy. The EADR levy of 0.7 of a cent per kilogram would be removed and replaced with a PHA levy of 0.1 of a cent per kilogram and an EPPR levy of 0.6 of a cent per kilogram. The threshold for payment of the levy would be increased from 600 kg to 1500 kg annual retail sales. Some regulatory savings would be achieved as set out at Option 2.

In order to supplement levy revenue from statutory levies, agents could be asked to pay a voluntary contribution on top of the existing statutory levy. The honey industry would choose to provide funds to the NBPSP and/or implement new biosecurity activities within the NBBP to the value of the voluntary contributions paid.

4.2.4 Option 4 – Implement the AHBIC proposed levy reform

Under option 4, the government would implement all reforms proposed by AHBIC. The EADR levy of 0.7 of a cent per kilogram would be removed and replaced with a PHA levy of 0.1 of a cent per kilogram and an EPPR levy of 2.9 cents per kilogram. With the existing R&D component remaining at 1.5 cents per kilogram and national residue survey component remaining at 0.1 of a cent per kilogram, the increase would result in an overall levy value of 4.6 cents per kilogram. The threshold for producers for payment of the levy would be increased from 600 kg to 1500 kg annual retail sales.

These reforms would provide for the AHBIC proposal to be implemented in full.

Section 5: Impact Analysis – Benefits, Costs & Assessment

5.1 Option 1 – Maintaining the status Quo

5.1. 1 Benefits

The existing EADR levy, set at 0.7 of a cent per kilogram, generated $152 566 payable to AHA in 2013-14. These are statutory levies and the collection system and operative rates are in place. Although there are inefficiencies that stem from the existing levy arrangements, including the threshold for payment, in general the arrangements operate effectively. The statutory levies overcome the 'free-rider' problem associated with biosecurity benefits that are non-excludable. Maintaining the status quo will see similar amounts of funding raised in the future for biosecurity purposes.

As the existing arrangements would be retained, there would be no effect on competition between honey producers.

5.1.2 Costs

The immediate costs of choosing option 1 will be that the problems the honey industry is seeking to address will remain unsolved. These costs include those associated with the inefficiencies of the current levy arrangements. The honey industry's available

biosecurity funds will continue to be decreased by the need to pay an annual membership subscription fee to AHA, related costs of membership (such as travel to meetings) and by the use of some levy revenue to continue to pay costs incurred in relation to collection and compliance activity for producers whose annual retail sales volume is between 600 kg and 1500 kg.

In the medium term, the honey industry will need to decide whether it will continue to contribute to the NBPSP, using the honey levy contingency fund. AHBIC's business case argues that this is not sustainable. Further, if a pest incursion occurs, the honey industry may need to use the funds to pay for its share of an emergency response, making those funds unavailable for other uses, including existing commitments such as the NBPSP.

A serious potential cost lies in the increased biosecurity risk to the honey industry, the feral bee population, and to agricultural industries whose crops rely on pollination from bees. This increased risk applies to both exotic and established pests.

Risk of incursion by exotic pests bears a very high potential cost for the honey industry and related pollination-reliant industries. Australia has not yet experienced an incursion of Varroa mite, but it is almost certain that an incursion will occur at some point. An indication of the costs involved is provided by the Varroa mite incursion and subsequent establishment in New Zealand in 2002, where the cost of eradication was estimated at between NZ$55 million to NZ$70 million. This estimate does not factor in the costs associated with lost pollination-dependent crops and honey production. An emergency response for Varroa mite at present values is potentially very costly. These costs will be proportional to the length of time between the entry of the mite and detection, with early detection giving the best chance for eradication and for controlling the cost of eradication.

Regarding established pests, AFB is the most widespread and economically significant honeybee pest in Australia. The total current cost of AFB to beekeepers is estimated at $5.2 million per annum ($3.9 million in hive pest management plus $1.3 million in lost honey) (AgEconPlus 2014). As instances of AFB are increasing, without a significant change to the handling of established pests, this cost is likely to continue to rise. Further, where established pests are not being effectively managed, the impact of an exotic pest incursion is likely to be increased. This compound effect is difficult to quantify, but should be considered part of the potential costs of keeping bee biosecurity at a level the industry considers inadequate to meet current and future biosecurity threats.

5.1.3 Assessment

The weaknesses of the current arrangements outweigh their strengths.

The levy types and outdated threshold for payment, though appropriate when first introduced, now create cost and other inefficiencies that result in a reduction of available levy revenue for the honey industry. These inefficiencies cannot be resolved by industry alone as they stem from statutory arrangements that can only be amended with government intervention. Therefore, if the government takes no action, the problems will remain indefinitely.

The net cost of doing nothing is high concerning established pests such as AFB and potentially very high concerning exotic pests such as Varroa mite. The current operative rate of the levy does not provide sustainable funds for the AHBIC contribution to the NBPSP. This exposes the honey industry and pollination-dependent industries to the risk of failure to detect a future pest incursion, or to detect it too late for a successful eradication. Without additional investment into bee biosecurity for established pests, the current costs associated with treatment of AFB will remain and are likely to increase over time and the industry will lose the potential to take full advantage of the synergies that exist between biosecurity activities aimed at established and exotic pests.

5.2 Option 2 - Implement reforms with no increase to levy rate

5.2.1 Benefits

The PHA levy, set at 0.1 of a cent per kilogram, and EPPR levy, set at 0.6 cents per kilogram, if applied to the leviable production figure for 2013-14, would generate $151 334, payable to PHA. This figure takes into account the estimated 48 honey producers who would not have paid the levy if the increased threshold for payment proposed in option 2 had applied in 2013-14.

These are statutory levies and the collection system and operative rates are in place and operate effectively. The statutory levies overcome the 'free-rider' problem associated with biosecurity benefits that are non-excludable. The cost efficiency of the levy would be increased by the new arrangements including the higher threshold for payment for producers. As the honey industry's AHA membership is current paid through levy funds, the ability to cease AHA membership will mean that $10 000 of levy revenue per year can be directed towards other biosecurity priorities. This estimate takes into account the membership fee which will no longer be paid, and also the expenses associated with AHA membership, such as administrative costs and travel to attend biannual AHA member meetings.

5.2.2 Costs

Collection and compliance costs are activity-based and may change from year to year as a result. As a result of the increase to the threshold for payment from 600 kg to 1500 kg, some portion of costs that would otherwise have been incurred would be reduced, but the net cost for all collection and compliance activities will depend on the total level of activity for that year.

The increased threshold for payment of 1500 kg will mean that some producers who previously paid the levy will no longer be required to do so. However, this small reduction in cost is unlikely to make a significant difference to farmgate (and by extension, retail) prices, which are driven largely by seasonal and other factors. 2.3 cents is 0.46 per cent of the recent average farmgate price of $5.00 per kilogram. By comparison, prices from December 2013 to December 2014 fluctuated between $3.40 (32 per cent less than $5.00) and $6.00 (20 per cent more than $5.00) per kilogram. Therefore, while the increased threshold will deliver a very small benefit to honey producers who are no longer required to pay the levy, this is unlikely to have a significant impact on competitiveness.

It is not considered that there are any likely incentives for businesses to structure themselves in a manner that would avoid payment of the levy. The threshold volume can be surpassed by a business with around 28 hives. The per kilogram saving is unlikely to be enough incentive for a larger honey producing business to, for example, restructure into a number of smaller entities, each covering only 28 or fewer hives. The agents who are honey aggregators – that is, who buy honey from producers and conduct the first retail sales on which the levy is based, also have no incentive to do this, as they are permitted to recover the cost of the levy from the honey producers from whom they buy honey.

The honey industry will need to make the same decisions described for option 1 above, regarding its contribution to the NBPSP and the uses of the honey levy contingency fund. The same costs and potential costs of failing to secure sustainable funding for the NBPSP and making no additional investment in honey bee and pollination biosecurity apply as for option 1.

5.2.3 Assessment

Option 2 will achieve a more favourable outcome than option 1. It will resolve the problems of administrative and cost inefficiency created by the existing levy arrangements, including the current threshold for payment for producers.

As with option 1, the net cost of doing nothing is potentially very high concerning exotic pests such as Varroa mite, and high concerning existing and established pests, such as AFB. The current operative rate of the levy does not provide sustainable funds for the AHBIC contribution to the NBPSP. This exposes the honey industry and pollination-dependent industries to the risk of failure to detect a future pest incursion, or to detect it too late for a successful eradication. Without addition investment into bee biosecurity for established pests, the current costs associated with treatment of AFB will remain and are likely to increase over time. Beneficial exotic and established pest programme synergies will not be fully realised.

5.3 Option 3 - Implement reforms and voluntary contributions

5.3.1 Benefits

The PHA levy, set at 0.1 of a cent per kilogram, and EPPR levy, set at 0.6 cents per kilogram, if applied to the leviable production figure for 2013-14, would generate $151 334, payable to PHA. This figure takes into account the estimated 48 honey producers who would not have paid the levy if the increased threshold for payment proposed in option 3 had applied in 2013-14.

These are statutory levies and the collection system and operative rates are in place and operate effectively. The statutory levies overcome the 'free-rider' problem associated with biosecurity benefits that are non-excludable. As with option 2, the cost efficiency of the levy is likely to be increased by the new levy arrangements including the higher threshold for payment, with the same savings as a result of AHBIC being able to cease AHA membership.

If a voluntary contribution system was introduced, additional funds could be generated. However, the benefit is difficult to quantify without certainty as to how many honey industry members would participate in such a scheme. The honey industry could choose to provide funds to the NBPSP and/or implement new biosecurity activities within the NBBP to the value of the voluntary contributions paid.

5.3.2 Costs

A potential free-rider problem exists in relation to voluntary contributions. Whatever benefit is derived from sustainable or additional biosecurity activities is non-excludable. This means that those who choose to contribute voluntarily will bear the cost for all beneficiaries. The statutory levy was implemented to address this free-rider problem. A voluntary system may also create a commercial disadvantage in terms of higher costs for those beekeepers or agents that decide to contribute. The impact on competitiveness for a voluntary contributor would vary according the amount they chose to contribute.

However, as explained for option 2, as honey prices tend to fluctuate seasonally by a much higher margin than any likely contribution, the potential impact of such a disadvantage would not be expected to be significant. Where a disadvantage was experienced, voluntary levy payers could choose to decrease the amount of their contribution.

The very small benefit to honey producers who are no longer required to pay the levy, due to the increased threshold for payment, is not likely to have a significant impact on competitiveness, and is not considered that there are any likely incentives for businesses to structure themselves in a manner that would avoid payment of the levy.

It is unlikely that an individual producer or group of beekeepers/agents would invest sufficiently to fully fund the honey industry contribution to the NBPSP and the implementation of the proposed NBBP. This means that the honey industry would need to reduce the scope of its planned biosecurity activities. The uncertainty of voluntary funding may also mean that certain parts of the proposed NBBP would need to be postponed until sufficient funds have been contributed to provide certainty of funding for contractual arrangements for services to be provided.

The cost of insufficient biosecurity has been discussed in options 1 and 2. The extent to which these costs will apply for option 3 will depend on the efficacy the honey industry is able to achieve through a potentially reduced NBPSP and NBBP. Some program objectives, such as surveillance activities that aim to allow for early detection of incursions of exotic pests, if not fully met, could result in similar costs to those described for options 1 and 2. This is because the chances of detection, or early detection, will be reduced and give opportunity for a pest to become established. The scope of the current NBPSP and proposed NBBP has been determined with these objectives in mind.

5.3.3 Assessment

Option 3 will achieve a more favourable outcome than options 1 and 2. It will resolve the problems of administrative and cost inefficiency created by the existing levy arrangements, including the current threshold for payment.

The introduction of a voluntary contribution scheme is very likely to achieve an increase in funds available for honey and pollination biosecurity. Many honey industry members are committed to the paying of an increase biosecurity levy and are likely to contribute voluntarily if this were the only means by which to increase biosecurity. However, this means of raising funds is considered inequitable and inconsistent with the reasons the honey industry sought to introduce a statutory levy in the first place. It may also provide a commercial disadvantage in terms of lower costs for voluntary contributors. Some producers or agents may choose not to contribute where they perceive the system employed to be unfair.

Full funding for the NBPSP and NBBP is unlikely to be realised through voluntary means. The potential unreliability of voluntary contributions may also create a detrimental level of uncertainty, affecting programme implementation and outcome.

5.4 Option 4 – Implement the AHBIC proposed levy reforms

5.4.1 Benefits

The PHA levy, set at 0.1 of a cent per kilogram, and EPPR levy, set at 2.9 cents per kilogram, if applied to the leviable production for 2013-14, would generate $652 523, payable to PHA. This represents an annual increase of around $499 768.[7] This figure takes into account the estimated 48 honey producers who would not have paid the levy if the increased threshold for payment proposed in option 4 had applied in 2013-14.

The statutory levies overcome the 'free-rider' problem associated with biosecurity benefits that are non-excludable. The collection system for these levies is in place and operates effectively. Therefore, the ongoing collection and compliance costs will not be directly impacted by the increase to the levy rate, meaning that the industry will effectively raise more revenue for a similar level of cost. The cost efficiency of the levy is also likely to be increased by the higher threshold for payment. (However, as explained

[7] AHBIC's business case uses a conservative production figure of 20 million kilograms to ensure that its calculations of levy revenue would cover the intended uses, even in a year of lower production, and has calculated the increase at $465 000. The 2013-14 leviable production figure was around 21.8 million kilograms.

under option 2, the net cost for all collection and compliance activities will depend on the total level of activity for that year.)

Also, as the honey industry's AHA membership is current paid through levy funds, the ability to cease AHA membership will increase available levy revenue by around $10 000 per year. This estimate includes the membership fee which will no longer be paid, and also the expenses associated with AHA membership, such as administrative costs and travel to attend biannual AHA member meetings.

As discussed in option 1, the total current cost of AFB to beekeepers is estimated at $5.2 million per annum and expected to increase. One of the expected outcomes of the NBBP is a significant reduction in these annual costs (AgEconPlus 2011). The NBBP aims to achieve this reduction through awareness raising and training of beekeepers, and through inspections and compliance activities conducted by state bee biosecurity officers via an industry-funded partnership arrangement. These improvements are likely to increase the incidence of early detection and the effectiveness of treatments.

It is important to note that while AFB is considered to be the most serious established pest affecting honey bees, and has been used as a primary example in this RIS, it is by no means the only existing or established pest affecting European honey bees. Further benefit will be derived if the implementation of the NBBP results in increased biosecurity in relation to hive beetle, Asian honey bee and other existing or established pests. Overall, the AgEconPlus analysis (2014) estimates a benefit:cost ratio of 20:1 regarding the implementation of the NBBP. The large ratio is partly explained by the very high potential cost to the honey industry, and particularly to pollination-dependent agricultural industries, if a serious pest threat such as Varroa mite was to become established in Australia.

The benefits of preventing the establishment of such serious exotic bee pests as Varroa mite are significant, both to the honey industry and to industries that rely on pollination from bees. In its report *Australia's Biosecurity Future: Preparing for future biological challenges* the CSIRO identified a number of potential "megashocks" – significant, relatively sudden and potentially high impact events, the timing of which are hard to predict (CSIRO 2014). One of these was the nationwide loss of pollination services from feral European honey bees. These feral honey bees provide the majority of pollination services.

Cook *et al.* (2007) estimated that if Varroa mite was prevented from entering the country over the next 30 years the economic costs avoided would be between $21.3 - 50.5 million per year. In its benefit-cost framework for responding to an incursion of Varroa mite (ABARES 2014), ABARES estimated the potential present value of losses to producers and consumers of pollination-dependent crops from an unhindered spread of Varroa mite to be in the range of $0.63-1.31 billion over 30 years, depending on port of entry. Barry *et al.* (2010) supported the view that the establishment of an effective surveillance program for bee pests (including, but not limited to, Varroa mite) and pest bees forms a critical component of honey bee biosecurity.

5.4.2 Costs

The proposed increase in the biosecurity component of the honey levy will double the current overall rate (from 2.3 cents per kilogram to 4.6 cents per kilogram). Therefore, the value of levy payments currently made by agents will double with the new rate. The AHBIC business case states that most levy paying beekeepers maintain between 500 and 1000 hives. These agents consequently pay an annual levy of between $621 and $1242. If the proposed increase is implemented, these agents would pay between $1242 and $2484 per annum.

This increase would be applied equitably to all Australian honey levy agents on a per kilogram basis. The additional monies raised would be utilised for activities focussed on assisting the honey industry as a whole. Across the bulk of the industry, the proposed amendments will be competition neutral, because they will neither advantage nor disadvantage one individual beekeeper or agent in the industry over another.

The exception to this is the very small benefit to those smaller producers who, due to the increase in the threshold for payment, will no longer be required to pay the levy. However, as explained for options 2 and 3, this benefit is not considered large enough to have a significant impact on competitiveness, and it is not considered that there are any likely incentives for businesses to structure themselves in a manner that would avoid payment of the levy. This is because the amount is so small relative to the price of the honey.

The average farm gate price for honey is currently around $5.00 per kilogram. This price can fluctuate, depending on seasonal and other factors. The price rose from $3.40 in several increments across 2014, due to unfavourable weather and consequent shortages, with a high of $6.00 per kilogram around August 2014 before settling back to $5.00 in December 2014. Taking into account the way that the price of honey may fluctuate across years or even within seasons, the increase of 2.3 cents per kilogram is not expected to have a significant impact on the price of honey, including the retail price to consumers.

Over time, increased industry funding for biosecurity related issues are expected to enhance the viability and profitability of the honey industry. The price of honey may experience fewer fluctuations if the biosecurity threats that affect hives and honey yield (and therefore supply) are dealt with more consistently and effectively.

5.4.3 Assessment

Option 4 is the preferred option. Implementing the AHBIC proposal for changes to the honey levy is the option most likely to resolve the three problems the honey industry is trying to address. It will increase administrative and cost efficiency for the honey industry in the collection of its levy, provide sustainable funding for the NBPSP and additional funding to enable the honey industry to raise funds to implement the NBBP.

The government generally supports a proactive approach to biosecurity from industry. The NBPSP and the proposed NBBP are supported by the honey industry, including those members of the industry who would fund those programs through an increased levy. This use of levy funds is consistent with the biosecurity purposes for which PHA and EPPR levies are intended and the AHBIC business case demonstrates that the proposed use will result in a significant net benefit to honey levy payers, as well delivering significant benefit more widely to pollination-dependent crop industries.

Section 6: Consultation

6.1 Industry levy proposal

AHBIC has conducted a thorough consultation campaign with all known potential levy payers, in accordance with the government's *Levy principles and guidelines* (LPGs).

Consultation was comprehensive, including:

- a 6-month industry consultation period
- a dedicated information website page on AHBIC's site
- distribution of a Q&A document explaining the proposed reforms, how to register to vote and how to lodge a postal vote
- series of articles in relevant publications, including responses to 'letter to the editor' type objections

- State government mailouts to all registered beekeepers in TAS, VIC, QLD and SA
- letters to Federal Council of Australian Apiarists' Association, State Beekeeping Associations (NSW, QLD, VIC, SA, TAS and WA), National Council of Pollination Associations, Honey Packers and Marketers Association explaining the reason for the proposed levy increase, sources of detailed information (e.g. AHBIC website), proposal timetable and meeting dates (presentations were given at several beekeeper association meetings and ballots were held at each of the state association annual meetings (with postal voting also available))
- information placed in state beekeeping association newsletters and journals (these reach both commercial and hobby beekeepers) and in the AHBIC newsletter
- media press releases
- consultation with other affected parties – packers and marketers
- ballot processes held at state beekeeping association annual conferences, with a nominated state government department of agriculture/primary industries representative (commonly the apiary officer of that particular state) acting as the independent scrutineer and tallier of votes.

During consultation, stakeholders had many opportunities to raise issues and objections, both in person at industry association meetings and in writing. There was a high level of support for the proposal and most issues raised were identified as stemming from unfamiliarity with, or misunderstanding of, the consultation materials (AHBIC 2014). As an example, one objector in a 'letter to the editor' had misunderstood the purposes for which the levy funds would be used. AHBIC replied in the next edition of that journal, explaining the correct information.

Two broader biosecurity issues were also raised:

- A small number of people expressed the view that the government had sole responsibility for biosecurity and emergency responses and did not agree with the expectation that industry contribute towards such costs. The current government policy is a partnership approach to biosecurity, with industries sharing in the cost of biosecurity. AHBIC's membership of Plant Health Australia and signatory status to the EPPRD reflects the honey industry's willing involvement in such partnership arrangements and in sharing the cost of biosecurity activities.

  Where primary industries see a benefit in doing so, they may also, as the honey industry has done with its current proposal, choose to invest further funds into biosecurity.

- Some stakeholders questioned why the honey industry bears the whole cost of biosecurity for bees when the benefits of pollination services are available to so many plant industries. While this is valid in principle, current legislation does not permit statutory levies to be charged on services. This complex issue is being considered separately by government following the Senate inquiry on the bee industry. However, as an objection it is considered outside the scope of AHBIC's proposal, as the levies cannot legally be applied in the way the objector would like them to be applied.

Majority support for the AHBIC proposal was demonstrated. 86 per cent of voters supported the proposed changes to the levy and 92 per cent supported raising the levy threshold.

Despite an extensive consultation, voter turnout for this ballot was relatively low, with around 10 per cent of those eligible to participate choosing to do so. However, in its submission, AHBIC has demonstrated that its widespread, comprehensive consultation activities provided ample opportunity for levy payers to view and discuss the proposal, understand the issues, raise any objections, and vote on the proposal.

After AHBIC's business case was submitted to the government for consideration, a six week formal objection period was held, providing a final opportunity for levy payers and any other affected parties to raise concerns. No objections were received.

6.2 Regulation impact statement

In the majority of cases, proposals for changes to primary industries levies are initiated by industry. Proposals are assessed in accordance with the LPGs. They must relate to a function for which there is market failure (thereby making a case for the necessity of government intervention), and set out how levy revenue will be used. They must also demonstrate widespread consultation with actual and potential levy payers, and that the proposal has majority support.

Consequently, the government received AHBIC's submission after industry consultation on the levy proposal had concluded. As a result, development of this regulation impact statement (RIS) occurred after AHBIC's consultation with levy payers had been undertaken. Consideration of options for government action in order to resolve the problems presented was strongly informed by the content and outcomes of the industry consultation. This reflects the thorough and directly relevant nature of the AHBIC consultation process.

A draft RIS (addressing all seven questions provided for RIS development by the *Australian Government Guide to Regulation*) was provided to the Minister for Agriculture at the time his policy approval was sought for the reforms.[8] The final version of this RIS will be provided to the Minister to inform his final decision on whether to approve the making of the amendment regulations that would implement the preferred option (see Section 8).

The government considers that the most relevant form of consultation for the options being considered in this RIS would have been targeted, rather than public, consultation, as the impact of the government action option would affect a particular industry sector. However, the target stakeholders are the same as those targeted in the industry consultation, that is, actual and potential honey levy payers, and the honey industry in general. In addition, the AHBIC consultation was comprehensive and directly relevant to the problem the government is trying to solve. For these reasons, it was considered that consultation on the RIS was unlikely to raise any new issues and a separate consultation on the RIS was not undertaken.

Section 7: Conclusion and recommended option

The recommended option is Option 4 – AHBIC's proposal to cease the EADR levy of 0.7 of a cent per kilogram, introduce a PHA membership of 0.1 of a cent per kilogram and

[8] These questions are: What is the problem you are trying to solve? Why is government action needed? What policy options are you considering? What is the likely net benefit of each option? Who will you consult about these options and how will you consult them? What is the best option from those you have considered? and How will you implement and evaluate your chosen option?

EPPR levy of 2.9 cents per kilogram and increase the threshold for retail honey from 600 kg to 1500 kg per annum.

The proposed reforms are considered the most effective means of addressing the inefficiencies in the collection and disbursement of levy revenue for the honey industry and aligning it with the plant sector consistent with government policy. The proposed reforms are also considered the most equitable means of ensuring the honey industry maintains the financial capacity to resource its biosecurity obligations and priority activities. The proposed levy reforms for the honey industry –

- conform to the government's LPGs
- will be applied universally across the levy paying population
- have clear benefits to the industry
- are not expected to result in significant costs to consumers

The proposed reforms will improve efficiencies in the collection and disbursement of levies revenue, reduce administrative costs by removing duplication across sectors and increasing the threshold and provide sustainable funding for biosecurity activities. The establishment of an increased and more effective revenue stream is a positive example of an industry providing for its own biosecurity priorities and is in accordance with government policies where biosecurity is a shared responsibility and that those industries benefiting from an eradication response should contribute to it.

Section 8: Implementation and review

The AHBIC has asked the government to implement the levy reforms as soon as practicable.

Amendments to the Primary Industries (Excise) Levies Regulations 1999, the Primary Industries (Customs) Charges Regulations 2000 and the Primary Industries Levies and Charges Collection Regulations 1991 made under the *Primary Industries (Excise) Levies Act 1999*, the *Primary Industries (Customs) Charges Act 2000* and the *Primary Industries Levies and Charges Collection Act 1991* will be required.

Unless other factors prompt earlier action, AHBIC has indicated it intends to review the levy arrangements around 2020.

8.1 Compliance Costs

For levy agents who continue to pay the levy, there will be no change to the compliance requirements if the preferred option is implemented. This is because the changes to the levy component types will be made to department systems rather than on return forms. Where levy agents used one overall levy rate previously, they will simply use another.

Because of the increased threshold for payment, some levy agents will no longer be required to pay the levy. This will result in a regulatory saving in compliance costs for the honey industry as a whole. This net deregulatory outcome is shown in Table 1.

As it requires no action, costs have not been calculated for option 1.

Table 1: Regulatory burden and cost offset estimate table – options 2, 3 and 4.

Average annual regulatory costs (from business as usual)				
Change in costs ($ million)	Business	Community organisations	Individuals	Total change in costs
Total, by sector	-$0.005027	$	$	-$0.005027
Cost offset ($ million)	Business	Community organisations	Individuals	Total, by source
Agency	N/A	N/A	N/A	N/A
Are all new costs offset? □ Yes, costs are offset □ No, costs are not offset ☑ Deregulatory—no offsets required				
Total change in costs = -$0.005027 million (-$5027)				

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