

Department of the Environment

Hazardous waste reform proposals analysis

Project report (final)



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EXECUTIVE SUMMARY

Introduction

The purpose of this project is to test the feasibility of a series of short-listed options for national hazardous waste reform with the federal government, state and territory governments, hazardous waste generators, hazardous waste transporters and treaters, industry groups, non-governmental organisations; industry groups; academia and consultants.

The possible reform proposals relate to amendments of the *Hazardous Waste (Regulation of Exports and Imports) Act 1989* (Cth) and associated regulations, but also include proposals for hazardous waste reforms that may not require amending national legislation. These non-regulatory reforms include, for example, facilitating improved data on Australian hazardous waste management infrastructure, and improved data on hazardous waste generation, treatment and fate.

A list of sixteen (16) hazardous waste reform options were provided to stakeholders within a *Consultation paper and questionnaire document*. The options list was based on a core list of reform proposals developed by the Department, which was tested and augmented during an initial round of consultation with a restricted list of stakeholders in May 2015.

The reform options loosely fall into two groups; those involving international movements of hazardous waste (reform options a–f), and those focussed on Australia’s generation and management of hazardous wastes (reform options g–p).

Each of the reform options has been assessed against a standard set of criteria to determine a recommendation for: inclusion in 2015 Cost Benefit Analysis (CBA); further assessment outside that CBA; placed on hold pending the successful completion of other reform options; or to be dropped altogether. The recommendation is based on the stakeholder consultation feedback, prior studies reviewed for this project, and the project team’s specialist knowledge.

Recommendations

It is recommended that:

- Reform Options a), c), d), e), g), i), k), l) and m) are assessed through cost-benefit analysis.
- Reform Options b), f), h), j), n), o) and p) are not assessed through cost-benefit analysis, but as these are quasi regulatory or non-regulatory options are pursued outside of a regulatory framework.

A summary of each reform option’s description, regulatory status, purpose and recommendation is provided in the following table.



Table E-1 – Reform options summary recommendations

Reform option description				Recommendation for inclusion in Cost Benefit Analysis
Title	Reform option regulatory status	Reform option purpose	Primary international obligation relating to the reform option	
a) Power to require provision of information	Legislated.	Correct an information gap or asymmetry.	Annual reporting on hazardous waste.	Assess.
b) Recognise bans imposed by other countries	Legislated or quasi-regulatory.	Promote the environmentally sound management of hazardous wastes.	A regulatory system applying to cases where transboundary (i.e. international) movements are permissible.	Do not assess. Consider outside of a regulatory framework as a quasi-regulatory reform.
c) Updating compliance and enforcement provisions	Legislated.	Improve Australian hazardous waste regulation and/or reduced red tape.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Assess.
d) Taking economic efficiency into account	Legislated.	Address a competition failure by supporting a competitive market or managing a continuing monopoly situation.	Restriction of transboundary movements of hazardous wastes, except where it is perceived to be in accordance with the principles of environmentally sound management.	Assess.
e) Updating cost recovery arrangements	Legislated.	Improve Australian hazardous waste regulation and/or reduced red tape.	Reduction of hazardous waste generation.	Assess.
f) Increased transparency on the operations of the Act	Quasi-regulatory.	Improve Australian hazardous waste regulation and/or reduced red tape.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Do not assess. Consider outside of a regulatory framework as it is a quasi-regulatory reform.
g) Information on hazardous waste infrastructure	Legislated or quasi-regulatory.	Correct an information gap or asymmetry.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Assess.
h) Information on hazardous waste generation and management	Legislated, quasi-regulatory or non-regulatory.	Correct an information gap or asymmetry.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Do not assess. Consider outside of a regulatory framework as it is a non-regulatory reform.
i) Power to establish agreements targeting particular wastes	Co-regulatory.	Address the market inability to deliver a public good.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Assess.
j) Nationally consistent arrangement on hazardous waste data collection and reporting	Quasi-regulatory.	Correct an information gap or asymmetry.	Annual reporting on hazardous waste.	Do not assess. Consider outside of a regulatory framework as it is a quasi-regulatory reform.



Table E-1 – Reform options summary recommendations (continued)

Reform option description				Recommendation for inclusion in Cost Benefit Analysis
Title	Reform option regulatory status	Reform option purpose	Primary international obligation relating to the reform option	
k) Powers to establish and maintain hazardous waste facilities	Legislated.	Address the market inability to deliver a public good.	Restriction of transboundary movements of hazardous wastes, except where it is perceived to be in accordance with the principles of environmentally sound management.	Assess.
l) Nationally consistent system for tracking hazardous waste movements	Legislated or quasi-regulatory.	Correct an information gap or asymmetry.	Annual reporting on hazardous waste.	Assess.
m) Harmonisation of regulatory arrangements	Legislated or quasi-regulatory.	Harmonisation with other policy areas and creating a seamless national economy.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Assess
n) Developing guidelines on specific hazardous waste issues	Non-regulatory.	Promote the environmentally sound management of hazardous wastes.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Do not assess. Consider outside of a regulatory framework as a non-regulatory reform
o) Nationally consistent system of hazardous waste levies	Quasi-regulatory.	Harmonisation with other policy areas and creating a seamless national economy.	Reduction of hazardous waste generation.	Do not assess. Consider outside of a regulatory framework as a quasi-regulatory reform
p) Nationally consistent approach to landfill bans or conditional disposal	Quasi-regulatory.	Harmonisation with other policy areas and creating a seamless national economy.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Do not assess. Consider outside of a regulatory framework as a quasi-regulatory reform



GLOSSARY

ANZSIC code	Australian and New Zealand Standard Industry Classification code.
The (Basel) Convention	<i>Basel Convention on the Control of Transboundary of Movements of Hazardous Wastes and their Disposal. The Basel Convention was opened for signature in 1989 and entered into force in 1992.</i>
Department / DoE	Department of the Environment.
Environmentally sound management	Even where all countries have consented, the country in which hazardous waste is generated must be independently satisfied that the waste will be managed in an environmentally sound manner. The Convention provides that this obligation 'may not under any circumstances be transferred to the states of import or transit.'
Hazardous waste	Hazardous waste as defined under the Act.
Minister	The Minister responsible for administration of the Act and Regulations.
NEPM / Controlled Waste NEPM	National Environment Protection (Movement of Controlled Waste between States and Territories) Measure.
Prior informed consent	The prior informed consent requirement is that parties must only permit the export of hazardous waste to another country where that country and all countries of transit have given consent in writing.
Regulations	Hazardous Waste (Regulation of Exports and Imports) Regulations 1996.
Regulations (Decision IV/9)	Hazardous Waste (Regulation of Exports and Imports) (Decision IV/9) Regulations 1999.
Regulations (Fees)	Hazardous Waste (Regulation of Exports and Imports) (Fees) Regulations 1990.
Regulations (OECD)	Hazardous Waste (Regulation of Exports and Imports) (OECD Decision) Regulations 1996.
Regulations (Waigani)	Hazardous Waste (Regulation of Exports and Imports) (Waigani Convention) Regulations 1999.
Stockholm Convention	<i>Stockholm Convention on Persistent Organic Pollutants 2001.</i>
The Act	<i>Hazardous Waste (Regulation of Exports and Imports) Act 1989 (Cth).</i>
The Regulations	The five sets of regulations made under the Act (see above).
Transit	The transit of waste through a country to another country.
Transboundary	Movement from one country to another.



1 INTRODUCTION

1.1 Background

The purpose of this project is to test the feasibility of a series of short-listed options for national hazardous waste reform with the federal government, state and territory governments, hazardous waste generators, hazardous waste transporters and treaters, industry groups, non-governmental organisations, academia and consultants.

Provided in Section 1.2 is an outline of the key international and local drivers that are behind this consultation. Particularly important drivers are the hazardous waste related international obligations to which Australia is committed. This is principally, but not limited to, the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal*.

There is evidence that a range of improved regulatory and non-regulatory arrangements could be undertaken to improve the discharge of our hazardous waste international obligations, while also achieving more effective management of hazardous wastes, both from environmental and economic perspectives.

The proposed reform options relate to amendment of the *Hazardous Waste (Regulation of Exports and Imports) Act 1989* (the Act) and associated regulations, but also include options for hazardous waste reforms that may not require amending national legislation. These non-regulatory reforms could include, for example, facilitating improved data on Australian hazardous waste management infrastructure, and improved data on hazardous waste generation, treatment and fate.

The outcomes of the consultation will provide input into a cost benefit analysis (CBA) on the shortlisted reform proposals that will be completed in the second half of 2015, which will then lead to subsequent regulation impact assessment.

The following table provides a summary of the major international obligations, a view on the (growing) problems with meeting these obligations, and some of the possible reform options to assist in resolving the problems.



Table 1 – Mapping of international obligations and related problems, to selected potential reform options

Obligation	Problem	Some possible reform options
Reduction of hazardous waste generation.	<ul style="list-style-type: none">• Australian generation of hazardous waste is increasing.• Australia does not have a coordinated national policy to avoid and minimise the generation of hazardous waste.	<ul style="list-style-type: none">• Improve knowledge of hazardous waste generation, including sources.• Coordinate a national approach to sending price and regulatory signals to avoid and minimise hazardous waste generation.
Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	<ul style="list-style-type: none">• Aspects of current hazardous waste management may not be environmentally sound, especially as knowledge improves.• Recovery and recycling of resources from hazardous waste flows is at a low level, leading to economic cost and waste of resources.	<ul style="list-style-type: none">• Better data and reporting.• Consistent national tracking (inter and intra state) of hazardous wastes.• Domestic hazardous waste infrastructure available and accessible, including for intractable wastes.• Pricing and regulatory signals support dealing with hazardous waste in accordance with the principles of the waste hierarchy.• Integration of product stewardship and hazardous waste activities.• Harmonisation of transport and environmental regulations.
Restriction of transboundary movements of hazardous wastes, except where it is perceived to be in accordance with the principles of environmentally sound management.	<ul style="list-style-type: none">• Out of date legislation is preventing efficient and effective regulation of transboundary movements, including appropriate compliance and enforcement activities.• Stockpiling or landfill disposal of hazardous wastes continues, though more environmentally sound fates are available in Australia or overseas.	<ul style="list-style-type: none">• Update the <i>Hazardous Waste (Regulation of Exports and Imports Act 1989</i> and regulations.• Develop a coordinated approach with relevant jurisdictions to problematic hazardous waste stockpiles and landfill disposal, including to support product stewardship.• Domestic hazardous waste infrastructure available and accessible, including for intractable wastes.
A regulatory system applying to cases where transboundary (i.e. international) movements are permissible.	<ul style="list-style-type: none">• A regulatory system is in place, but it is out of date, difficult to administer and inefficient.	<ul style="list-style-type: none">• Update the <i>Hazardous Waste (Regulation of Exports and Imports Act 1989</i> and regulations.
Annual reporting on hazardous waste.	<ul style="list-style-type: none">• Major gaps exist in Australian data and reporting on hazardous wastes.• Data is not easily available, accurate, up to date and presented at useful scales for participants in domestic markets, including regulators and industry.	<ul style="list-style-type: none">• Improve Australia's hazardous waste domestic and international data and reporting.• Consistent national tracking (inter and intra-state) of hazardous wastes to fill in key data gaps and ensure environmentally sound management is taking place.• Integrate hazardous and non-hazardous waste data and reporting.

Note that the reform options outlined in the table above, as well as other options, are addressed in the list of reform options provided in Section 2 of this report.



1.2 Context to hazardous waste reform

To assist in understanding the context of this project, provided here are outlines of the Department of the Environment and other Commonwealth agencies policy objectives and areas of remit in relation to hazardous waste.

1.2.1 Federal policy objectives of hazardous waste reform

At the Federal level the policy objectives of this reform process are to improve Australian hazardous waste management, markets and regulation. This will be done by working with the states and territories, and also other stakeholder groups.

How will Commonwealth agencies achieve this?

The Commonwealth will achieve its policy objectives by:

- amending national hazardous waste legislation
- pursuing harmonisation with other policy areas (such as transport)
- enhanced hazardous waste data and reporting (domestic & international)
- investigating nationally-consistent inter and intra-state waste tracking
- providing better information on Australian hazardous waste infrastructure and its capacity.

What are the reasons for doing this?

Meet Australia's international obligations to:

- minimise the generation of hazardous waste
- ensure that hazardous waste is managed efficiently and effectively
- protect human health and the environment.

What are the other reform activity and priorities that relate to this?

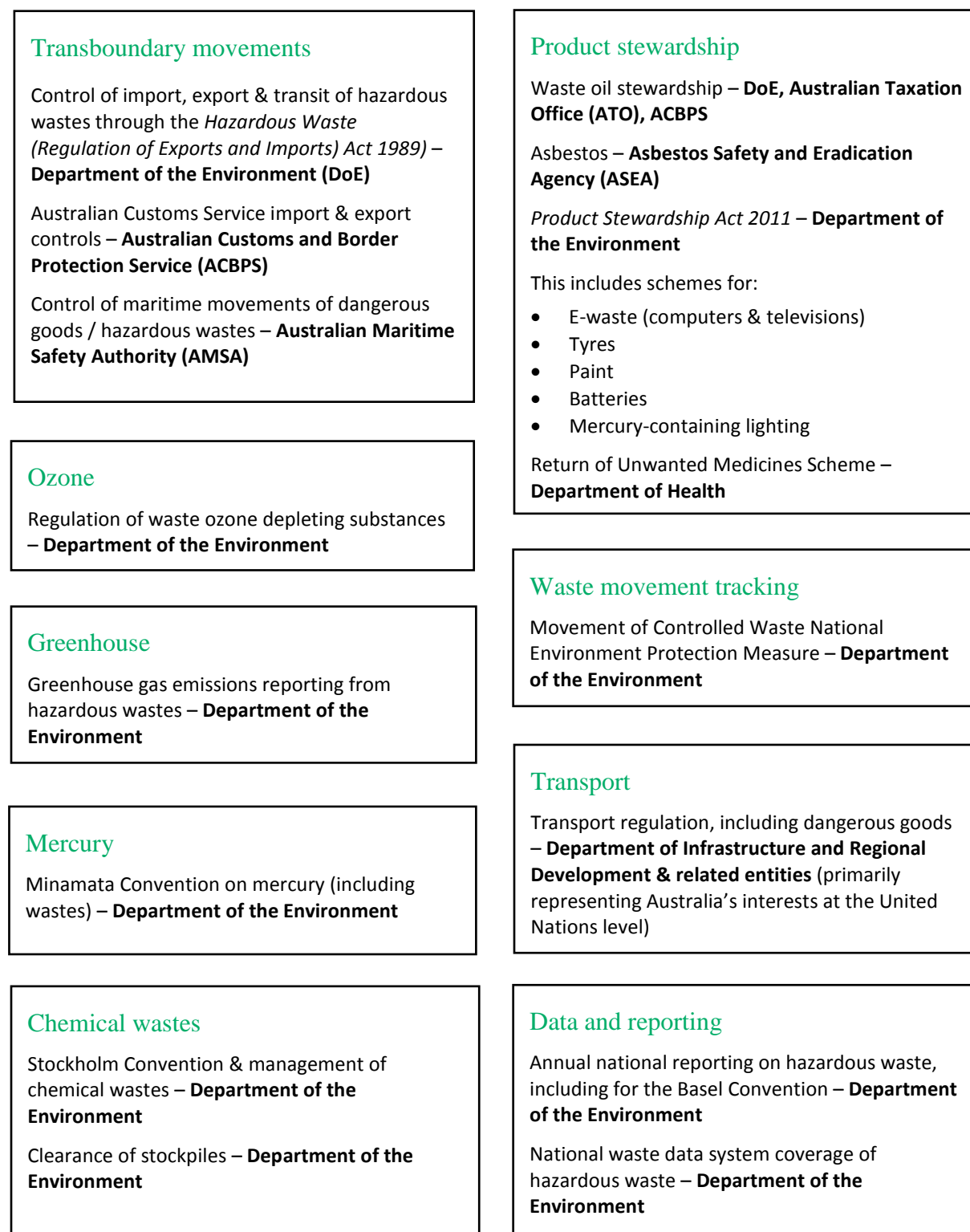
The other areas of reform activity or priority that relate to this reform process are:

- red tape reduction
- developing a national waste data system
- creating a seamless national economy.

The Commonwealth's areas of responsibility for the management of hazardous waste are complex and varied. They relate not just to transboundary movements of hazardous waste, but also to other aspects of Australian management of hazardous waste. Provided immediately below is a current summary of these areas, with greater detail provided over the following pages.



Figure 1 – Current Australian Government involvement in hazardous waste





1.2.2 Transboundary movements of hazardous waste

The Basel Convention

Australia is a signatory to the *Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal* (Basel Convention). The Basel Convention has four guiding principles of: polluter pays, user pays, proximity¹ and product stewardship. Its principal aims are:

- Reduction of hazardous waste generation and the promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.
- Restriction of transboundary movements of hazardous wastes, except where it is perceived to be in accordance with the principles of environmentally sound management.
- A regulatory system applying to cases where transboundary (i.e. international) movements are permissible.

The principal aim of the Basel Convention is to reduce the risk of lower quality treatment and final disposal of hazardous waste in developing countries by addressing a range of areas including:

- Tracking of waste transport.
- Arrangements for prior notification of receiving jurisdictions.
- Consignment authorisations, either from the jurisdiction or from a delegated facility.
- Licensing of transport providers and facilities.

Australia provides domestic hazardous waste generation and transboundary movement data to the Secretariat of the Basel Convention in the form of an annual Government report.

The Hazardous Waste (Regulation of Exports and Imports) Act 1989

Australia introduced the *Hazardous Waste (Regulation of Exports and Imports) Act 1989* (the Act) to meet its obligations under the Basel Convention.

The object of the Act is to regulate the export, import and transit of hazardous waste to ensure transboundary movements are managed in an environmentally sound manner, to protect human health and the environment. The Act also makes reference to the Commonwealth making arrangements to fulfil other obligations under Article 4 of the Basel Convention, such as the obligation to ensure that the generation of hazardous waste is reduced to a minimum.

The Act and related regulations were last updated in 2001. That update, undertaken under the National Competition Policy, focused on those aspects of the legislation which affected competition, or which imposed costs or conferred benefits on to business. Minor amendments were made to the Act and regulations as a result of that work.

¹ The proximity principle states that treatment and disposal of hazardous waste take place at the closest possible location to its source in order to minimise the risks involved in its transport.



Ozone Protection and Synthetic Greenhouse Gas Management Act 1989

The objectives of the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* are to give effect to Australia's international obligations to phase-out the production and consumption of ozone depleting substances (ODS) under the Vienna Convention for the Protection of the Ozone Layer (Vienna Convention) and the Montreal Protocol on Substances that Deplete the Ozone Layer (Montreal Protocol). The Ozone Act assists Australia to meet its obligations under the United Nations Framework Convention on Climate Change (UNFCCC) and its Kyoto Protocol with respect to reducing emissions of synthetic greenhouse gases (SGGs) and reporting on Australia's emissions of these gases.

The Ozone Act achieves its objectives by regulating the manufacture, import, export, use and disposal of ODS and SGGs through import, export and domestic use licensing systems through several pieces of legislation. The Ozone Act and regulations:

- require the import and export of waste ODS must be done under a used substances licence
- require the destruction of waste ODS to be done in accordance with Montreal Protocol requirements on approved destruction technologies
- ban the emission of waste ODS to the atmosphere
- require that waste ODS is handled by technicians who hold refrigerant handling licences or extinguishing agent handling licences.

The role of the ACBPS

The Australian Customs and Border Protection Service (ACBPS) controls international freight movements in and out of Australia. This includes the control of cargoes containing hazardous wastes that may move through Australian ports or airports.

The role of AMSA

Ensuring the safe movement of cargoes through Australian waters is the responsibility of the Australian Maritime Safety Authority (AMSA). This role includes oversight of how hazardous waste cargoes should be packaged.

1.2.3 Other aspects of Australian management of hazardous waste

The Product Stewardship (Oil) Act 2000

The *Product Stewardship (Oil) Act 2000* establishes the general framework and benefit entitlements of the Product Stewardship for Oil scheme. The scheme provides incentives to encourage the collection and recycling of used oil. The arrangements comprise a levy-benefit system, which includes an 8.5 cents per litre levy on new oil and a scale of benefit payments to used oil recyclers. The highest benefit of 50 cents per litre is provided for re-refining of used oil back to virgin quality.

The Department of the Environment has policy responsibility for the scheme. Under the enabling legislation and instruments the Australian Taxation Office (ATO) perform a number of functions including:

- determining eligibility for the scheme



- registering eligible scheme claimants
- payment of benefits
- collection of some levies
- compliance activities.

The Australian Customs and Border Protection Service (ACBPS) also collects some of the levy on new oil.

The Product Stewardship Act 2011

The *Product Stewardship Act 2011* provides the framework to effectively manage the environmental, health and safety impacts of products, and in particular those impacts associated with the disposal of products. The framework includes voluntary, co-regulatory and mandatory product stewardship. Televisions, computers and computer peripherals were the first products to be regulated under the *Product Stewardship Act*, through the co-regulatory National Television and Computer Recycling Scheme. In the future, this Act may be used to regulate (through a co-regulatory or mandatory approach) products that contain or produce hazardous waste, if this is the most appropriate way for these products and their end-of-life impacts to be managed.

Under the *Product Stewardship Act* there are currently schemes in place or under development for:

- television and computer recycling
- end-of-life tyres
- packaging
- mercury-containing lamps
- waste architectural and decorative paint
- end-of-life batteries (less than 5 kg in weight)
- end-of-life air conditioners with small gas charges
- end-of-life refrigerators with small gas charges.

National Waste Data System

The National Waste Data System is currently being developed and will, for the first time, allow for integrated reporting of hazardous waste as part of the Commonwealth's reporting on waste. It will remove duplication of requests to state and territory jurisdictions for hazardous waste data, and also align differences in hazardous waste classifications between jurisdictions for collation into national reporting.

1.3 Project scope

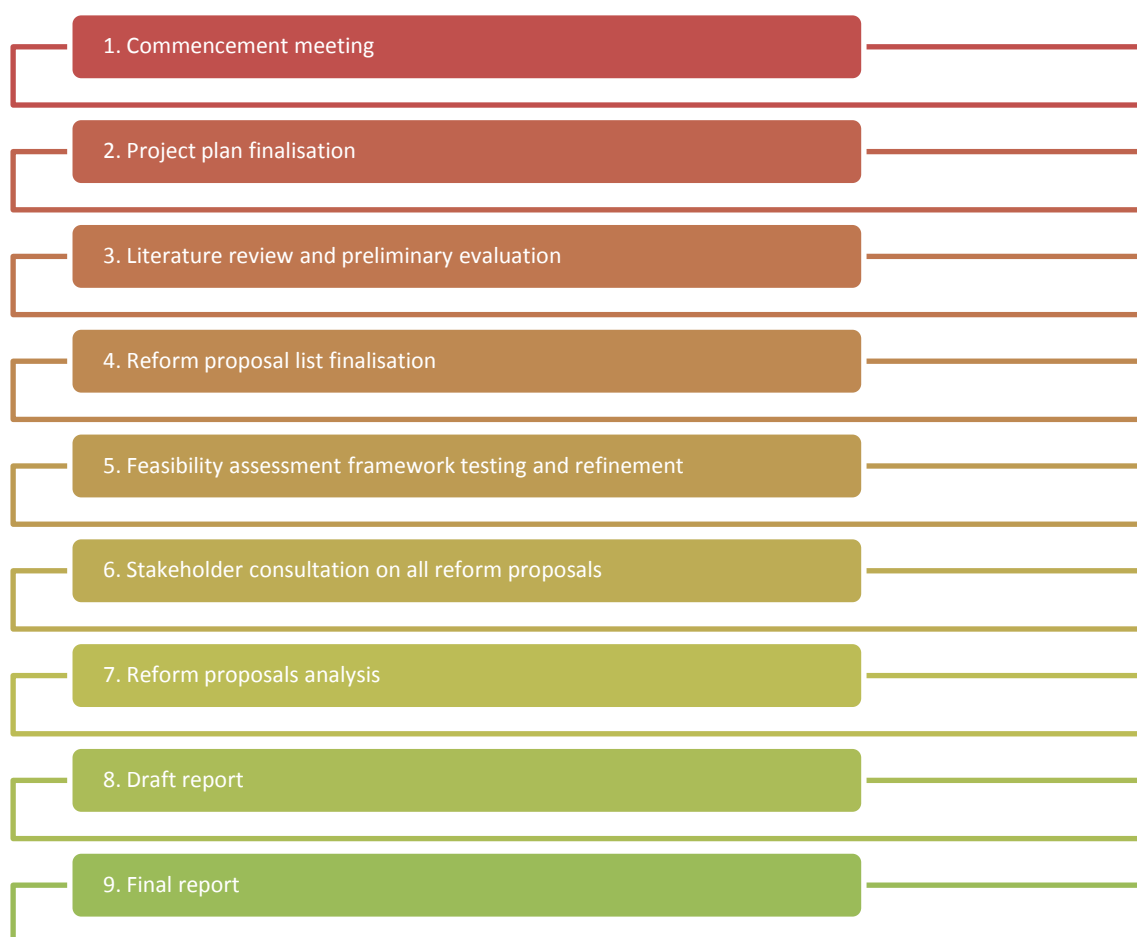
Extensive research and consultation has been undertaken in order to collate and test the feasibility of sixteen options for national hazardous waste reform, including those involving amendments to national legislation.



The outcomes of the project will provide input into a cost benefit analysis (CBA) on the shortlisted reform proposals that will be completed in 2015–16, which may then lead to a regulatory impact assessment.

An outline of the project method is provided in Figure 2.

Figure 2 – Project tasks



1.4 Consultation responses

On the 3 June 2015 a consultation paper was released to 15 government stakeholders nationally, followed by the release of the consultation paper to 52 other stakeholders on the 10 June 2015. In total the consultation paper was directly e-mailed to 67 organisations. The consultation period was concluded on the 22 June 2015, and this report documents the outcomes and responses from the consultation.

In total, 26 written responses were received from stakeholders across: government; industry groups; industry (generators, transporter and treaters); and NGOs. A summary of the consultation responses is provided in Table 2.



Table 2 – Consultation responses

Stakeholder group	Number invited	Number of written responses	% written response rate
Government agencies – Federal	5	2	40%
Government agencies– State/Territory	10	9	90%
Hazardous waste generators	13	1	8%
Hazardous waste transporters/treaters	18	6	33%
Industry groups	11	4	36%
Non-governmental organisations (NGO)	4	1	25%
Academia and consultants	6	3	50%
Total	67	26	39%

The response rate for Generators (8%) was particularly low, with one responses from 13 invitations, highlighting in part the difficulty of engaging with these groups. Beyond the 26 stakeholders providing written response, a further 15 stakeholders responded to indicate that they did not see a need to respond to the consultation (including six generators), and eight stakeholders were unable to respond within the time period available.

1.5 Confidentiality and status of responses

This report incorporates and directly quotes consultation responses provided on both confidential and non-confidential bases.

Responses provided on a confidential basis, where quoted, are identified as a ‘Confidential response’ without any further identifier. Some of these responses have been edited to protect the confidentiality of the respondent.

Consultation responses and discussion on specific reform options generally demonstrated a strong level of understanding on the reform option in question. However, for a small minority of responses it was clear that a misinterpretation in the meaning of the reform option had occurred. Where this was apparent the response was either clarified with the respondent, or where this wasn’t practicable has been excluded from this report.



2 REFORM OPTIONS

A list of sixteen (16) hazardous waste reform options were provided to stakeholders within the issued *Consultation paper and questionnaire* document (SRU and MJA, 2015). The options list was based on a core list of reform proposals developed by the Department, which was tested and augmented during an initial round of consultation with a restricted list of stakeholders in May 2015.

The full list of reform options, as presented to stakeholders, is provided in Sections 2.1 and 2.2. The reform options loosely fall into two groups; those involving international movements of hazardous waste, and those focussed on Australia's generation and management of hazardous wastes.

In addition to the reform options, stakeholders were also provided with a series of questions (the *Assessment framework*) against which the consultation was testing each of the reform options. The Assessment framework is provided in Section 3.

2.1 International movements of hazardous wastes

To improve Australia's acquittal of its international hazardous waste obligations six regulatory and quasi-regulatory reform options have been analysed. The list of reform options are:

- a) Adding in (consistent with Customs regulation) a power to require the provision of information where needed to prevent breaches of the Act.
- b) Capacity to recognise bans imposed by other countries on hazardous waste imports.
- c) Updating compliance and enforcement provisions, including to introduce civil penalties.
- d) Adding a capacity to take economic efficiency into account when comparing the efficiency of different recovery and recycling options of equivalent environmental and safety benefit.
- e) Updated cost recovery arrangements, including possible weight-based charging.
- f) Increased transparency on the operations of the Act, in particular increased communications on import and export applications, and the issuing of permits.

Option f) is an additional option that was identified through the initial consultation process. All options require amendment(s) to the Act and/or associated regulations. Options a) to e) are regulatory options while Option f) is a quasi-regulatory option.

2.2 Australia's generation and management of hazardous wastes

The scope of the Act accords with the breadth of Australia's Basel obligations, but the specific provisions in the current text of the Act have a narrower focus, mostly on permits for transboundary movements. The Act and Regulations do not directly regulate the domestic management of hazardous waste, except where there is a connection to import or export.



Ten legislated, co-regulatory, quasi-regulatory and non-regulatory reform options to clarify the Commonwealth's role in a number of domestic areas have been analysed. These are intended to either assist in streamlining regulation and hazardous waste management between jurisdictions, or are necessary to meet Australia's international obligations under the Basel Convention, the Stockholm Convention or other international instruments.

These areas include the requirement to avoid or minimise the generation of hazardous waste, to prevent pollution from hazardous waste, and to ensure the availability of adequate disposal facilities. Australia also has data reporting obligations under the Convention which the related reform options could support. A significant objective of these reform options is to encourage harmonisation of Australia's hazardous waste management laws.

The ten reform options that have been analysed to clarify the Commonwealth's role in a number of domestic areas are:

- g) Provision of national information on the capacity of, and needs for, hazardous waste infrastructure in Australia, on an ongoing basis.
- h) Provision of regular and timely public reporting on hazardous waste generation and management in Australia. This reporting could also capture public interest aspects such as the industrial activities generating hazardous wastes, new infrastructure, or noteworthy hazardous waste minimisation achievements.
- i) A power to establish a statutory covenant or similar agreement for dealing with particular wastes (e.g. an agreement with legal status to phase out of stocks of spent pot linings, via domestic and international facilities).
- j) An agreed, nationally-consistent arrangement for hazardous waste data collection and reporting, based on consistent definitions and classifications, aligned with data and reporting arrangements for non-hazardous wastes, and international hazardous waste classifications (e.g. Basel Convention).
- k) Powers consistent with those in radioactive waste legislation for the establishment and maintenance of hazardous waste processing or treatment facilities. The selection criteria for the preferred processing technologies should have due consideration of the waste hierarchy.
- l) National consistency of tracking systems for movements of controlled (hazardous) wastes, covering inter and intra-state movements.
- m) Harmonisation of regulatory arrangements pertaining to hazardous wastes or specific hazardous wastes (e.g. asbestos), such as between transport and environmental regulation.
- n) The development of a series of Federal policy guidelines and standards on specific hazardous waste management issues in Australia, with clear linkages to the international policy environment. Examples of the types of issues the guidelines could address include: management of end-of-life rechargeable batteries; management of wastes containing brominated flame retardants; or management of mercury containing wastes.



- o) A nationally-consistent system of hazardous waste levies (including a Commonwealth import/export levy or charge for international movements), to reduce economic incentives to transport wastes long distances to fates of possibly higher risk to health and the environment, consistent with the proximity principle under the Basel Convention.
- p) A nationally-consistent approach to landfill bans or conditional disposal restrictions for metropolitan areas, to support product stewardship. For example, in relation to e-waste or tyres.

These reform options consist of thirteen options identified by the Department, and three additional reform options identified through the initial consultation process. These additional reform options are Options f), h) and n).



3 ASSESSMENT FRAMEWORK

3.1 Assessment questions

All stakeholders were provided with a set of reform option assessment questions developed to help structure and facilitate responses, these questions are summarised in Sections 3.1.1 and 3.1.2 below. A Microsoft Excel based '*Response template*' containing the questions was also provided to stakeholders.

3.1.1 Reform option questions for all stakeholders

The questions put to all stakeholders were a combination of general questions and specific questions relating to individual options. These questions are listed below.

General questions

1. In general do you **support** the package of reform options?
2. In general do you **not support** the package of reform options?
3. Do you think that the package of reform options will result in an increase or decrease in compliance costs for industry?
4. Do you think that the package of reform options will result in some benefits, and if so what sort? (e.g. financial, social or environmental)

Specific questions

5. Are there particular reforms you feel strongly about (either support or oppose)?
6. Are there likely to be significant barriers to any of the reform options? If so, then please outline the barriers.
7. Are you aware of similar reform options that have been implemented in other countries?
8. Over what timeframes should the reform options be implemented?
9. Do you have any additional comments?

3.1.2 Additional reform option questions for regulators

The following questions were put to the federal, state and territory departments and agencies.

10. Do you believe that the reform options align with the policy objectives of your state/territory?
11. For the reform options that you support please outline the types of costs and benefits.
12. For the changes you oppose please outline the types of costs and benefits.



3.2 Assessment criteria

The reform options have been uniformly assessed against the following descriptive and assessment criteria:

1. **Reform option description and context** – A detailed description of each reform option is provided, along with contextual detail on the option, which is primarily based on the extensive review of prior work undertaken for this project.
2. **Reform option regulatory status** – Reform options are categorised into: legislated, co-regulatory, quasi-regulatory, self-regulatory, non-regulatory and status quo. See Table 3 on the following page for descriptions of each of these reform option regulatory status types.
3. **Reform option purpose** – In line with the Australian Government Guide to Regulation (DPMC, 2014), a clear statement identifying and defining the problem that the reform option is trying to solve. See Table 4 on the following page for the list of reform option purposes used in this report.
4. **Does the option have broad stakeholder support?** – Summary statement of the consultation findings on support and opposition for the reform option.
5. **Are there significant barriers that realistically would prevent adoption?** – Summary statement of the consultation findings on barriers to the reform option.
6. **Potential for overall economic benefits**– Summary statement of the consultation findings of the economic costs and benefits, as well as consideration of the distribution of impacts. Is the reform likely to lead to overall net benefit to the community?
7. **Likely regulatory (financial) impact on industry**– Summary statement of the regulatory burden (industry costs), and consideration of if the reform likely to lead to a reduction in regulatory burden. Reducing the regulatory burden placed on industry is a key focus of government, and a key factor to be considered in the cost-benefit analysis (CBA).
8. **Implementation timeframe** – Summary of the consultation findings on implementation timeframes for the reform option. The implementation timeframe includes an allowance for early warning.
9. **Recommendation for inclusion in Cost Benefit Analysis** – Recommendation on further assessment of the reform options. Recommendation categories are:
 - *Assess* – Reform options with no significant barriers (assessment criterion 5), no net cost in relation to assessment criteria 6 and 7.
 - *Do not assess* – Reform options with a significant cost in relation to either assessment criteria 6 and 7, with no corresponding benefit to offset this.
 - *Do not assess (consider outside of a regulatory framework as a non-regulatory or quasi-regulatory reform)* – Non-regulatory or quasi-regulatory reform that can be pursued outside of a regulatory framework.

The consultation outcomes are presented in the following section of this report (Section 4), and each of the reform options is evaluated against the nine assessment criteria listed above in Section 7 of this report.



Table 3 – Reform option regulatory status descriptions

Reform option regulatory status	Description
Status quo	No change to regulation.
Non-regulatory	Non-regulatory reform options include a range of options such as: letting competitive market forces prevail; reducing information barriers through consultative mechanisms; and providing education programmes and information.
Self-regulatory	Self-regulation consists of industry-written rules and codes of conduct enforced by industry.
Quasi-regulatory	Quasi-regulation covers a wide range of rules or arrangements that are not part of explicit government regulation, but nevertheless seek to influence the behaviour of businesses, community organisations and individuals. They may be designed to accompany existing regulations but are also increasingly used as stand-alone documents. Examples include: standards, codes of practice/conduct, administrative process and any ruling document, or other piece of advice with an expectation of compliance.
Co-regulatory	Co-regulation is the sharing of the regulatory role between government and industry. It is usually affected through legislative reference or endorsement of a code of practice.
Legislated regulation	Legislated regulation comprises primary and subordinate legislation and is probably the most common form of regulation. Usually used as a regulatory tool where there is high perceived risk or public interest and achieving compliance is seen as critically important.

Table 4 – Defined list of reform option purposes

Reform option purposes
1. Correct an information gap or asymmetry.
2. Promote the environmentally sound management of hazardous wastes.
3. Address a competition failure by supporting a competitive market or managing a continuing monopoly situation.
4. Address a structural failure in the market.
5. Address the market inability to deliver a public good.
6. Address the existence of externalities in the market.
7. Improve Australian hazardous waste regulation and/or reduced red tape.
8. Harmonisation with other policy areas and creating a seamless national economy.



4 CONSULTATION OUTCOMES – GENERAL COMMENTS ON THE PACKAGE OF REFORM OPTIONS

The consultation questionnaire was designed to direct stakeholders to provide feedback on four general questions, as listed in Section 3.1.1. The responses to these four questions are provided over the following pages.

4.1 General **support** for the package of reform options

This question related to the overall direction of the 16 reform options (the “reform package”).

Respondents were supportive of the overall direction of the reform package, although one respondent commented that support was conditional on a review of its own legislation. A number of respondents gave reasoning for their support. No clear themes are apparent from these varied comments which included the following:

- Supportive of reforms that requires increased industry involvement (and cost sharing) associated with the recovery and disposal of hazardous waste (Confidential response).
- The reforms are able to deal with waste recovery and disposal at both ends of the supply chain i.e. local and international (Queensland Department of Environment and Heritage Protection).
- Simplifies compliance and reduces costs for waste recovery (Enirgi Metal Group Pty Ltd).
- Enables Australia to become a leader in the ‘safe and effective processing and treatment of hazardous waste’. (Veolia Australia and New Zealand).
- Prevents existing legislation from becoming ‘outmoded’ (Dodd & Dodd Group Pty Ltd).

With regard to the successful implementation of the reforms, one stakeholder indicated that the following would be required for successful reform:

- A ‘very long lead-time to get agreement’.
- That there is a role for the Commonwealth Government to resolve disputes and reduce information and capacity gaps.
- Mechanisms in place to ensure reforms are being implemented and duplication is avoided between jurisdictions.

4.2 General **non-support** for the package of reform options

While respondents were supportive of the overall direction of the reform package (see Section 4.1), some outlined particular concerns, these included:

- The domestic reforms don’t adequately take into account ‘the complexities and jurisdictional legislation’. There were concerns that a national code may prevent the evolution of jurisdictional codes (West Australian Department of Environmental Regulation).



- Need to ensure harmonisation doesn't result in 'lowest common denominator outcomes' and should be linked to specific waste streams to 'reduce the complexity of implementation' (Confidential response)
- Reforms should not allow the standards required to manage the export of hazardous waste to be lowered (Confidential response).
- While national consistency is admirable, it is important to respect state differences e.g. state levies and landfill bans (Queensland Department of Environment and Heritage Protection).
- Uncertainty with respect to who would bear the costs associated with the proposals e.g. costs of reporting and online data tracking (Confidential response).
- It will be necessary to have an increased focus on policing compliance (Dodd & Dodd Group).

Two respondents were concerned specifically with reform option d) (Adding a capacity to take economic efficiency into account). Enirgi Metal Group were particularly concerned with:

- the 'potential for economic distortion, created by government subsidies in overseas jurisdictions, to unfairly influence decisions on hazardous waste management and disposal in Australia.'
- economic efficiency (or more specifically productive efficiency in this case) should only be a secondary factor in determining Australia's international obligations on hazardous waste management, since countries can achieve lower costs by having lower environmental performance standards. Enirgi indicated that this was an appropriate argument to support Used Lead Acid Battery processing within Australia as opposed to offshoring Used Lead Acid Battery for recycling and disposal.

4.3 Do you think that the package of reform options will result in an increase or decrease in compliance costs for industry?

The majority of respondents indicated that the reform package would result in an increase in compliance costs for industry.

Two respondents (West Australian Department of Environmental Regulation and one confidential response) indicated that harmonisation of legislation should reduce compliance costs for industry.

However, another stakeholder confidentially indicated that the costs of regulation are currently being 'borne by Governments and society' and that reforms (i.e. price signals) should result in the 'least cost to society over time.' The Queensland Department of Environment and Heritage Protection was also considering cost recovery from industry as a way of recovering costs.

The South Australian EPA suggested that reforms should be 'structured and implemented' to ensure cost neutrality.

The Waste Management Association of Australia (Queensland Branch) indicated that it was appropriate that exporters of hazardous waste (who benefit from this activity), should bear higher compliance costs.



Dodd & Dodd Group indicated that it was not clear whether costs would increase or not.

4.4 Do you think that the package of reform options will result in some benefits, and if so what sort? (e.g. financial, social or environmental)

Some respondents indicated that there would be benefits associated with the reform package.

One stakeholder indicated that the reforms could provide 'environmental, social and economic benefits.' Environmental benefits included recycling of materials and reduced emissions over product life cycle. Social benefits included increased jobs in recycling and HSE quality assurance to ensure workers in those industries are not exploited or work in unsafe environments. Economic benefits included price signals that incorporate environmental externalities, which should result in reduced costs to society in the future.

The Queensland Department of Environment and Heritage Protection indicated that benefits should result from 'better monitoring and tracking of wastes movements and exports.'

The West Australian Department of Environmental Regulation indicated that there should be an 'environmental benefit, but there are elements that may not meet this objective.'

A government stakeholder confidentially stated that benefits should arise from an increased ability to meet international obligations (e.g. reporting and effective management) and that environmental and economic benefits should also arise from price signals helping to reduce the amount of hazardous waste produced and transported.

The Queensland Branch of WMAA indicated that the above benefits will only be realised through strong regulation and enforcement.

Dodd & Dodd Group Pty Ltd believe that the environmental benefits of the reform package will be large, while the financial benefits will be smaller. Positive attitudes towards recycling will help provide social benefits.

Veolia Australia and New Zealand emphasised that investment in hazardous waste treatment will provide economic benefits through job creation.



5 CONSULTATION OUTCOMES – THEME 1: INTERNATIONAL MOVEMENTS OF HAZARDOUS WASTES

Provided in this section of the report are the assessment and stakeholder consultation outcomes for reform options a) to f) that relate to international movements of hazardous wastes.

5.1 Option a) Power to require provision of information

Reform option description

Adding in (consistent with Customs regulation) a power to require the provision of information where needed to prevent breaches of the Act.

Context

This option is driven by the concern that the 'Act's information gathering and compliance powers have deficiencies. This makes it more difficult to investigate and prosecute offenders' (DoE, 2012, p. 35). With specific regard to this reform option, the Department of the Environment (DoE, 2012, p. 35) report states that:

Unlike more modern legislation, the Act does not allow the Minister to require a person to provide information or documents where the Minister reasonably believes this would assist in investigating or preventing a breach of the Act.

On a related note, the Act allows that seized evidence may be retained for 60 days, unless a prosecution is instituted within that period. This period may be too short for the required preliminary investigations.

Reform option regulatory status

This is a legislated reform option.

Reform option purpose

Correct an information gap or asymmetry.

Stakeholder feedback

This reform option was supported by all six of the stakeholders that commented on it. Comments in support of this reform option included:

- If information is required for the purposes of obtaining evidence of breaches of the Act, or ascertaining whether a material is hazardous or not, then these powers should be broader, such that documents from the top of the supply-chain could be obtained, i.e. from original waste producers, should they be (knowingly or unknowingly) using 3rd parties to export their waste (Confidential response).
- Agree whole heartedly – but it needs enforcement to be useful (Dodd & Dodd Group).



Barriers and implementation timeframe

No specific significant potential barriers raised to the adoption of this option.

Only one stakeholder proposed phase in periods for the reform option. Dodd & Dodd proposed advanced warning and implementation timeframes of 3 to 6 months each.

Recommendation

It is recommended that this reform option be assessed in the cost-benefit analysis.

5.2 Option b) Recognise bans imposed by other countries

Reform option description

Capacity to recognise bans imposed by other countries on hazardous waste imports.

Context

Some nations place bans on the importation of hazardous waste imports into their countries. The Act does not provide a mechanism for accepting and acting on these bans, and so does not prevent Australian hazardous waste being shipped to these countries, where the status upon arrival may be illegal acceptance or refusal to accept the shipment.

This mechanism will be of relevance to the situation where a country has banned the import of a hazardous waste and has not informed the Basel Convention of this listing. This issue particularly relates to hazardous wastes that are not listed under the Basel Convention, or are not listed by Australia as hazardous.

Enabling this reform option could include informing a potential exporter of (non-Basel) permit requirements, and notifying the recipient country of the proposed import, which can then consent or not.

Reform option regulatory status

This is either a legislated or quasi-regulatory reform option.

Reform option purpose

Promote the environmentally sound management of hazardous wastes.

Stakeholder feedback

Nine stakeholders commented on this reform option, with seven in support, and two in neither support nor opposition.

Comments in support of this reform option included:

- [We] don't think we currently have a framework for accepting bans in other countries, [and it can] be difficult to stop things leaving. Could impact on trade agreements (QLD DEHP).



- The EU Battery Directive restricts the use of mercury and cadmium in handheld batteries. The exemption for cadmium used in cordless power tool batteries will cease on 31 December 2016. We would support this being implemented in Australia as alternatives are available (lithium-ion).’ ABRI also noted that ‘there would be existing stocks of NiCad batteries in particular so industry would need a period of advanced notice (ABRI).
- [This] should assist Australia in ensuring that it acts responsibly in relation to its Basel Convention requirements (WMAA Queensland Branch).

Barriers and implementation timeframe

The most significant potential barriers raised to the adoption of this option are (i) potential conflicts with trade agreements and (ii) a method for assessing and accepting that an overseas ban is appropriate for Australian circumstances has yet to be developed. The duplication and overlapping requirements/approvals is a key source of red tape as it does not deliver a benefit and increases regulatory burden (often inconsistently).

Three stakeholders proposed phase in periods for the reform option. QLD DEHP proposed advanced warning of at least 18 months, and observed that a great deal of consultation will be required. ABRI and WMAA Queensland Branch both proposed advanced warning and implementation timeframes of 12 months each.

Recommendation

It is recommended that this reform option not be assessed in the cost-benefit analysis. Instead, the potential to deal with non-Basel-notified hazardous waste bans via the issue of evidentiary certificates or guidance documents should be investigated.

5.3 Option c) Updating compliance and enforcement provisions

Reform option description and context

Updating compliance and enforcement provisions, including to introduce civil penalties.

Context

The Department undertook a review of the Act in 2012 (DoE, 2012) that considered a number of possible amendments to the Act that relate to the area of this reform option. These include (DoE, 2012, p. 34–35):

- New ‘strict liability’ offences or comparable civil penalty provisions.
- Alleviate proof of a negative under the legislation when prosecuting.
- Introduce penalty infringement notices.
- Provide that the Minister may publicise contraventions

The report provides significant additional detail on these amendments. For example, with respect to civil penalty provisions the Department of the Environment found in its 2012 review of the Act (DoE,



2012, p. 34) that if civil penalty provisions were introduced, a power to accept enforceable undertakings could also be considered:

Enforceable undertakings are administrative settlements which may be accepted as alternatives to other enforcement action where a contravention of a civil penalty provision has taken place. They are written promises enforceable in court. Enforceable undertakings are an efficient way for regulators to ensure compliance, while avoiding the time and expense of court action. They have the additional benefits of supporting behaviour change and ongoing compliance.

The report (DoE, 2012, p. 35) also observes that the costs for the establishment and operation of a penalty infringement notice regime, or presumably other compliance and/or enforcement regimes can be considerable and require significant internal management systems.

It is also worth noting that there is a strong relationship between regulatory harmonisation (Section 6.7 reform option) and improving enforcement outcomes. A recent GHD (2015, p. 34) study undertaken for the Department found that harmonisation within environmental protection regulation also provided an opportunity to improve and harmonise approaches to enforcement:

Simplification of regulatory regimes, based on risk assessment, would both increase the perceived strategic importance of enforcement activity and potentially release resources that could be redeployed into enforcement. Thus a harmonised approach to enforcement is an important but longer term objective. Benefits include greater certainty and reduced costs for business and improved environmental outcomes.

Reform option regulatory status

This is a legislated reform option.

Reform option purpose

Improve Australian hazardous waste regulation and/or reduced red tape.

Stakeholder feedback

Nine stakeholders commented on this reform option, with eight in support, none in opposition, and one neither in support or opposition.

Comments in support of this reform option included:

- ABRI would support changes to the Act that are likely to improve the ability of the Commonwealth to enforce the Act. In particular we are concerned that illegal exports of used lead acid batteries are still happening (ABRI).
- [We] support the increase of penalties and enforcement for non-compliance and other related offences. Tough penalties should be imposed in order to effectively manage transboundary movements of hazardous waste. The Government should also tighten the requirements of permit applications, particularly in hazardous waste export (Confidential response).
- Strongly support. Provisions that reduce illegal exports, informal stockpiling and disposal to landfill are encouraged (Enirgi Metal Group).



- The weak and inconsistent enforcement of the *Hazardous Waste (Regulation of Exports and Imports) Act 1989* is a real issue. Hazardous wastes under the Basel Convention are routinely exported from Australia without the appropriate permits, and there is no effective deterrent currently available (Confidential response).

Another stakeholder was not in support or opposition to this reform option, but observed that:

- Having seen South Australia implement civil penalties, it must be noted that the process from legislation, through policy development, establishing guidelines, and final delivery of cases suited to civil penalties can take a number of years. Even then, to my understanding, <50% of cases in SA now are going through the civil route, where the majority of environmental offences still warrant 'standard' criminal procedures.

[The] implementation of the attempt provisions of the criminal code, which should be available without any legislative changes. To my understanding, this would enable cases where export hasn't yet occurred, and an offence under the strict wording of the legislation hasn't been committed, but has only been attempted. Better legal minds than mine would need to review this concept, but I strongly feel that division 11 of the Criminal Code would readily apply to the legislation already, and could provide an opportunity for the department to bolster its enforcement activities in this area (Confidential response).

Barriers and implementation timeframe

There were no significant potential barriers raised to the adoption of this option.

None of the stakeholders proposed phase in periods for the reform option.

Recommendation

It is recommended that this reform option be assessed in the cost-benefit analysis.

5.4 Option d) Taking economic efficiency into account

Reform option description

Adding a capacity to take economic efficiency into account when comparing the efficiency of different recovery and recycling options of equivalent environmental and safety benefit.

Context

Current policy, as implemented through the Act and Regulations, favours treatment of hazardous wastes for recovery within Australia, where appropriate domestic capacity exists. While under the Basel Convention, as applied by other OECD countries, domestic preference settings generally apply only in respect of treatment in developing countries. The adoption of this reform option would likely result in overall economic benefits while reducing domestic processing.

While it was presented to stakeholders in terms of 'economic efficiency', it was generally interpreted that this reform option would entail the amendment of the Act and Regulations such that the existence or otherwise of domestic processing capacity would no longer be a consideration in assessing applications, however that the requirement for environmentally sound management requirements for export permits would be unaffected.



The type and extent of any changes to domestic preference settings are at an early stage of consideration, and may be informed by financial information, such as comparative gate fees, in any assessment of overall economic efficiency.

To provide some context on the potential economic benefit of this reform option, the 2013 GHD cost-benefit analysis for the Department found that removal of the domestic processing capacity test in the used lead acid batteries, cathode ray tube glass and sulphuric acid regeneration industries had a 'positive net present value, at a real discount rate of seven per cent, of AUD\$147 million and a benefit-cost ratio of 1.9.' (GHD, 2013, p. ii).

Furthermore, a recent Blue Environment, et al. (2015b, p. 73) study undertaken for the Department observed that:

As Australia's manufacturing sector slows, hazardous wastes commonly generated by manufacturing in Australia...are in decline. Across the country, industry reported falling amounts of hazardous manufacturing wastes sent for treatment. In some instances sharp declines were reported.

This project is focused on identifying where Australia's hazardous waste industry may become constrained over the next 20 years. Industry flagged that undersupply of wastes could cause infrastructure shortages due to closure of key infrastructure that may no longer be viable as demand falls for processing of key high volume wastes.

Note that the decline in generation of some forms of hazardous waste reported by industry is sector specific, and that Blue Environment, et al. (2015b, p. xi) projects that hazardous waste generation in Australia will increase from 5.7 million tonnes in 2013–14 to 9.9 million tonnes in 2033–34. This is an average growth rate of 2.8% per year across all sectors and hazardous waste material types.

Notwithstanding the findings of the GHD and Blue Environment reports above, this reform option generated strong views from many of the stakeholders, both in support and in opposition.

Reform option regulatory status

This is a legislated reform option.

Reform option purpose

Address a competition failure by supporting a competitive market or managing a continuing monopoly situation.

Stakeholder feedback

Sixteen stakeholders commented on this reform option, with seven in support and nine in opposition.

Comments in support of this reform option included:

- [We understood] that consideration of domestic processing is currently a policy position not a legislative requirement - but transparency would be good (QLD DEHP).
- Domestic capacity requirement has potential for misuse and monopoly pricing (Confidential response).



- There are often significant costs involved in battery recycling (transport and reprocessing) so economic efficiency should be taken into account. However, environmental and safety benefits of processing within Australia, rather than export, should be given priority over economic efficiency (ABRI).
- Critical and certainly should almost be guaranteed for exports to OECD countries (Dodd & Dodd Group).
- We agree in principle with this option on the proviso that 'economic efficiency' is solidly defined and not allowed to be openly interpreted (Southern Oil Refining Pty Ltd).
- Where environmental and safety benefits are truly equivalent, Veolia supports reforms that include practical measures to discourage waste generators inventing offshore markets which in reality do not deliver safe and environmental outcomes (Veolia).

Comments expressing concern or opposition to the reform option included:

- I do not support any change which would lower the bar to exporting hazardous waste without strong tracking of its ultimate fate (University of Technology Sydney).
- This proposal is getting into a policy grey-area for me personally, as I believe that the economics of the marketplace should drive the movement of goods and services, not government policy. I would further point out that the objective of the legislation, as specified in section 3 is solely focussed on managing waste in an environmentally sound manner, and protecting humans and the environment. To put economic efficiency into the legislation would therefore seem to be outside the remit of the Act as it stands, and would need broader changes to the raw objectives of the legislation (Confidential response).
- Should only consider the environmental and safety outcome. Is this a policy or a legislative barrier? Loosening the criteria is a good thing but could be less specific. Increasing the permit costs may reduce competitiveness of exports (WA DER).
- [We] oppose this reform as it will potentially undermine the entire *Hazardous Waste (Regulation of Exports and Imports) Act 1989* and the resource recovery industry, particularly in the waste oil sector (Confidential response).
- Too high a weighting on the economic benefit of transporting hazardous waste internationally will further limit business investment in Australia that would otherwise treat hazardous wastes within the country (WMAA Queensland Branch).
- We are concerned that this option will result in the cheapest, barely acceptable fate being the management end-point, with environmental benefits potentially based on dubious numbers. Processing and changing the form of hazardous waste can be inherently expensive with high capital costs. The risks of shipping should also be considered (Confidential response).
- Strongly object - Whilst economic efficiency could be considered, the potential for economic distortion due to government subsidies in some foreign jurisdictions is evident. Issues of economic efficiency should be discounted when considering overseas recovery and recycling options of comparable environmental and safety benefit to available solutions in Australia that remove the need for trans boundary movements of waste (Enirgi Metal Group).



- Strongly oppose – To remain consistent with the principle aims of the Basel Convention, the environmentally sound management of hazardous waste must remain at the core of any decision making process (Confidential response).

Barriers and implementation timeframe

The significant potential barriers raised to the adoption of this option were in relation to addressing the ambiguity with respect to assessment of economic efficiency, and ensuring that overseas treatment facilities were of a suitably high standard, as is currently managed under the Act.

Only one stakeholder proposed phase in periods for the reform option. WMAA Qld Branch proposed advanced warning of three years, and an implementation timeframe of three years, to allow sufficient time for local industry to adjust.

Recommendation

It is recommended that this reform option be assessed in the cost-benefit analysis.

5.5 Option e) Updating cost recovery arrangements

Reform option description

Updated cost recovery arrangements, including possible weight-based charging

Context

Currently the fees charged for evaluating and approving and renewing hazardous waste export permits are well below the costs incurred by government.

The intent of this reform option is to set charges to recover all the costs of a product or service where it is efficient and effective to do so, where the beneficiaries are a narrow and identifiable group and where charging is consistent with Australian Government policy objectives (DSEWPaC, 2011, p. 4).

The Department has undertaken significant prior work in considering the need and nature of these changes, with the Department completing a Cost Recovery Implementation Statement (CRIS) in 2011 (DSEWPaC, 2011), and recently commissioning The Centre for International Economics (TheCIE) to undertake an updated CRIS (DoE, 2015). The update was required as the Department's CRIS was only applicable for the 2012–2014 period, and the Department of Finance also released a new set of Cost Recovery Guidelines in July 2014.

The latest CRIS report estimated that the Government's 2014 cost recovery for activities in relation to hazardous waste permits, which was dominated by costs related to processing new applications or varying/renewing existing permits, was around 5.5 per cent of the total costs incurred by the hazardous waste permitting team (DoE, 2015, p. 10).

The current fees were initially introduced in 1990 (The Regulations, 1990) and revised in 1996 and were based on average public service salary rates applicable at that time (\$53 per hour). The fees have not been changed since 1996, and have a maximum total cap of \$8,000 prescribed in the Act. The fees were initially set with the knowledge that they would only achieve partial cost recovery, but



that they were unlikely to inhibit the regulatory objective, which might occur if the full costs of regulation were charged. (DSEWPaC, 2011, p. 10).

In relation to the question of the achievement of regulatory objectives if the full costs of regulation are charged, the recent DoE (2015, p. 27) study concluded that:

The consultation process highlighted some circumstances where higher fees (based on full cost recovery) could contribute to adverse environmental outcomes, which would be inconsistent with the overarching policy objectives...Nevertheless, these adverse environmental outcomes are likely to occur in a relatively low proportion of cases. The efficiency benefits outlined above should therefore outweigh these costs.

The DoE report (2015, p. 27) recommends that ‘the costs incurred by the Commonwealth Government that can be directly linked to specific applications should be recovered through cost reflective charges.’ There is a two part fee structure proposed, with annual increases indexed to the Consumer Price Index (CPI). The fee structure consists of a fixed fee component, which is dependent on the type of permit (varying from \$6,001–\$42,072 per permit in 2017, excluding the re-lodgement fee), and a variable fee component based on the weight of the hazardous waste shipment (\$2 per tonne in 2017) (DoE, 2015, p. 28).

Reform option regulatory status

This is a legislated reform option.

Reform option purpose

Improve Australian hazardous waste regulation and/or reduced red tape.

Stakeholder feedback

Eight respondents supported this reform proposal, and two indicated opposition. Specific comments in support included:

- Current arrangements are meeting a fraction of costs. There would be value in more appropriately matching true costs of service to users, and accurate costs of waste removal to inform producers so as to minimise production (Confidential response).
- Full cost recovery on export permit applications with extra built in to fund resources for auditing, investigation and enforcement action is supported (Confidential response).
- [Our jurisdiction] is moving to cost recovery and if the Commonwealth is recovering the true cost of import/export permits then the cost should include state/territory costs (Confidential response).
- [Cost recovery] provides further incentive to develop options for treatment in Australia and is in line with the ‘User Pays’ principle in terms of the cost of administration/licensing/enforcement (WMAA Queensland Branch).
- New applications should be assessed and charged differently from renewals (same product to the same destination) (Dodd & Dodd Group).

Points made in opposition were:

- This [reform] may provide less responsible operators with an incentive not to apply for an export permit, i.e. to export waste products for recycling without a permit. The administrative cost of applying for a permit is already very high. Increasing fees and charges will increase total costs (ABRI).
- I don't believe that the introduction of a weight-based charging would be appropriate, as I don't believe that the costs incurred by the department are proportional to the volumes of wastes involved in the application, but rather the type of waste, the destination country, the final fate (destruction vs recycling), and the number of transit countries (Confidential response).

Barriers and implementation timeframe

The most significant potential barrier to this reform option is the potential incentive to illegally export hazardous wastes without an export permit, to increase hazardous waste disposed to landfill, and to store hazardous wastes.

Only one stakeholder proposed a phase in period for the reform option. WMAA Queensland Branch suggested advanced warning of at least three years.

Recommendation

It is recommended that this reform option be assessed in the cost-benefit analysis.

5.6 Option f) Increased transparency on the operations of the Act

Reform option description

Increased transparency on the operations of the Act, in particular increased communications on import and export applications, and the issuing of permits.

Context

The Department of the Environment's 2012 review of the Act and Regulations found that (2012, p. 43):

The Act requires the publication of certain particulars in the Government Notices Gazette, including the particulars of each application received and each permit granted, not granted, revoked, surrendered or varied. It would be more efficient, in officer time and cost, if this requirement were amended to require publication on the Department's website. It would also be more convenient for applicants and other interested parties to be able to access all material concerning permits on the Department's website.

The Department's report proposed amending the Act to remove the requirement to publish notices in the Gazette, and allow notices to be published on the Department's website.

The reform option was described in quite general terms to stakeholders in the round of consultation undertaken for this report, and a range of interpretations and responses were received, all of which were supportive of reviewing and updating communications on the operations of the Act.



Reform option regulatory status

This is a quasi-regulatory reform option.

Reform option purpose

Improve Australian hazardous waste regulation and/or reduced red tape.

Stakeholder feedback

Nine stakeholders commented on this reform option with all in support.

The QLD DEHP would like to see increased transparency on export permit applications and the finer detail on what should get a permit or not, as well as information on operational definitions of what constitutes a hazardous waste versus a strict interpretation of the Act and Regulations.

Other comments in support included:

- We used to see information and requests coming from the Commonwealth however this seems to have reduced in recent years. Foreshadowing of upcoming restrictions to exports and imports would also be of interest. Also of interest would be a more formalised information sharing arrangement for when a [locally] sourced export permit application is received, with the objective of giving [our jurisdiction] an opportunity to influence the fate of the hazardous waste. Working groups or a 6-monthly communiqué could be options for facilitating this option (Confidential response).
- There needs to be [improved] transparency to help applicants and objectors to understand the decision making process (ABRI).
- My history to date with department has been very good in terms of transparency and communication, though at times advice could be clearer as I have encountered differing advice from person to person. If there were areas where improvements could be made, I would suggest more guidance on 'what is hazardous waste vs non-hazardous waste', akin to the MW2 and MW3 guidance from the UK, and some clarity regarding the Department's interpretation of the date of 'receiving and application' in s15A (Confidential response). This stakeholder also commended the Department for placing on its website a concise list of approvals and application for 2015, which was seen as a great improvement on having to interrogate the ComLaw database.
- Strongly support [this reform option]. Greater transparency on the day-to-day operations of the Act is missing and would be of value to stakeholders such as [our organisation]. There seems to be diminishing transparency on export and import applications, with no mechanism for scrutiny except for the Gazettes (Confidential response).
- Probably the highest priority change proposed. Some past decisions on export licences appear inconsistent. The focus of all assessments should be environmental outcomes. (Dodd & Dodd Group).

Barriers and implementation timeframe

This reform option requires some improved detail on its methods for increased transparency. For this project it is assumed to be limited to the Department's proposal to amend the Act to remove the



requirement to publish notices in the Gazette and allow notices to be published on the Department's website.

A potential barrier/challenge may arise with respect to managing commercial confidentiality aspects if publishing the reasons for permit decisions.

No requirement for either advanced warning or an implementation timeframe were proposed for this option.

Recommendation

This is a quasi-regulatory reform option, and for this reason is it not recommended for assessment in the cost-benefit analysis. It is recommended that it be pursued as a non-regulatory reform.



6 CONSULTATION OUTCOMES – THEME 2: AUSTRALIA'S GENERATION AND MANAGEMENT OF HAZARDOUS WASTES

Provided in this section of the report are the assessment and stakeholder consultation outcomes for those reform options to improve Australia's domestic management of hazardous waste.

6.1 Option g) Information on hazardous waste infrastructure

Reform option description

Provision of national information on the capacity of, and needs for, hazardous waste infrastructure in Australia, on an ongoing basis.

Context

This could include the establishment of an *Australian Recycling Capacity Register* where recyclers would register their capacity, and also outline their technologies, volume and processing capabilities. To ensure that the infrastructure information is comprehensive and of an acceptable quality the disclosure of information by recyclers may be mandatory. This information would also assist in assessing the export permits with regards to the availability and sufficiency of domestic processing capacity.

The need for improving information in this area is highlighted in the recent Blue Environment, et al. report (2015b, p. 105) which concluded:

The arisings of hazardous waste are influenced by industrial markets, development activities, social licences, government regulations and technological innovations that are all unpredictable. The infrastructure servicing this waste is difficult to characterise, changeable and information on its activities is limited and hard to obtain.

The Blue Environment, et al. (2015b) recommendation arising from this conclusion is that 'DoE should work with the jurisdictions to improve hazardous waste tracking system data so that fate is consistently recorded and categorised.' This recommendation is consistent with the underlying purpose of reform option g).

Reform option regulatory status

This is either a legislated or quasi-regulatory reform option.

Reform option purpose

Correct an information gap.

Stakeholder feedback

Fourteen respondents indicated a degree of support for this reform proposal and one indicated opposition. Specific comments in support included:



- While information is available from state-based licensing databases, it is incomplete in some regions (QLD) and that consolidation into a national database would be useful (Confidential response).
- Would support the development of infrastructure in the medium term, but in the longer term would support 'product stewardship related activities'. A national database would help to provide a state level view in time (Confidential response).
- In principle, such information would be useful but needs to be assessed against the cost of maintaining it. Should the Commonwealth propose to investigate this proposal further, it should gauge the level of interest from industry (and perhaps its willingness to provide financial support), assess the extent to which the information could draw on data obtained for other purposes and undertake a cost-benefit analysis (Confidential response).
- This information is important to identify investment priorities and could be updated every 5 years (Australian Battery Recycling Initiative).
- Information could be updated annually (Veolia Australia and New Zealand).
- That the development of a domestic waste treatment facilities (especially for POPs) is important and that Australia (a developed country) should adhere to the 'proximity principle' (Confidential response).

WA DER did not agree with this option. It adopted the laissez-faire position that the market (or industry) will know if there is demand for waste processing and will develop facilities accordingly. They argued that the role of the Government should be in the planning and approvals of these facilities, not promoting waste processing.

Barriers and implementation timeframe

The WMAA Queensland Branch indicated that this reform option will only be successful if there is a regulatory requirement for waste facility operators to provide the data. This is due to the reluctance of many operators to undertake reporting.

Another stakeholder confidentially suggested that that overseas facilities may achieve more significant economies of scale than domestic facilities and that domestic waste treatment may result in 'exorbitant' costs for Australia's manufacturing sector.

The WMAA Queensland Branch indicated that this reform could be implemented over 12 months.

Recommendation

It is recommended that this reform option be assessed in the cost-benefit analysis.



6.2 Option h) Information on hazardous waste generation and management

Reform option description

Provision of regular and timely public reporting on hazardous waste generation and management in Australia. This reporting could also capture public interest aspects such as the industrial activities generating hazardous wastes, new infrastructure, or noteworthy hazardous waste minimisation achievements.

Context

The Commonwealth does not currently have any regulatory role in relation to reporting of hazardous waste generation transport or disposal. This reform option would provide a head of power to require regular and timely public reporting on hazardous waste generation and management.

There are a series of hazardous waste data related reforms that are identified across two recent Blue Environment, et al. (2015a, p. 77; 2014, p. 17) reports completed for the Department that provide context on the underlying purposes of this reform option. A compiled summary of these recommendations is:

- *Adopt the 75 NEPM code classification system as a national framework for collecting, collating and reporting on hazardous waste in Australia.*
- *Consider mechanisms for obtaining ongoing data on the fate of hazardous wastes in order to eliminate the discrepancies between the data presented for Basel and the proposed National Waste Data System.*
- *Align the data collection task and reporting timeframes with those of the proposed National Waste Data System.*
- *Examine the potential to combine the data collection tasks for the Basel Convention and the Controlled Waste NEPM.*
- *Conduct further investigation into the key waste stream issues of contaminated soils and asbestos, to address clear deficiencies in their data recording and tracking.*
- *Investigate the feasibility, effort requirement, accuracy of, and extent to which any commercial confidentiality could be breached if jurisdictions provided generation data by ANZSIC code.*

Another potential focus of this reform option includes the broader communication of public interest aspects such as changes to Australian processes and systems for managing hazardous waste, as well as information on the generation of hazardous waste and the environmental impacts of hazardous waste.

Reform option regulatory status

This is a legislated, quasi-regulatory or non-regulatory reform option.

Reform option purpose

Correct an information gap.



Stakeholder feedback

Nine respondents indicated support for this reform option, three indicated opposition, and one stakeholder commented that further assessment is required to establish the need for this reform.

Comments made in support of the reform appeared to align to a theme of improved transparency and better information for decision makers. Some specific comments were:

- better data and tracking of hazardous waste (University of Technology Sydney).
- increased transparency across the entire hazardous product supply chain from 'cradle to grave' - useful data for decision makers (Confidential response).
- Federal regulators/administrators have a good grip on the international context for hazardous waste, and an increased role to play in communicating this context to state/territory regulators (Confidential response).

Points made in opposition were:

- Increase in reporting (Australian Vinyls Corporation).
- Potential overlap and duplication with state level reporting (Confidential response and Australian Vinyl Corporation).
- Concerns about information being used in public interest disputes and exposing commercial confidentiality (Veolia Australia and New Zealand).

The stakeholder that was not directly in support or opposition to this reform option observed that:

- Noting that some information on hazardous waste is already available through the annual Controlled Waste NEPM reports and transfers reported on the NPI, identification of the public data gaps proposed to be filled by this proposals is needed to enable its merits to be assessed. In principle, [our organisation] supports the increased provision of information to the public and is planning to upgrade its public register to provide more information about hazardous waste (Confidential response).

Barriers and implementation timeframe

The most significant potential barriers raised were around the release of commercially sensitive information, the risk of an increased burden of reporting for industry, and the related issue of potential overlap between the reporting requirements of jurisdictions. It is worth noting however that concerns about duplication with state/territory data collection and reporting need to be put in the context that, in general, the jurisdictions do not publicly report hazardous waste data.

None of the stakeholders proposed any timeframes for this reform option.

Recommendation

It is recommended that this reform option is approached as a non-regulatory reform for the foreseeable future, and for this reason is it not recommended for assessment in the cost-benefit analysis. It should be pursued further outside of a regulatory framework.



6.3 Option i) Power to establish agreements targeting particular wastes

Reform option description

A power to establish a statutory covenant or similar agreement for dealing with particular wastes (e.g. an agreement with legal status to phase out of stocks of spent pot linings, via domestic and international facilities).

Context

The reform seeks to bring about a legal power to establish a legal agreement for dealing with particular wastes of concern.

The example of spent pot linings was highlighted in a recent report for the Commonwealth (Blue Environment, et al., 2015b, p. 73), which stated:

Industry estimates around 900,000 tonnes of spent potlining – a waste from aluminium smelting – are in stored in stockpiles across Australia. As the aluminium industry slows in Australia there is a risk that funding to treat/recycle these stockpiles becomes unavailable and the stockpiles become a legacy waste without funding for recovery.

The Blue Environment, et al. (2015b, p. 104–112) report also identified potential reprocessing and treatment capacity shortfall risks, either existing currently or projected in the next decade or so, for:

- hazardous waste contaminated packaging
- waste oil re-refining capacity
- waste solvents/paints
- hazardous waste organics
- clinical waste treatment and thermal destruction
- POPs thermal destruction.

Reform option regulatory status

This is a co-regulatory reform option.

Reform option purpose

Address the market inability to deliver a public good.

Stakeholder feedback

Eight respondents indicated support for this reform option while three indicated a degree of concern, though not specific opposition.

Some specific comments in support were:

- [This is a] great 1st step in identifying problematic wastes, and taking an outcomes-focussed approach to dealing with the issue (Confidential response).



- Will enable prioritisation of stockpiles and responsible management [such as the] Orica HCB waste stockpile (Confidential response).
- If properly formulated this should provide clear long term direction on the handling of particular wastes (WMAA Queensland Branch).

Comments raising concerns included:

- A strong and transparent case would need to be made for the Commonwealth to involve itself in State matters (CRC CARE).
- Legislation already exists in [our jurisdiction] to impose conditions on specific hazardous wastes, including the phase out a particular waste stream. [Our organisation] believes that existing legislation should be used if at all possible to deal with specific hazardous waste issues. Any proposal to introduce additional powers should be subject to a rigorous assessment to ensure that it does not cause duplication in an already complex regulatory environment (Confidential response).

Some respondents sought to guide the direction or scope of the proposed reform – such as:

- The statutory covenant should be industry-led (Confidential response).
- Not applicable to used lead acid batteries (Enirgi Metal Group).
- Agree in principal with this option on the proviso that any covenant does not contradict existing legislation (Southern Oil Refining).

Barriers and implementation timeframe

The WMAA Queensland Branch identified the current ambiguity around definitions as a potential barrier to this reform option.

The WMAA Queensland Branch commented that the reform should be implemented within a three year timeframe and that it should be developed in conjunction with product stewardship advances, i.e., where hazardous wastes are generated as the result of activities in Australia, the manufacturer/importer should bear some costs associated with treatment and/or disposal.

Recommendation

It is recommended that this reform option be assessed in the cost-benefit analysis.

6.4 Option j) Nationally consistent arrangement on hazardous waste data collection and reporting

Reform option description

An agreed, nationally-consistent arrangement for hazardous waste data collection and reporting, based on consistent definitions and classifications, aligned with data and reporting arrangements for non-hazardous wastes, and international hazardous waste classifications (e.g. Basel Convention).



Context

In terms of the underlying rationale and purpose of this reform option, a recent GHD study on the transport and environmental regulation of waste consulted with a wide range of stakeholders, with the following findings (GHD, 2015, p. 24):

Industry respondents considered that the existence of multiple jurisdiction-specific waste tracking regimes, each with its own waste classifications, codes and administrative requirements, complicated their operations and added to the cost of doing business. National businesses must liaise with the 'NEPM expert' in each jurisdiction and company information systems need to pick up each jurisdiction's set of NEPM codes.

And furthermore that:

Government regulators were highly aware of the limitations of existing arrangements for industry [and] while each jurisdiction has full information on hazardous waste transported into the jurisdiction, it can be prohibitively difficult to gain comparable information on hazardous waste leaving the jurisdiction – because of the number of jurisdictions, as well as possible hazardous versus non-hazardous classification differences in the other jurisdiction. One consequence is the additional difficulty in monitoring hazardous waste stockpiles.

Industry considers that the appropriate solution is to classify hazardous wastes uniformly and consistently, based on harm to the environment and the controls needed. A single system is required, integrating intra-jurisdictional and international (import/export), as well as inter-jurisdictional tracking. Given existing jurisdiction differences, regulators consider that national leadership would be needed to address the issue.

This finding is supported by a series of findings in a recent Blue Environment, et al. report also undertaken for the Department that (2015a, p. 74):

- *Differences in jurisdictional approaches to hazardous waste management adversely affect data quality.*
- *Jurisdictional fate categories are inconsistent and inadequate for national analysis.*
- *Significant tracking certificate errors exist in tracking data.*
- *Large volumes of problem wastes are 'hidden' outside of tracking systems.*

As part of the solution to this issue, a previous Blue Environment, et al. (2014) study strongly recommended that the Commonwealth and jurisdictions adopt the 75 NEPM code classification system as a national framework for collecting, collating and reporting on hazardous waste in Australia (Blue Environment, et al., 2014, p. v). The report also observed that (2014, p. iii):

DoE has flagged multiple areas where compliance with Basel requirements can be improved, including: improvements to timeliness, completeness, consistency, accuracy, verifiability and generally meeting common principles of data quality.

The adoption of this reform option is likely to provide significant support to improving Basel reporting compliance and quality.



Adding to these recommendations and findings, the GHD report found that (GHD, 2015, p. 33):

Development of a consistent set of codes and definitions is feasible, given strong national leadership aimed at developing and implementing either a model code (no legal force) or a set of national law. Jurisdictions would need to agree, based on risk to the environment and to human health, on what is hazardous and what is non-hazardous, including all questions of thresholds.

Benefits are potentially substantial, including cost savings for industry and government, increased incentive to establish or expand a national scale of operations and improved environmental outcomes.

As some final context, a recent Hyder Consulting study undertaken for the Department found that an estimated '98% of hazardous waste in Australia is generated, transported and disposed or treated within a single state or territory' (Hyder Consulting, 2015, p. 1).

Reform option regulatory status

This is a quasi-regulatory reform option.

Reform option purpose

Correct an information gap.

Stakeholder feedback

Twelve respondents indicated support for this reform option while five indicated opposition.

Comments in support of this reform option included:

- I support reform options in relation to gathering better data and tracking of hazardous waste (University of Technology Sydney).
- For about 15 years I've monitored the discrepancies between state-based waste classification with a mixture of surprise, anger and resignation at the way simple aspects such as waste codes can be made confusing. As an objective, I whole-heartedly agree that all States should agree to use the same codes, UN numbers etc. for waste tracking, and have consistent methodologies for classification of wastes by contamination (Confidential response).
- This option is supported. Getting classification agreement will be very time-consuming but is necessary. [We] need a common set of principles to improve administrative efficiency and consistency between jurisdictions and avoid less favourable environmental outcomes due to interstate HW transfers (Confidential response).
- [Our organisation] would be happy to participate in a project to improve national uniformity around waste tracking and data collection that is consistent with a risk-based approach to regulation and data reporting requirements that are consistent with minimising red tape (e.g. no double reporting, no requirement for data in more detail than is required) (Confidential response).
- This would improve the quality of data and ease the regulatory burden for industry. At present lead acid batteries, for example, are classified several different wastes in different jurisdictions. Classifications under the NEPM for the Movement of Controlled wastes are also ambiguous (ABRI).



- [Our organisation] supports the development of an agreed nationally consistent arrangement for hazardous waste data collection and reporting system, based on consistent definitions and classifications. The definitions and the distinction between waste and product should be tightened as some rogue hazardous waste generators claim their waste as a 'product' to avoid getting an export permit to export their waste overseas (Confidential response).
- Strongly support. For example, mercury use and management needs to be assessed across the board in Australia to ensure our classification systems are harmonised with the Minamata Convention on Mercury (Confidential response).
- State government tracking requirements are expensive in relation to small collections of batteries from numerous locations (Dodd & Dodd Group).

Opposition ranged from general concerns related to increase reporting burdens, through to stronger direct opposition. These comments are summarised as follows:

- Getting the states to agree will be difficult. Would potentially be a NEPM change. 90% of it is already consistent. Would be long [exercise] – NEPMs took years, packaging took ~5 years. There is always a risk that there is additional costs imposed on state and local government by Commonwealth reforms (QLD DEHP).
- [Strongly opposed] if it is to be a separate system [that] creates more reporting when the data is already available via the Prescribed and Controlled Waste tracking that happens in each of the states. It would be more appropriate for state agencies to work together to have compatible system or feed into a national system and adjust classifications in these systems (Australian Vinyls Corporation).
- There is a risk that this will make the current WA system redundant. Would be happy for there to be an overlay - but not for it to replace the current system. Definitions is a fraught areas due to different definitions used in differing jurisdictions. WA amended its controlled wastes regulations last year to improve terminology within WA. We have spent close to \$1m on the current system. So [great concern that] changing the system may lose a lot of those benefits (WA DER).
- Southern Oil Refining Pty Ltd comment: Waste facilities are subject to a large amount of reporting at the state and federal level. While this reporting often covers the same information, the differing detail requires separate working in each case. An additional reporting burden should not be imposed upon waste facilities (Southern Oil Refining).
- [This reform option] may be reaching for the unreachable goal. Without having worked in a federal capacity, I can only assume that bringing all the states together and obtaining consensus agreement on a unified approach to waste classification would be akin to solving the conflict in the Middle East.' (Confidential response).

Barriers and implementation timeframe

The most significant potential barrier is the challenges of determining and articulating the potential benefits of this reform option (to all stakeholders), while working within the needs, capabilities and existing classifications and tracking systems of the states and territories.



The recent Hyder Consulting study undertaken for the Department on the *Feasibility of national system for tracking controlled wastes* found that there were 'mixed government views on the balance in hazardous waste tracking between its core regulatory role and the provision of data to inform policy', and that in 'general there was greater acceptance of a national role around tracking interstate movements than there was for intrastate movements' (Hyder Consulting, 2015, p. 1). This is consistent with the stakeholder feedback provided for this report.

Depending on the nature of this reform option, QLD DEHP proposes an implementation timeframe of 5 years. WA DER was not specific, but indicated that a long lead-in period would be required. Another stakeholder confidentially estimated the implementation timeframe for harmonisation reform options will be 5–10 years.

Recommendation

This is a quasi-regulatory reform option, and for this reason is it not recommended for assessment in the cost-benefit analysis. It is recommended that it be pursued as a non-regulatory reform.

6.5 Option k) Powers to establish and maintain hazardous waste facilities

Reform option description

Powers consistent with those in radioactive waste legislation for the establishment and maintenance of hazardous waste processing or treatment facilities. The selection criteria for the preferred processing technologies should have due consideration of the waste hierarchy.

Context

The rationale for updating the Act is summarised in recent Blue Environment (2015b, p. 74) study that was undertaken for the Department, finding that:

Hazardous waste infrastructure is often capital intensive and as a result relies on a regulatory framework that supports recovery/treatment more than non-hazardous waste infrastructure. In addition, hazardous waste is less consistently generated than non-hazardous wastes such as household waste so investments carry a higher risk and are less secure.

This is particularly the case for relatively low volume and high hazard wastes, such as persistent organic pollutants (POPs), for which current processing infrastructure capacity is probably already far too low, and the future capacity requirement is even higher. The Blue Environment, et al. (2015b, p. xxiv) report found that the 'ratification of the new Stockholm POPs could massively increase the demand on capacity that already appears to be inadequate for the estimated current generation of POP wastes'. In addition, the size of this future demand is highly uncertain, further undermining commercial interest in timely and appropriately scaled investment in new infrastructure for these types of hazardous wastes.

Based on the historical and likely future gaps in hazardous waste recovery/treatment infrastructure, the economic challenges in this area, and the high environmental health cost of inappropriate management, there is a prima facie case for government intervention in this area.



Reform option regulatory status

This is a legislated reform option.

Reform option purpose

Address the Australian market inability to deliver a public good.

Stakeholder feedback

Seven respondents indicated support for this reform option, five indicated opposition, and two were neutral.

Comments in support of this reform option included:

- We should explore opportunities for Australian innovation, arising from waste reprocessing rather than exporting (University of Technology Sydney).
- Australia needs to develop domestic hazardous waste treatment facilities for POPs waste based on non-incineration technology. There are a range of commercially available non-combustion technologies...The emphasis should be on avoidance, and treatment costs should be at a level that doesn't encourage hazardous waste generation (Confidential response).
- Not sure that investment in such facilities would be feasible given the geographic spread of waste generation and relatively small volumes (Dodd & Dodd Group).
- We strongly support powers establishing a selection criterion that has focus on the waste hierarchy when selecting preferred processing technologies (Southern Oil Refining Pty Ltd).

Comments expressing concern or opposition to the reform option included:

- The waste hierarchy is much too simplistic to appropriately inform the management of hazardous waste. Designing appropriate product stewardship scheme will require HSE risk analysis over the cradle to grave product chain, life cycle assessment, and financial CBA. (Confidential response).
- Given the continuing absence of a national repository for radioactive waste and the failure of attempts late last century to establish a high temperature hazardous waste incinerator in Australia, a strong case would need to be put as to why any new proposed powers would have a better chance of success. In any event, any proposal to establish new regulatory powers would need to establish a clear need for such powers and be subject to a rigorous cost-benefit analysis (Confidential response).
- Veolia supports reforms that create confidence in Industry to invest in hazardous waste processing or treatment facilities. Veolia's experience is that a market driven approach is more effective (Veolia).



- The intent behind this proposed measure is unclear, as Radiation legislation and Hazardous Waste legislation are very different in that State-based Radiation legislations do not have the ability to allow/license radioactive waste treatment facilities, which (to my understanding) was agreed to be a federal function. For hazardous waste treatment however, every state has its own legislated power to licence hazardous waste treatment facilities, and the introduction of federal law with a similar intent to the states may cause a constitutional issue of who has the power/duty to control these activities (Confidential response).

One stakeholder was not directly in support or opposition to this reform option, but observed that:

- It is worth investigating...[however] must be assessed with significant consultation with impacted stakeholders. A national level hazardous waste infrastructure strategy would be useful as the relatively small quantities of specific hazardous wastes at a state level can be too low to attract industry interest in new facilities. National scale facilities may improve facility viability and business interest... Chemical toxicity should be a significant criteria in setting priorities (Confidential response).

This stakeholder also posed the following questions:

- Would the sites be on Commonwealth property or become Commonwealth property?
- How does the Commonwealth identify if new facilities have been built providing for new local reprocessing capacity?

Barriers and implementation timeframe

The most significant barriers or issues raised to the adoption of this reform option relate to concerns relating to the Commonwealth interfering with market-led solutions, and that chemical environmental and health hazard should a key assessment criteria.

None of the stakeholders proposed an implementation timeframe for this reform option.

Recommendation

It is recommended that this reform option be assessed in the cost-benefit analysis.



6.6 Option I) Nationally consistent system for tracking hazardous waste movements

Reform option description

National consistency of tracking systems for movements of controlled (hazardous) wastes, covering inter and intra-state movements.

Context

In relation to this reform option the key national initiative is the National Environment Protection (Movement of Controlled Waste between States and Territories) Measure (the NEPM), which commenced in 1998. The NEPM manages the interstate movement of controlled wastes, and established 75 categories of hazardous waste. A separate agreement between the states requires them to report waste tonnages moved across borders against 15 broad categories (not the 75 in the NEPM itself).

Reproduced here are two of the key findings in the recently completed Hyder Consulting (2015, p. 1–2) study undertaken for the Department that are relevant to the context and purpose of this reform option:

Mixed government views on the balance in hazardous waste tracking between its core regulatory role and the provision of data to inform policy. Regulators' perspectives on the appropriate role(s) of the tracking regime were highly influential in determining the level of acceptance about the need for a national dataset and around willingness to change existing regimes. In general there was greater acceptance of a national role around tracking interstate movements than there was for intrastate movements, which remain the concern of a single regulator. Other key issues were green tape reduction, competing funding priorities and the potential win/loss of landfill levy revenue.

Strong waste industry support for a consistent national tracking system that goes beyond data to include waste codes, approvals timelines and other operational rules. The unanimous industry support for reform speaks of a general frustration with the current plethora of systems and a clear sense of the benefits of consistency. These include reduced regulatory burden, optimised in-house management and billing systems, reduced waste contractor confusion and levelling the competitive playing field by closing loopholes in tracking schemes.

Reform option regulatory status

This is either a legislated or quasi-regulatory reform option.

Reform option purpose

Correct an information gap.

Stakeholder feedback

Eleven respondents indicated a degree of support for this reform option and four indicated opposition or concerns.



Comments in support of this reform option included:

- We support this reform – but using existing controlled/prescribed waste system - state agencies to work together to have compatible system or feed into a national system (Australian Vinyls Corporation Pty Ltd).
- Increase monitoring of supply chain for the recycling and disposal of hazardous waste both in Australia and when exported overseas to ensure HSE outcomes (Confidential response).
- [We] strongly support a harmonisation & tracking system - as waste is exported from [our jurisdiction] we give out a lot of certificates and return of the [documentation from the place of disposal] is around 20% (Confidential response).
- This option is strongly supported. There is currently no oversight when hazardous waste goes interstate. It would be of great value to have an overarching system to track these movements, as the lack of information on waste destinations is a concern. Possibly a model for this system could be the manner in which vehicle registrations are managed between States and Commonwealth (Confidential response).
- Tracking systems for batteries vary between jurisdictions and add to compliance costs. We need a simpler and harmonised system (ABRI).
- While I appreciate the intent of this is similar to j) above, and in fact a pre-requisite for the proper implementation of j), I would also say that this is very needed, but a near-impossible feat to achieve (Confidential response).

Concerns raised with this reform option included:

- [The implementation of this reform option] needs to have scope for flexibility and allow evolution. It also needs to be noted that data comes from industry, and the data gaps and errors come from industry. There is limited resourcing to review and identify data provided by industry (WA DER).
- A full waste tracking system delivers data to meet [the requirements] but is a relatively onerous type of regulation even with the types of streamlining provided [by our jurisdiction's] tracking system. Full waste tracking should only be required for waste streams where this level of regulatory intervention is justified, such as where there is a financial incentive for illegal dumping and the ramifications of a dumped load for human health and/or the environment are serious. Alternatives to full waste tracking, for both regulatory and data gathering purposes, should be considered where full waste tracking is not justified (Confidential response).

CRC CARE was not directly in support or opposition to this reform option, but observed that:

- There is already in place the National Environment Protection (Movement of Controlled Waste Between States and Territories) Measure (CRC CARE).

Barriers and implementation timeframe

This reform option has a similar set of challenges to Option j) in determining and articulating the potential benefits of this reform option (to all stakeholders), while working within the needs, capabilities and existing classifications and tracking systems of the states and territories.



One stakeholder estimated the implementation timeframe for harmonisation reform options will be 5–10 years, with one other stakeholder providing an estimated implementation timeframe of at least 5 years.

Recommendation

It is recommended that this reform option be assessed in the cost-benefit analysis.

6.7 Option m) Harmonisation of regulatory arrangements

Reform option description

Harmonisation of regulatory arrangements pertaining to hazardous wastes or specific hazardous wastes (e.g. asbestos), such as between transport and environmental regulation.

Context

The objective of harmonisation is to achieve national consistency in administrative or regulatory arrangements, and so avoid unnecessarily complex, inefficient and uneven collections of Commonwealth, State and Territory laws, which then lead to increased red tape and costs for businesses operating across multiple jurisdictions.

A method for implementing this reform option that has been previously considered by the Department is as follows (DoE, 2012, p. 50–51):

One possibility would be to insert a power in the Act to publish model regulations and other model instruments, such as codes of practice. This approach has been adopted in other areas of regulation where there are benefits from a harmonised approach. For example, the Model Act on the Transport of Dangerous Goods by Road or Rail 2007, which is made under the National Transport Commission Act 2003 and maintained by the National Transport Commission, has ensured a very high degree of uniformity in state and territory regulatory requirements.

To provide additional context, a recent GHD study (2015, p. ii) undertaken for the Department found that:

In contrast to transport of dangerous goods regulation, the hazardous waste national consistency effort is relatively institution-poor. While the Department of the Environment represents Australia on Convention committees, there is no international impetus to unify waste codes (and no strategic objective against which this would be an appropriate action). Domestically, the NEPM Implementation Working Group involves all jurisdictions through a State/Territory chair for consultation and information exchange, without aiming to bring jurisdictions into alignment.

GHD also mapped out the process for harmonising environmental regulatory arrangements (GHD, 2015, p. viii), this is provided below, with the related reform options for this consultation in brackets:

1. Establish a nationally consistent set of hazardous waste codes and definitions (**option j**).
2. Establish additional and consistent codes for used products containing multiple wastes, notably batteries and e-waste (**option j**).



3. Establish a national on-line waste tracking system, unifying and removing duplication between existing intra-jurisdictional, inter-jurisdictional and import/export systems **(option l)**.
4. Put in place consistent hazardous waste storage thresholds **(option m)**.
5. Harmonise approaches to hazardous waste categorisation for disposal and treatment, including levy arrangements **(options m and o)**.
6. Improve and harmonise approaches to enforcement **(options c and m)**.

Within jurisdictions, harmonisation between transport and environmental regulation is already occurring to some degree, with GHD observing that (GHD, 2015, p. 31):

There appears to be no sound rationale for retaining licences for vehicles moving hazardous waste in circumstances where the vehicle already has a dangerous goods licence. New South Wales has plans to issue a single licence to cover both dangerous goods and hazardous waste transport. While New South Wales arrangements, where the same organisation has administrative responsibility for both hazardous waste and dangerous goods (tanker) transport, are unique, other jurisdictions could choose to follow these plans.

Reform option regulatory status

This is either a legislated or quasi-regulatory reform option.

Reform option purpose

Harmonisation with other policy areas and creating a seamless national economy.

Stakeholder feedback

Nine respondents indicated support for this reform option and two indicated opposition.

Comments in support of this reform option included:

- A well-needed reform, but to my mind a monumental task of trying to obtain agreement between all states to use the same regulatory framework (Confidential response).
- Should be supported - particularly with respect to asbestos (WA DER).
- This option is strongly supported. In particular...it would be good to see consistency on the hazardous wastes that can be disposed to landfill nationally. Achieving national consistency would be a very difficult task. There needs to be caution on harmonisation activities to ensure that they don't lead to 'lowest common denominator' outcomes. A potential model for how this can be applied is the Heavy Vehicle National Law approach between the Commonwealth and states/territories (Confidential response).
- [Our organisation] is currently developing a proposal to harmonise hazardous waste and dangerous goods transport licensing. [We] would support investigating opportunities to harmonise legislation to produce greater regulatory efficiency (Confidential response).
- I don't think that environmental regulation (for the treatment) is an issue but think that transport is an issue (distance) (Dodd & Dodd Group).



- Strongly support. Simplification and harmonisation will reduce both compliance and enforcement costs (Enirgi Metal Group Pty Ltd).

With this reform option there was a strong theme of scepticism that the reform was feasible.

Comments expressing concern or opposition to the reform option included:

- Previous attempts to harmonise waste regulatory arrangement and waste data reporting in Australia have been slow, consumed a large amount of [our organisation's] staff resources, and have in some cases achieved little.

States and Territories may be better placed to maintain responsibility for hazardous waste management within their borders. Certainly, they are better positioned and resourced to carry out the monitoring and enforcement activities required for an effective regulatory framework. Furthermore, State/Territory led approach provides greater opportunity for innovation and competitive Federalism (Confidential response).
- There is always a risk that there are additional costs imposed on state and local government by Commonwealth reforms (QLD DEHP).

Barriers and implementation timeframe

It is difficult to achieve regulatory harmonisation. Harmonisation may restrict regulatory innovation.

One stakeholder confidentially estimated the implementation timeframe for harmonisation reform options will be 5–10 years.

Recommendation

It is recommended that this reform option be assessed in the cost-benefit analysis.

6.8 Option n) Developing guidelines on specific hazardous waste issues

Reform option description

The development of a series of Federal policy guidelines and standards on specific hazardous waste management issues in Australia, with clear linkages to the international policy environment. Examples of the types of issues the guidelines could address include: management of end-of-life rechargeable batteries; management of wastes containing brominated flame retardants; or management of mercury containing wastes.

Context

Supporting this reform option, the Blue Environment et al. (2015a, p. 72–76) report identifies a number of specific hazardous waste issues where regulation is possibly not the appropriate or only mechanism to improve management. These issues include: addressing emerging hazardous waste issues, such coal seam gas waste and persistent organic pollutants (POPs); inconsistencies and inadequacies in jurisdictional fate categories for hazardous waste tracking; and the finding that volumes of problem wastes are 'hidden' outside of jurisdictional tracking systems.



Reform option regulatory status

This is a non-regulatory reform option.

Reform option purpose

Promote the environmentally sound management of hazardous wastes.

Stakeholder feedback

Seven respondents indicated support for this reform option, one indicated opposition, and two responses were neutral.

Comments in support of this reform option included:

- I would suggest more guidance on ‘what is hazardous waste vs non-hazardous waste’. I feel that the more guidance and standards that are formalised and made public, the better. (Confidential response).
- Support this reform but there should be consultation on specific requirements for waste management where there may be significant changes in operations or costs to businesses (Australian Vinyls Corporation).
- The biggest risk with the controlled waste NEPM is that there are no [concentration] thresholds as to triggers it being a hazardous/controlled waste. [We are] limited by government resourcing to develop thresholds (WA DER).
- This would greatly assist compliance. ABRI's various guidelines have been downloaded in large numbers [however] there are clear gaps, e.g. safe management of used energy storage batteries and the classification (or exclusion) of used alkaline batteries under various hazardous waste and dangerous goods policy frameworks (ABRI).
- [This] will assist in developing clear pathways for end use of some waste streams and should (if developed properly) remove ambiguities that are exploited by some operators (WMAA Queensland Branch).
- Veolia supports guidelines and standards that achieve practical outcomes which also allow for innovation (Veolia).

Two stakeholders were neutral with respect to this reform option, and observed that:

- It would presumably be beyond Commonwealth power to establish standards. Guidance developed in conjunction with the States (e.g. through the NEPC) would be useful (CRC CARE).
- The hazardous waste types most suited to such guidelines and standards are those covered by international agreements such as the Stockholm and Minamata Conventions. For national guidelines and standards to be effective for these and other hazardous wastes, the guidelines and standards would need to be developed in consultation with the States and Territories. The aim of these consultations would be either to ensure consistency with existing state and territory requirements or, where changes to a state or territory's requirements were proposed to achieve national consistency, to obtain the agreement of the affected state or territory (Confidential response).



Barriers and implementation timeframe

There do not appear to be any significant barriers to the implementation of this reform option.

None of the stakeholders proposed an implementation timeframe for this reform option.

Recommendation

This is a non-regulatory reform, and for this reason is it not recommended for assessment in the cost-benefit analysis. It should be pursued further outside of a regulatory framework.

6.9 Option o) Nationally consistent system of hazardous waste levies

Reform option description

A nationally-consistent system of hazardous waste levies (including a Commonwealth import/export levy or charge for international movements), to reduce economic incentives to transport wastes long distances to fates of possibly higher risk to health and the environment, consistent with the proximity principle under the Basel Convention.

Context

The underlying driver behind this reform option is to reduce the incentive for longer distance hazardous waste movements, noting that differentials in gate fees also contribute to these movements. This reduces the health and safety risks associated with more kilometres of hazardous waste movements on the road, reduces the environmental impact of waste transport, and is also consistent with the Commonwealth's commitment to the proximity principle under the Convention.

Fees and charges are a particularly challenging area to harmonise across jurisdictions, with the GHD (2015, p. 12) report observing that 'both hazardous waste storage thresholds and the fees that they trigger differ markedly across jurisdictions.'

To provide context on the current variability and impact of hazardous waste landfill levies, a recent Blue Environment (2015b, p. 73) study undertaken for the Department observed that:

There are large differences in the cost of landfill disposal of hazardous waste in Australia. In Victoria the landfill levy for Category B hazardous waste is \$250/tonne and in Queensland the landfill levy is \$0/tonne. Industry commented that transport costs could be as low as \$80/tonne from Vic to Qld. If transport costs are indeed this low, landfills in Qld (charging the same gate fee as Vic landfills) could potentially offer tipping at \$170/tonne less than tipping costs in Victoria. Several industry stakeholders commented on this as a serious policy/governance issue for hazardous waste management in Australia.

It is also worth noting that five jurisdictions (ACT, NSW, SA, VIC and WA) have waste levies in place to encourage recycling and three jurisdictions do not.

Notwithstanding these challenges the GHD report argues that there 'is an opportunity to harmonise approaches to waste categorisation and levy arrangements for disposal with regard to landfilling and treatment' (GHD, 2015, p. 34), and discusses a high level approach to approaching this matter.



Reform option regulatory status

This is a quasi-regulatory reform option.

Reform option purpose

Harmonisation with other policy areas and creating a seamless national economy.

Stakeholder feedback

Ten respondents indicated support for this reform option, two indicated opposition, and two were neutral.

Comments in support of this reform option included:

- It is understood that in 2014, approximately 50,000 tonnes of waste was exported from Victoria to Queensland...In my personal opinion, the only way to address this issue is even out the levies. Where I have no doubt that Queensland is in need of a levy, while I also believe that Victoria's are excessive and could be reduced (Confidential response).
- Support this reform, but there needs to be adequate and appropriately costed disposal available locally (Australian Vinyls Corporation).
- [This is] directly in line with the Basel objectives of minimisation of transboundary management. Encourages development of national facilities where effective (Confidential response).
- Part of the levy revenue should be reinvested in the domestic hazardous waste resource recovery industry to encourage hazardous waste to be processed domestically and comply with strict social and environmental standards (Confidential response).
- [This] should greatly assist in discouraging export of material and the development of technologies and infrastructure within Australia to deal with some hazardous wastes (WMAA Queensland Branch).
- Qualified support. Whilst we support the charging of levies in relation to the export of used lead acid batteries (ULAB), we do not support a levy being charged on inter and intra-state movements of ULAB (Enirgi Metal Group Pty Ltd).
- It is critical that any proposed framework supports higher order treatment and recycling options within Australia which sit higher in the waste hierarchy than alternative options both domestically and internationally which have a lower benefit to human health and the environment (Confidential response).
- We strongly support the proximity principle under the Basel Convention and the implementation of [a] hazardous waste framework that is consistent with this principle (Southern Oil Refining Pty Ltd).



Comments expressing concern or opposition to this reform option included:

- [We do] not agree that landfill levies are the most appropriate mechanisms to establish price signals to discourage the generation of hazardous waste. Rather mandatory or co-regulatory mechanisms under the Product Stewardship Act 2011 should be used to ensure the costs of recovering, recycling and/or disposing of hazardous waste is borne by the manufacturers, importers, or retailers of products that create hazardous wastes (Confidential response). *[Note that many hazardous wastes may not be 'products' under the Product Stewardship Act].*
- Don't think the Commonwealth should be telling states about the levies they should be applying in their own state...There is always a risk that there is additional costs imposed on state and local government by commonwealth reforms (QLD DEHP).

Two respondents provided the following observations:

- This option is worth investigating further but won't work unless option m) is addressed first. When it comes to levies, the gaps is so great between states (e.g. VIC and QLD) that it is difficult to see it as a viable option. It is important to note that levies are unlikely to be the major cost for hazardous waste landfill disposal. If there is only one landfill accepting a material type then monopolistic pricing can occur (Confidential response).
- [Our jurisdiction] has introduced the proximity principle...to encourage local disposal of waste where practicable. For many hazardous waste streams, however, there are relatively few treatment options available in Australia so distance restrictions may have limited applicability. In line with the Basel Convention, [our organisation] supports local treatment of hazardous waste in Australia where practicable and cautions against granting permits for export based on price where local treatment capacity exists (Confidential response).

Barriers and implementation timeframe

The most significant potential barrier is the challenge of addressing the concerns and gaining sufficient support from the jurisdictions.

One stakeholder confidentially estimated the implementation timeframe for harmonisation reform options will be 5–10 years.

Recommendation

This is a quasi-regulatory reform option, and for this reason is it not recommended for assessment in the cost-benefit analysis. It is recommended that it be pursued as a non-regulatory reform.



6.10 Option p) Nationally consistent approach to landfill bans or conditional disposal

Reform option description

A nationally-consistent approach to landfill bans or conditional disposal restrictions for metropolitan areas, to support product stewardship. For example, in relation to e waste or tyres.

Reform option regulatory status

This is a quasi-regulatory reform option.

Reform option purpose

Harmonisation with other policy areas and creating a seamless national economy.

Stakeholder feedback

Ten respondents indicated support for this reform option, five indicated opposition, and two were neutral.

Comments in support of this reform option included:

- Support this reform but there needs to be appropriate cost effective alternatives for re-use/recycling (Australian Vinyls Corporation).
- Landfill bans on e-waste and tyres are appropriate and were enacted by our jurisdiction before product stewardship schemes were introduced by the Commonwealth for the aforementioned product classes...However, such bans can result in increased illegal dumping. What is required is stronger product stewardship schemes...Our jurisdiction views stronger product stewardship schemes as more relevant than federally imposed landfill bans. Once, strong product stewardship schemes are established, landfill bans along with targeted education campaigns can be a useful complementary mechanism (Confidential response).
- Need to also support thresholds [for conditional disposal]. Class 1-5 landfills is the only place where WA specifies concentrations (WA DER).
- National consistency is always preferred. Landfill bans are a useful policy tool to support product stewardship, particularly for toxic wastes that must be removed from landfill. We would need to consult further with members but we are likely to support bans on disposal of used lead acid, nickel cadmium and mercury-containing batteries to landfill with appropriate phase-in periods (ABRI).
- We support a nationally consistent approach to landfill bans or conditional disposal restrictions for metropolitan areas to support product stewardship (Confidential response).
- The current haphazard system of some local government banning certain materials ultimately ends up resulting in perverse outcomes (WMAA Queensland Branch).
- Product stewardship is the only way that the majority of used dry cell batteries will be recovered for recycling. Currently less than 3% recovered (Dodd & Dodd Group).



- We strongly support the implementation of nationally consistent approach to disposal restrictions on hazardous wastes such as waste oil to support existing product stewardship arrangements (Confidential response).
- We strongly support the establishment of an approach to disposal restrictions on hazardous wastes such as waste oil to support existing product stewardship arrangements that is nationally consistent (Southern Oil Refining Pty Ltd).
- Veolia supports a national consistent approach to the management of hazardous waste where geographical location does not influence the standards that are applied to the management of hazardous waste (Veolia).

Comments expressing concern or opposition to the reform option included:

- Obtaining consensus across the states will always be difficult, but by not having consensus also, it allows different states to try different models in this area, to see what works. Product stewardship schemes are still a fledgling enterprise internationally, and having variations in approach is not necessarily bad as it is a way of determining (albeit through trial-and error), what the best approach may be in the long-term. My suggestion would be to not strive for consistency today, but strive for information sharing and knowledge capture today, to inform the decisions of tomorrow (Confidential response).
- Bans may work in some states but not others. There is always a risk that there is additional costs imposed on state and local government by Commonwealth reforms (QLD DEHP).
- (We) strongly oppose banning items from landfill, [this] could go bad if there aren't other disposal options – end up with stockpiles (Confidential response).

Two stakeholders were neutral with respect to this reform option, and observed that:

- This option is worth investigating further but won't work unless Option m) is addressed first. While the general approach of using landfill bans is fine, the option as stated would be problematic as it would need all states to be aligned, otherwise there would be movement across borders. Even more problematic would be avoiding hazardous waste movements from metro to non-metro areas. For example, up until a few years back, used tyres were being transported in significant quantities into Victoria from NSW and SA (Confidential response).
- [Our organisation] already has an extensive program to encourage alternatives to landfill disposal for waste, in line with the waste hierarchy...Existing state and territory controls and programs would need to be taken into consideration when investigating any national landfill ban or disposal restriction (Confidential response).

Barriers and implementation timeframe

The most significant potential barrier is the challenge of addressing the concerns and gaining sufficient support from the jurisdictions.



Three stakeholder proposed phase in periods for the reform option. One government stakeholder proposed advanced warning of 2–3 years ‘to develop appropriate product stewardship mechanism for each product identified’, and an implementation timeframe of 3–6 years. WMAA Queensland Branch proposed advanced warning of 12–24 months. Another stakeholder estimated the implementation timeframe for harmonisation reform options will be 5-10 years.

Recommendation

This is a quasi-regulatory reform option, and for this reason is it not recommended for assessment in the cost-benefit analysis. It is recommended that it be pursued as a non-regulatory reform.



7 EVALUATION OF OPTIONS

Provided in Table 5 is a summary of the consultation outcomes documented in Section 4. The consultation outcomes are qualitatively assessed against the assessment criteria framework introduced in Section 3.2 of this report.

Table 5 – Summary evaluation of the reform options

Reform option description				Reform option assessment criteria					Recommendation for inclusion in Cost Benefit Analysis
Short-form reform option title	Reform option regulatory status	Reform option purpose	Primary international obligation relating to the reform option	Does the option have broad stakeholder support?	Are there signif. barriers that would prevent adoption?	Potential for overall economic benefits	Likely regulatory (financial) impact on industry	Implementation timeframe	
a) Power to require provision of information	Legislated.	Correct an information gap or asymmetry.	Annual reporting on hazardous waste.	Yes	No	Moderate benefit	Moderate cost	1 year	Assess.
b) Recognise bans imposed by other countries	Legislated or quasi-regulatory.	Promote the environmentally sound management of hazardous wastes.	A regulatory system applying to cases where transboundary (i.e. international) movements are permissible.	Yes	Perhaps	Unknown	Significant cost	1 year	Do not assess. Consider outside of a regulatory framework as a quasi-regulatory reform.
c) Updating compliance and enforcement provisions	Legislated.	Improve Australian hazardous waste regulation and/or reduced red tape.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Yes	No	Moderate benefit	Moderate cost	1 year	Assess.
d) Taking economic efficiency into account	Legislated.	Address a competition failure by supporting a competitive market or managing a continuing monopoly situation.	Restriction of transboundary movements of hazardous wastes, except where it is perceived to be in accordance with the principles of environmentally sound management.	No	No	Significant benefit	Moderate benefit	3 years	Assess.
e) Updating cost recovery arrangements	Legislated.	Improve Australian hazardous waste regulation and/or reduced red tape.	Reduction of hazardous waste generation.	Yes	No	Moderate benefit	Moderate benefit	2 years	Assess.
f) Increased transparency on the operations of the Act	Quasi-regulatory.	Improve Australian hazardous waste regulation and/or reduced red tape.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Yes	No	Moderate benefit	Neutral	1 year	Do not assess. Consider outside of a regulatory framework as it is a quasi-regulatory reform.
g) Information on hazardous waste infrastructure	Legislated or quasi-regulatory.	Correct an information gap or asymmetry.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Yes	No	Moderate benefit	Neutral	1 year	Assess.
h) Information on hazardous waste generation and management	Legislated, quasi-regulatory or non-regulatory.	Correct an information gap or asymmetry.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Perhaps	No	Moderate benefit	Neutral	1 year	Do not assess. Consider outside of a regulatory framework as it is a non-regulatory reform.
i) Power to establish agreements targeting particular wastes	Co-regulatory.	Address the market inability to deliver a public good.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Yes	No	Moderate benefit	Moderate cost	3 years	Assess.
j) Nationally consistent arrangement on hazardous waste data collection and reporting	Quasi-regulatory.	Correct an information gap or asymmetry.	Annual reporting on hazardous waste.	No	No	Significant benefit	Moderate cost	3 years	Do not assess. Consider outside of a regulatory framework as it is a quasi-regulatory reform.
k) Powers to establish and maintain hazardous waste facilities	Legislated.	Address the market inability to deliver a public good.	Restriction of transboundary movements of hazardous wastes, except where it is perceived to be in accordance with the principles of environmentally sound management.	No	No	Unknown	Neutral	3 years	Assess.
l) Nationally consistent system for tracking hazardous waste movements	Legislated or quasi-regulatory.	Correct an information gap or asymmetry.	Annual reporting on hazardous waste.	Yes	Perhaps	Significant benefit	Significant benefit	5–7 years	Assess.



Table 5 – Summary evaluation of the reform options (continued)

Reform option description				Reform option assessment criteria					Recommendation for inclusion in Cost Benefit Analysis
Short-form reform option title	Reform option regulatory status	Reform option purpose	Primary international obligation relating to the reform option	Does the option have broad stakeholder support?	Are there signif. barriers that would prevent adoption?	Potential for overall economic benefits	Likely regulatory (financial) impact on industry	Implementation timeframe	
m) Harmonisation of regulatory arrangements	Legislated or quasi-regulatory.	Harmonisation with other policy areas and creating a seamless national economy.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Yes	Yes	Significant benefit	Significant benefit	5-7 years	Assess
n) Developing guidelines on specific hazardous waste issues	Non-regulatory.	Promote the environmentally sound management of hazardous wastes.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	Yes	No	Moderate benefit	Neutral	2 years	Do not assess. Consider outside of a regulatory framework as a non-regulatory reform.
o) Nationally consistent system of hazardous waste levies	Quasi-regulatory.	Harmonisation with other policy areas and creating a seamless national economy.	Reduction of hazardous waste generation.	Yes	Yes	Significant benefit	Significant benefit	5-7 years	Do not assess. Consider outside of a regulatory framework as a quasi-regulatory reform.
p) Nationally consistent approach to landfill bans or conditional disposal	Quasi-regulatory.	Harmonisation with other policy areas and creating a seamless national economy.	Promotion of environmentally sound management of hazardous wastes, wherever the place of disposal.	No	Yes	Moderate benefit	Significant cost	5 years	Do not assess. Consider outside of a regulatory framework as a quasi-regulatory reform.



8 RECOMMENDATIONS

In summary, it is recommended that:

- Reform Options a), c), d), e), g), i), k), l) and m) are assessed through cost-benefit analysis.
- Reform Options b), f), h), j), n), o) and p) are not assessed through cost-benefit analysis, but as these are quasi regulatory or non-regulatory options are pursued outside of a regulatory framework.



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ATTACHMENT A –STAKEHOLDER LIST



Provided in Table A-1 is a summary of the stakeholders who responded with comments on the reform options.

Table A-1 – Stakeholder consultation list

Stakeholder group	Stakeholders
Academia and other	CRC CARE University of Technology, Sydney – Institute of Sustainable Futures <i>Confidential response 1</i>
Generators	Australian Vinyls Corporation Pty Ltd
Government	Department of Infrastructure and Regional Development Department of Environment and Heritage Protection (QLD DEHP) Department of Environment Regulation (WA DER) Environment Protection Authority South Australia <i>Confidential response 2</i> <i>Confidential response 3</i> <i>Confidential response 4</i> <i>Confidential response 5</i> <i>Confidential response 6</i> <i>Confidential response 7</i> <i>Confidential response 8</i>
Industry groups	Australasian Institute of Surface Finishing (AISF) Australian Battery Recycling Initiative (ABRI) Australian Council of Recycling (ACOR) WMAA Queensland Branch
NGOs	<i>Confidential response 9</i>
Transporters/treaters	Dodd & Dodd Group Pty Ltd Enirgi Metal Group Sims E Recycling Pty Ltd Southern Oil Refining Pty Ltd Veolia Environmental Services <i>Confidential response 10</i>