

# Better Regulation Statement

Protection of the Environment Operations Legislation Amendment (Waste)  
Regulation 2018

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# Glossary

**Act** *Protection of the Environment Operations Act 1997.*

**Amendment Regulation** Protection of the Environment Operations Legislation Amendment (Waste) Regulation 2018.

**BCR** Benefit-cost ratio

**Better Regulation Statement (BRS)** This better regulation statement, which is the document that addresses the guidelines in Schedule 1 to the *Subordinate Legislation Act 1989* and the better regulation principles.

**C&D waste facility** A construction and demolition waste facility within the meaning of clause 90B of the Amendment Regulation.

**construction waste** Construction and demolition (C&D) waste within the meaning of clause 90A of the Amendment Regulation.

**daily cover** Material placed on landfills to cover any exposed waste at the end of each day to prevent odour and vermin and to reduce the infiltration of any rainfall to minimise leachate.

**EPA NSW** Environment Protection Authority.

**Metropolitan Levy Area (MLA)** The local government areas listed in clause 3 of the Waste Regulation. These generally are the local government areas falling within the Greater Sydney, Hunter, Illawarra and Shoalhaven areas of NSW.

**NPV** Net present value.

**recovered fines** Residues from the handling, sorting and processing of construction waste. If recovered fines meet specific physical and chemical properties they may be lawfully re-used for various purposes in the construction industry.

**Regional Levy Area (RLA)** The local government areas listed in clause 7 of the Waste Regulation. These generally are those local government areas falling within the coastal local council areas north of Port Stephens. It also includes the Blue Mountains and Wollondilly south-west of Sydney, and the inland councils of Singleton, Muswellbrook, Upper Hunter, Dungog and Kyogle.

**Standards** The proposed Standards for managing construction waste in NSW.

**VENM** Virgin excavated natural material.

**waste hierarchy** A set of priorities for the efficient use and management of resources that underpins the objectives of the *Waste Avoidance and Resource Recovery Act 2001*. In section 3 of the Act, the waste hierarchy is a hierarchy of the following order:

1. avoidance of unnecessary resource consumption
2. resource recovery (including re-use, reprocessing, recycling and energy recovery)
3. disposal.

**Waste Regulation** Protection of the Environment Operations (Waste) Regulation 2014.

# Executive Summary

## Better Regulation Statement

Regulation is an important tool available to government. Well designed and properly targeted regulation helps deliver the community's economic, social and environmental goals. However, regulation can also impose administrative and compliance burdens on business, not-for-profits, consumers, government and the wider community. These burdens must be weighed against the benefits that the regulation generates.

The NSW Government has articulated what characterises good regulation and the minimisation of red tape through seven better regulation principles. The principles are designed to improve the quality of regulation by ensuring that the decision maker is fully informed when considering regulatory proposals.

Before making new or amendment regulations, the proposed regulation must be assessed against the requirements of the *Subordinate Legislation Act 1989* and the NSW Government's Guide to Better Regulation. This Better Regulation Statement (BRS) addresses the guidelines in Schedule 1 to the Subordinate Legislation Act and the government's better regulation principles. Well-designed and properly targeted regulation helps deliver the community's economic, social and environmental goals.

Better regulation is the result of sound policy development and regulatory design processes. The principles are the cornerstone of the government's commitment to good regulation and must be followed in the development of every regulatory proposal. In doing so, it is demonstrated that the proposal is required, reasonable and responsive.

## Background and government objectives

The NSW Environment Protection Authority (EPA) has a responsibility to efficiently regulate waste facilities and ensure that recovered resources are produced with all the necessary procedures to protect the community and the environment.

The *Protection of the Environment Operations Act 1997* (the Act) is the primary piece of environmental legislation in NSW. Regulations may be made under the Act to give effect to powers in the legislation to protect the environment and reduce risks to human health in NSW.

In 2014, the NSW Government introduced the Protection of the Environment Operations (Waste) Regulation 2014 (the Waste Regulation). The Waste Regulation substantially reformed and modernised the NSW waste industry and aimed to provide a level playing field for waste operators.

## Need for government action

Waste management can present 'externality' problems – a type of 'market failure'. An externality results from production or consumption decisions that affect third parties. Without appropriate controls over waste management, parties would be free to dispose of waste without sufficient regard to the environment or members of the community. For this reason, governments in all Australian jurisdictions regulate how waste is managed, treated and disposed.

The 2014 reforms in the Waste Regulation modernised the waste industry in NSW and improved the practices and procedures of most waste facilities.

However, through numerous investigations and industry feedback, the EPA has identified some ongoing issues with poor waste management practices, particularly in the construction waste sector of the waste industry.

Some operators in this sector have minimal environmental controls and poor processes and are not safely maximising recovery of resources from construction waste. Some C&D waste facilities have sent considerable volumes of contaminated recovered resources off-site for re-use in the natural environment.

In addition, the EPA is aware of current and former landfills exhuming waste. This risks damaging the integrity of landfill systems designed to protect human health and the environment, and increases risk of exposure to hazardous substances, pollution and fires.

These poor practices expose the community and environment to risks from contaminated material, including asbestos, and can undermine the objectives of the waste hierarchy.

Further regulatory reform is required to ensure that appropriate processes and procedures are implemented and followed so that these risks are addressed.

## Objectives of the Amendment Regulation

The objects of the Act include to reduce risks to human health and prevent the degradation of the environment using various mechanisms.<sup>1</sup>

The Protection of the Environment Operations Legislation Amendment (Waste) Regulation 2018 (Amendment Regulation) proposes amendments to the Waste Regulation to improve waste management practices and reduce risks to human health and the environment by:

- minimising the risk of exposure of the community and environment to contaminated material (including asbestos)
- improving the practices and procedures at waste facilities to protect the environment and human health and promote the waste hierarchy.

The Amendment Regulation also seeks to improve the EPA's capacity to effectively regulate waste management practices, particularly at licensed C&D waste facilities and landfills.

The aspects of the Amendment Regulation that are likely to have a material regulatory cost or benefit are:

- **new Standards for C&D waste facilities** – to prescribe, as a licence condition, a set of Standards to ensure appropriate management of construction waste at C&D waste facilities
- **concessional levy rate for recovered fines** – to provide a waste levy concession of 75% for recovered fines applied as daily cover at landfills. This deduction is designed to incentivise lower-quality recovered fines being placed in a landfill as they may be unsuitable for re-use in the natural environment
- **prohibiting exhumation of waste at current or former landfills** – to prohibit waste being exhumed from current or former landfills without written approval from the EPA.

These three measures all aim to improve waste management practices to ensure that risks to human health and the environment are minimised.

This BRS focuses on identification and assessment of options in relation to these three reforms.

Additionally, the Amendment Regulation makes several changes to update and clarify the application of the Waste Regulation. These include:

- clarifying procedures for transporting and disposing of asbestos waste
- clarifying the facilities at which shredder floc and VENM concessional levy rates apply
- clarifying the application of transported waste deductions and operational purpose deductions, and when the EPA can estimate changes to mass of waste
- clarifying the application of the waste levy at waste facilities other than landfills
- clarifying the circumstances in which resource recovery exemptions can be granted
- providing for video monitoring requirements at waste facilities
- exempting certain scheduled waste facilities from the requirement to have a weighbridge installed or conducting a volumetric survey

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<sup>1</sup>Sections 3(a), 3(d), and 3(g) of the Act.

- providing for the issue of increased penalty notice amounts for certain offences (including asbestos offences)
- updating references to local government areas.

The Amendment Regulation also clarifies licensing requirements for a small number of scheduled activities listed in Schedule 1 of the Act and makes changes to exclude certain activities relating to remediation of contaminated land from the land pollution offence, and clarify the meaning of 'fit and proper person' under the Protection of the Environment Operations (General) Regulation 2009 (POEO General Regulation).

Further information about these reforms is contained in Appendix A. The NSW Government's Licensing Framework has been applied in assessing the clarified licensing requirements discussed in Appendix A.

The Amendment Regulation builds on the 2014 reforms to the Waste Regulation and will significantly improve the EPA's ability to efficiently regulate the industry to protect human health and the environment. The Amendment Regulation is consistent with the objectives of existing NSW Government policies.

## Benefits and costs of the proposed changes

The introduction of the Standards at C&D waste facilities, the prohibition of exhumation and the waste levy concession for recovered fines are the only components of the Amendment Regulation expected to present material regulatory cost or benefit.

The EPA engaged an independent consultant to conduct a cost-benefit analysis of these reforms.<sup>2</sup> The cost-benefit analysis found that these proposed reforms deliver a net economic benefit. The net economic benefit is approximately \$70 million over a 10-year analysis period and this increases to \$115 million over a 20-year analysis period.

The economic costs imposed by these reforms in the Amendment Regulation is estimated to be around \$17 million per annum, equating to a present value of nearly \$123 million over 10 years at a 7% discount rate. This mostly reflects costs for additional staff and training, capital costs and equipment costs needed to comply with the proposed Standards. Facilities that currently have poor inspection and resource recovery processes are likely to incur most of these costs.

These costs are expected to be more than offset by the significant benefits that will result from these reforms in the Amendment Regulation. There are quantifiable economic benefits of around \$27.6 million per annum with a present value of almost \$193 million over 10 years at a 7% discount rate that will result from the introduction of the Standards and the waste levy concession for recovered fines applied as daily cover at landfills.

There are also potential benefits and costs associated with prohibiting the exhumation of waste from current and former landfills; although it is difficult to quantify these as currently operating landfills are reluctant to report they are exhuming waste (refer to Section 5 for further details). As a result, benefits and costs of this prohibition are not included in the figures for costs and benefits above. However, Section 5 sets out an example of the significant benefits that are likely to arise from a prohibition of exhuming waste from landfills.

In addition, a primary benefit of the proposed Amendment Regulation is the environmental and health benefits associated with reducing exposure to asbestos and other hazardous materials. These benefits are likely to be significant. For example, the cost to the community of one death per year due to exposure to asbestos or another hazardous material is \$4.2 million.<sup>3</sup> However, these benefits have not been quantified for this BRS, as it can be difficult to link adverse health outcomes with specific incidents of exposure.

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<sup>2</sup>This cost-benefit analysis was conducted by Marsden Jacob Associates (see assumptions relied on in Appendix B).

<sup>3</sup>Australian Government, Department of Prime Minister and Cabinet, Office of Best Practice Regulation, *Best Practice Regulation Guidance Note: Value of statistical life*, December 2014: [https://www.pmc.gov.au/sites/default/files/publications/Value\\_of\\_Statistical\\_Life\\_guidance\\_note.pdf](https://www.pmc.gov.au/sites/default/files/publications/Value_of_Statistical_Life_guidance_note.pdf)

## Impact on competition and small business

Any regulatory proposal needs to be examined carefully to assess whether it will have an adverse impact on the ability of firms or individuals to enter and participate in the market.

Compliance with the proposed Standards at C&D waste facilities may have competition effects because implementation and compliance impose a relatively lower cost for the larger facilities than for some medium-sized facilities, because they can exploit scale economies. For example, the cost of tipping and spreading construction waste at a designated inspection point would be proportionally costlier, the smaller the business.

However, poor waste management activities at waste facilities can lead to distortion within the waste industry. For example, poor processing of construction waste can enable operators to offer discounted services to the market and undermine legitimate operators who are passing the full cost of waste management onto their customers. The Amendment Regulation is designed to create a more even playing field for C&D waste facilities and landfills, and fair competition in the market.

Overall, it is assessed that any minor restrictions on competition are outweighed by the policy objectives of the proposal.

## Consultation

Effective consultation is at the heart of better regulation. It helps to improve the quality of policy outcomes by ensuring that regulation is well informed, is technically viable and will work in practice. Effective consultation will ensure that regulation is responsive to the knowledge, experience and opinions of stakeholders.

The better regulation principles state that consultation should inform regulatory development. The NSW Government has made a commitment to adequate and timely consultation on all regulatory proposals, in a manner that is proportionate to their significance and to the degree of stakeholder interest.

The EPA undertook initial consultation on the proposed reforms through a Consultation Paper released in late 2016, which generated 32 written submissions.

In late 2017, the EPA undertook a further round of public consultation on both the Standards and the Amendment Regulation, which incorporated feedback from the initial consultation.

In response to the feedback received through the consultation process on the Standards and the Amendment Regulation, several changes have been made to the Standards and Amendment Regulation (see Section 6). The feedback guided the decision to make the Amendment Regulation and has also informed the cost-benefit analysis and regulatory design options.

As a result, the Amendment Regulation is targeted and proportionate to the problems it seeks to address, and minimises any adverse outcomes. The Amendment Regulation is considered to achieve the greatest net benefit of the options identified and assessed.

# 1 Background

## 1.1 The waste industry in NSW

The waste industry includes waste disposal facilities, waste transporters, processing and recycling facilities, waste storage facilities and transfer stations.

There are three main waste streams: municipal solid waste, commercial and industrial waste, and construction and demolition waste (named construction waste in this BRS).

Poor practices in the management, processing, storage, re-use or disposal of waste have the potential to cause significant environmental harm and adverse human health impacts.

Waste generation involves depletion of natural resources and represents inefficiency within the market. More tangible impacts from the mismanagement of waste are often realised at or through waste facilities.

Poor practices at waste facilities have the potential for the release of emissions, and contamination of ground and surface water, together with odour, noise and dust issues. They also risk undermining the waste hierarchy.<sup>4</sup>

Waste facilities that send inadequately processed material off-site for re-use also potentially expose the community and environment to contaminated materials.

## 1.2 Regulating construction waste in NSW

Construction and demolition activities can generate a wide range of different waste materials. While a portion of these materials is rubbish and unwanted material, they also include a significant proportion of valuable recyclable material, such as:

- excavated material (e.g. rock and soil)
- waste asphalt, bricks, concrete, plasterboard, timber and vegetation.

Waste materials also include asbestos and contaminated soil.

In 2016–17, there were over 60 licensed C&D waste facilities in the Metropolitan Levy Area (MLA) of NSW alone, which in total received over 8 million tonnes of waste, the majority of which then re-enters the productive economy as a 'recovered resource'.

The EPA has a responsibility to efficiently regulate waste facilities and ensure that recovered materials are produced in accordance with procedures that protect the community and the environment.

The Act is the primary piece of environmental legislation in NSW. The objects of the Act include to:<sup>5</sup>

- protect, restore and enhance the quality of the environment in NSW, having regard to the need to maintain ecologically sustainable development
- reduce risks to human health and prevent the degradation of the environment by the use of mechanisms that promote
  - pollution prevention and cleaner production
  - the reduction to harmless levels of the discharge of substances likely to cause harm to the environment
  - the elimination of harmful wastes
  - the reduction in the use of materials and the re-use, recovery or recycling of materials
  - the making of progressive environmental improvements, including the reduction of pollution at source
  - the monitoring and reporting of environmental quality on a regular basis

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<sup>4</sup>See definition in Glossary.

<sup>5</sup>Sections 3(a), 3(d) and 3(g) of the Act.

- assist in the achievement of the objectives of the *Waste Avoidance and Resource Recovery Act 2001*.<sup>6</sup>

Regulations may be made under the Act to give effect to powers in the legislation, protect the environment and reduce risks to human health in NSW.

The Waste Regulation commenced in November 2014. It improves the EPA's ability to protect human health and the environment and paves the way for a modern and fair waste industry in NSW. The new regulatory framework prescribed by the Waste Regulation was implemented in stages between 2014 and 2016.

## 1.3 Proposed amendments to the Waste Regulation

The EPA now proposes to modify the Waste Regulation by making the Amendment Regulation. The reforms are designed to improve waste management practices and reduce risks to human health and the environment by:

- minimising the risk of exposure of the community and environment to contaminated material, including asbestos
- improving the practices of waste facilities to protect the environment and human health and promote the waste hierarchy.

The reforms include a set of Standards to ensure appropriate management of construction waste at C&D waste facilities. The Standards are designed to ensure construction waste is appropriately inspected, sorted and stored, and the quality of recovered materials is improved to ensure that human health and the environment are protected.

The reforms also include a waste levy concession of 75% for recovered fines applied as daily cover at landfills. This deduction is designed to incentivise recovered fines being placed in landfill, as they may be unsuitable for re-use in the natural environment (e.g. if they contain excess quantities of plastics, glass or other foreign material, or are contaminated with chemicals).

The Amendment Regulation also prohibits the exhumation of waste at both current and former landfills, without prior EPA written approval. The introduction of this provision provides a more robust, certain and consistent way to ensure that the environmental and human health risks generated by the exhumation of waste are addressed.

Additionally, the proposed reforms make several changes to update and clarify the application of the Waste Regulations, as set out in Appendix A.

## 1.4 Better regulation principles

Before making new or amendment regulations, the proposed regulation must be assessed against the requirements of the Subordinate Legislation Act and the NSW Government's Guide to Better Regulation.

The NSW Government has articulated what characterises good regulation and the minimisation of red tape through seven better regulation principles. The principles are designed to improve the quality of regulation by ensuring that the decision maker is fully informed when considering regulatory proposals.

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<sup>6</sup>The object of the *Waste Avoidance and Resource Recovery Act 2001* includes to encourage the most efficient use of resources and to reduce environmental harm in accordance with the principles of ecologically sustainable development; to ensure that resource management options are considered against a hierarchy of the following order – avoidance of unnecessary resource consumption, resource recovery (including re-use, reprocessing, recycling and energy recovery), disposal; to provide for the continual reduction in waste generation; to minimise the consumption of natural resources and the final disposal of waste by encouraging the avoidance of waste and the re-use and recycling of waste; to ensure the industry shares with the community the responsibility for reducing and dealing with waste.

## The better regulation principles

**Principle 1:** The need for government action should be established. Government action should only occur where it is in the public interest; that is, where the benefits outweigh the costs.

**Principle 2:** The objective of government action should be clear.

**Principle 3:** The impact of government action should be properly understood by considering the costs and benefits (using all available data) of a range of options, including non-regulatory options.

**Principle 4:** Government action should be effective and proportional.

**Principle 5:** Consultation with business and the community should inform regulatory development.

**Principle 6:** The simplification, repeal, reform, modernisation or consolidation of existing regulation should be considered.

**Principle 7:** Regulation should be periodically reviewed and, if necessary, reformed to ensure its continued efficiency and effectiveness.

This BRS has been prepared to demonstrate how the better regulation principles have been applied to the proposed Regulation. The BRS is structured as follows:

- need for government action – demonstrates that government intervention is justified (Principle 1)
- objective of government action – demonstrates that the objectives of government action are well understood (Principle 2)
- identification of feasible options to achieve objective – outlines the various options that were considered in developing the proposal, including non-regulatory options and options to simplify existing regulation (Principle 3 and Principle 6)
- costs and benefits of options – demonstrates that the potential impacts of the proposal are understood (Principle 3)
- consultation – demonstrates how consultation informed the development of the options considered, as well as the determination of the final regulatory proposal (Principle 5)
- preferred option – identifies the preferred option based on its ability to meet the objectives and achieve the greatest net benefit to the community (Principle 3 and Principle 4)
- evaluation and review – sets out a plan to monitor and review the performance of the regulation (Principle 7).

# 2 The need for government action

## 2.1 Overview

The EPA regulates various aspects of the transportation, storage, processing and disposal of waste. In accordance with the requirements of the Waste Avoidance and Resource Recovery Act and the waste hierarchy, the EPA promotes the reduction of waste generation and disposal by encouraging resource recovery, recycling and re-use.

The EPA introduces policies and implements programs that reduce waste, increase recycling and improve behaviour around littering and waste disposal. Innovative waste management is supported through the Environment Protection Authority Strategic Plan 2017–21 (EPA Strategic Plan) and funding is provided through the Waste Less, Recycle More Program.

The EPA has identified six key result areas in the EPA Strategic Plan to deliver on the EPA's core guiding principles. This includes improved environmental and human health protection and innovative waste management.

Through compliance programs and regulation activities the NSW EPA has become aware of several issues in the construction waste sector of the NSW waste industry since the 2014 reforms.

This sector has the potential to return large volumes of recovered material into the economy, reducing pressure for virgin materials on the environment. However, several operators in the sector have minimal environmental controls and poor processes that are not maximising the safe recovery of resources. These poor practices expose the NSW community and environment to significant risks from contaminated recycled products, including asbestos waste, and risk undermining the objectives of the waste hierarchy.

## 2.2 The nature of problems addressed by robust waste regulation

Without appropriate controls over waste management, parties would be free to dispose of waste without regard to the environment or members of the community— a type of 'market failure'. For this reason, governments in all Australian jurisdictions regulate how waste is treated and disposed.

Certain wastes have properties that make them hazardous or potentially harmful to human health or the environment. The Amendment Regulation addresses several well understood market failures:

- risk of harm to the community – some types of waste are dangerous if not managed appropriately, exposing the public to significant risks. Asbestos is an example of this. The key risk the Standards seek to address in respect of asbestos is where, due to poor inspection and other on-site processes at C&D waste facilities, asbestos contaminates materials processed by these facilities, which are then sent/sold back out into the community for re-use (e.g. as 'fill' in the construction industry).
- the exhumation of waste from current and former landfills results in several externalities, including the costs of exhuming, risks of damage to landfill infrastructure and exposure of staff, community and the environment to potentially contaminated materials, including asbestos
- information failures – lack of data on waste inhibits the effective management of risks associated with the handling of waste. Better information could also inform the assessment of progress towards recovery targets and the identification of recovery targets and opportunities.

## 2.3 Residual risks and poor practices

### 2.3.1 Overview

The NSW Government is committed to improving waste management standards at waste facilities in NSW and the quality of construction waste resource recovery, in order to protect the environment and human health. This provides substantial benefits for the NSW community and environment.

The EPA has identified some poor practices since the 2014 reforms, particularly in relation to construction waste, asbestos handling and the exhumation of waste.

If no changes are made to the current regulatory framework for waste, the risk of harm posed to the environment and community (and associated costs) by poor waste management practices will continue.

### 2.3.2 Poor practices at C&D waste facilities

There are over 60 licensed C&D waste facilities in the MLA of NSW, sending millions of tonnes of waste off-site for re-use in the productive economy as 'recovered resources'.

Most of this material is sent to be re-used in the natural environment for such purposes as 'fill' on development sites, or is provided to other recyclers as a component for their recycled products to go back into the productive economy.

It is therefore critical that such significant quantities of 'product' are safely handled to protect the community and environment.

If a facility meets the licensing thresholds for sorting, storing, processing or resource recovery of construction waste, it should have processes in place to maximise resource recovery and minimise risks to the environment and human health. In a modern waste industry, these facilities must produce quality materials that can safely be re-used or re-enter the environment.

Through compliance programs, consultation with industry and regulation activities since 2014, the EPA has found ongoing issues with several C&D waste facilities in the MLA of NSW. Several operators have minimal environmental controls and poor waste management processes, leading to an increased risk of harm to human health and the environment, and a reduction in the quality of resources recovered from construction waste.

Poor practices include C&D waste facilities:

- failing to properly remove contaminants from mixed construction waste prior to processing loads of waste, because of poor inspection processes
- not appropriately handling contaminants, including asbestos waste, on-site
- sending loads of processed waste offsite that are contaminated (including with asbestos) for re-use in the community.

#### Examples of risks

Poor practices at C&D waste facilities pose environmental and human health risks as they may allow for contamination of material destined for re-use as fill on development or agricultural sites and for other re-use in the natural environment. Poor waste processing can also lead to lower rates of resource recovery.

If not managed responsibly at the C&D waste facility, 'processed' construction waste that re-enters the productive economy can pollute the environment and pose a public health risk (particularly asbestos and contaminated soil). If land applied, the material can have amenity effects for neighbouring residents and can lead to contamination of the surrounding environment. These practices often result in significant clean-up costs for individuals and government.

In one recent instance alone, a waste processing facility in the MLA, which receives large volumes of mixed construction waste, processed thousands of tonnes of this waste to be supplied to many properties and applied to land. EPA investigations found that significant portions of the land where the waste was applied were contaminated with asbestos, plastic, timber, glass or metals. The clean-up has been extensive, including removal of many thousands of tonnes of this waste material from dozens of properties. Total costs of clean-up are estimated to be in the millions of dollars. The presence of asbestos found in construction waste has the potential to cause harm to human health (see below).

Existing laws do not sufficiently deter this conduct, and such conduct is leading to an uneven playing field. There is a need for government intervention to ensure that C&D waste facilities in the MLA that receive significant volumes of construction waste meet minimum compliance and environmental criteria to ensure protection of the environment and human health, and ensure fair competition in the market.

## Risks of exposure to asbestos waste

In 2017, the NSW Ombudsman delivered a report<sup>7</sup> expressing concern that gaps in existing NSW legislation may limit the ability of relevant agencies to appropriately address asbestos issues. The report also stipulated that there is a continuing need for coordinated action and ongoing commitment to address the important public safety issue of asbestos.

The EPA has also conducted several investigations into asbestos management at waste facilities. These investigations have revealed a number of issues with the handling of asbestos waste at C&D waste facilities. A key concern is a lack of inspection of loads for asbestos and other contaminants prior to processing waste at C&D waste facilities.

Materials that contain asbestos waste and are 'processed' in C&D waste facilities and sent off-site for use as 'recovered resources' have the potential to increase the exposure of the community to asbestos, which increases the risk of the community contracting asbestos-related diseases.

Asbestos fibres can cause a range of diseases, such as:

- lung cancer
- mesothelioma
- asbestosis
- asbestos-related cancers of the larynx and ovaries.

The most common asbestos-related disease is lung cancer, followed by mesothelioma.

Even small levels of asbestos exposure can result in asbestos-related diseases. Therefore, any small increases in the community's exposure to asbestos waste has the potential to significantly increase the risk to the community.

There are significant health risks associated with inhalation of even minute quantities of asbestos. Therefore, while the probability of contracting asbestos-related diseases can be low, the cost is high, if contracted.

In summary, adverse consequences of improper handling of asbestos include the following:

- environment – land-applied material containing asbestos can contaminate and degrade land and pollute waterways.
- community – when asbestos fibres are released into the air they can cause a health risk.
- economy – land-applied material containing asbestos can lower land values and undermine legitimate recycling. Clean-up is expensive.
- resources – easily recycled resources (e.g. concrete, bricks, timber and green waste) are lost when contaminated with asbestos.

The analysis suggests that there is likely to be a significant payoff to society from small reductions in the risks to society.

### 2.3.3 Use of recovered fines

Recovered fines are residual material generated from the processing and sorting of construction waste.

Some 'fine' residual material can be re-used as fill in the natural environment if it meets the strict physical and chemical requirements of an EPA resource recovery order and exemption. However, portions of these recovered fines streams do not meet these requirements and are not suitable to be re-used in the natural environment due to their physical properties and the risk of contamination.

These lower-quality recovered fines are often derived from the residual material in mixed skip-bins, and can contain excess quantities of plastics, glass and other foreign material and/or be contaminated with chemicals. This makes the material unsuitable for re-use in the environment.

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<sup>7</sup>Asbestos: How NSW government agencies deal with the problem – A Special Report to Parliament under s 31 of the *Ombudsman Act 1974*, April 2017

Given the risks with lower-quality recovered fines in the natural environment, these fines are better suited to being placed in landfills, which are engineered to manage the risks associated with potentially contaminated materials.

### 2.3.4 Exhumation of waste at landfill sites

The EPA is aware, including through consultation with industry, that waste has been exhumed at a number of landfills in NSW for a range of purposes, without approval from the EPA.

Digging up or exhuming waste from current or former landfills creates several environmental, safety and human health risks. The type and content of the waste being exhumed is often unknown and therefore the risks cannot necessarily be managed appropriately.

Landfill operators, occupiers of former landfills, landfill employees, the community and the environment are also exposed to these risks:

- the exposure and handling of asbestos and other hazardous materials
- waste detonation and explosions
- increased risk of fire in the waste mass via spontaneous combustion when oxygen is introduced via the exhumed area
- damage to landfill infrastructure (e.g. cell-liners, gas and leachate management systems), creating environmental impacts if these substances migrate off-site or into surface or groundwater bodies
- water pollution through leachate discharge (liquid that has travelled through or generated in the landfill requires treatment as it is not suitable for release into the environment)
- air pollution through the emission of dust, odour and release of landfill gas, carrying contaminants from the landfilled waste that may pose a risk to human health or the environment if inhaled or migrates off-site.

These practices and the associated risks are also inconsistent with, and undermine the aims of, the EPA's *Environmental Guidelines: Solid Waste Landfills* (2nd edn, 2016). Landfills are designed to be the final destinations in the life cycle of waste.

Exhuming waste at landfills may result in ongoing and increased risks to human health and the environment. There are, however, limited circumstances where exhuming waste is necessary for operational works.

### 2.3.5 Summary of need for action

Government interventions should aim to improve waste management practices that reduce the risk of harm to human health and the environment by ensuring that:

- construction waste is inspected, sorted and stored so that recovered resources sent into the community are contaminant free and of sufficient quality to protect the environment and human health
- sufficient incentives are in place to ensure lower-quality recovered fines are placed in landfill rather than in the natural environment
- waste is not exhumed from current or former landfills unless necessary for operational works, and it is demonstrated that the waste can be exhumed safely.

# 3 Objectives of government action

## 3.1 Objectives of proposed reforms

The *Protection of the Environment Operations Act 1997* (the Act) is the primary piece of environmental legislation in NSW. Regulations may be made under the Act to give effect to powers in the legislation to protect the environment and reduce risks to human health in NSW.

As set out in Section 1.2 of this BRS, the Act has a range of objects. The object of the Act most relevant to the proposed Regulation is to reduce risks to human health and prevent the degradation of the environment. As set out in the objects of the Act, this may include mechanisms to promote:

- pollution prevention and cleaner production
- the reduction to harmless levels of the discharge of substances likely to cause harm to the environment
- the reduction in the use of materials and the re-use, recovery or recycling of materials
- the making of progressive environmental improvements, including the reduction of pollution at source.

Other objects of the Act relevant to the reforms in the Amendment Regulation include to rationalise, simplify and strengthen the regulatory framework for environment protection and to assist in the achievement of the objectives of the Waste Avoidance and Resource Recovery Act (including to ensure that resource management options are considered against the waste hierarchy).

**The primary objectives of the Amendment Regulations are to:**

- **minimise the risk of exposure of the community and environment to contaminated material (including asbestos)**
- **improve the practices and procedures at waste facilities to protect the environment and human health and promote the waste hierarchy.**

## 3.2 Government policy

The NSW Government has developed the NSW Waste Avoidance and Resource Recovery Strategy 2014–21. Its goal is to enable the NSW community to improve environment and community well-being by reducing the environmental impact of waste and using resources more efficiently. The NSW Government has also provided significant grants and funding opportunities through the Waste Less, Recycle More Initiative (\$802 million over nine years).

One of the EPA's organisational objectives is to 'reduce the risks to human health and prevent the degradation of the environment'. One of the identified means to achieve this objective is by 'preventing pollution'. Taking action to prevent the occurrence of risks from poor waste management practices at C&D waste facilities, low-quality recovered fines and exhumation of waste is consistent with furthering this objective.

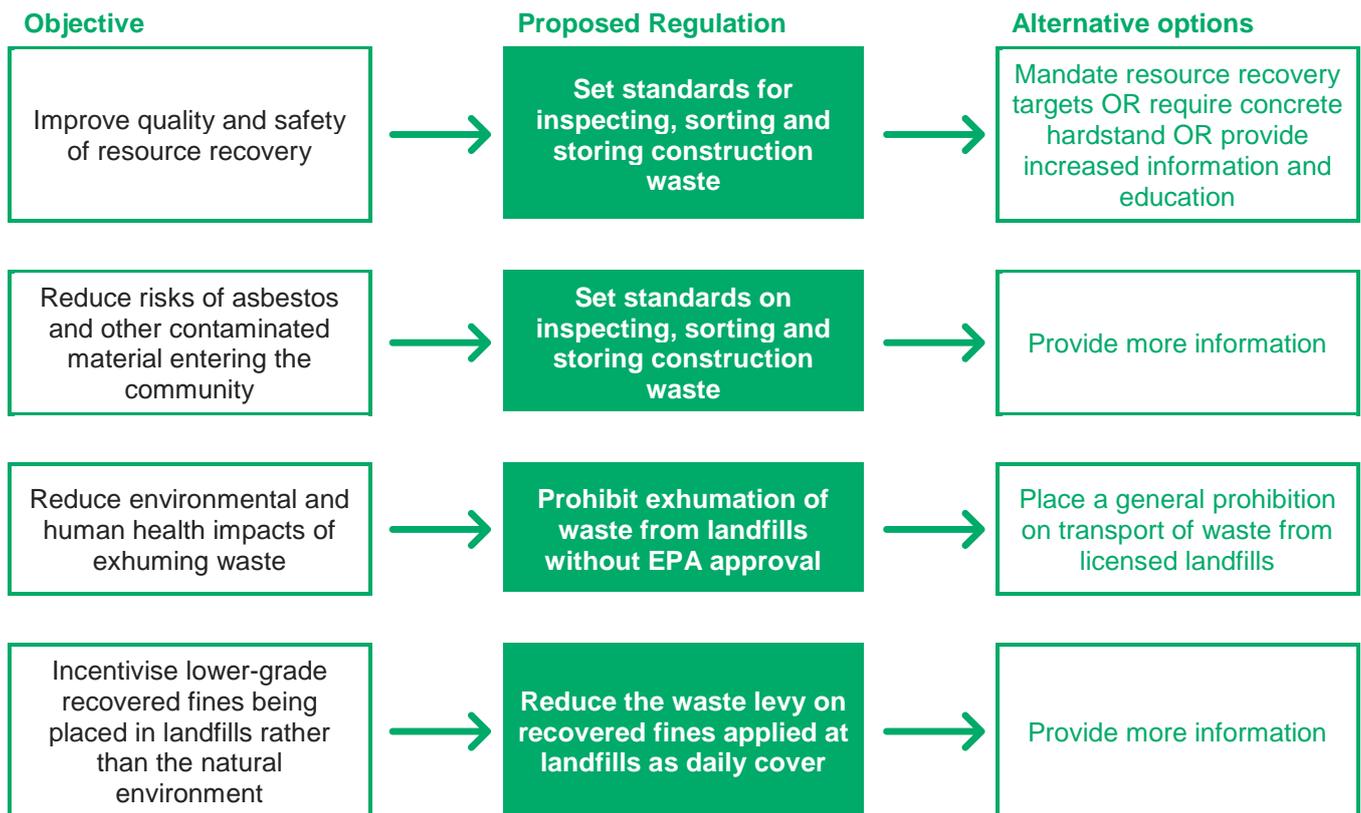
The EPA's Strategic Plan 2017–21 outlines six key result areas. The regulatory action to address poor waste management practices at landfill operations and C&D waste facilities is consistent with activities in at least two of these result areas: improved environmental and human health protection and innovative waste management.

# 4 Identification of feasible options

The identification and assessment of options set out in this part of the BRS is limited to only those parts of the Amendment Regulation that impose a material regulatory burden. The Amendment Regulation includes other changes that are considered minor, improve clarity or are likely to reduce regulatory costs. For full details on all other proposed changes, please see Appendix A.

## 4.1 Feasible options to address objectives

The EPA has identified several options that could address the objectives and problems discussed above. These are shown in the following figure.



### Non-regulatory actions

The figure above includes an option to provide more information to waste facilities about handling of asbestos, rather than mandating standards on waste inspection and requiring personnel to be trained in asbestos awareness and handling.

However, the EPA already provides considerable information to waste facilities regarding handling of asbestos. The EPA's experience indicates that voluntary mechanisms would fail to deliver beyond 'business as usual' position (i.e. status quo).

Providing further education alone is not considered an efficient or effective means to achieve the objectives set out in this BRS.

## 4.2 The proposed amendments to the Waste Regulation

The Amendment Regulation includes the following changes that are expected to have a material regulatory cost or impact on waste facilities.

## 4.2.1 Standards for managing construction waste in NSW

The Amendment Regulation makes it a licence condition for certain licensed C&D waste facilities that meet set thresholds to comply with the Standards. Specifically, the Standards will apply to all scheduled waste facilities that are not solely scheduled waste disposal facilities that are:

- located in the Metropolitan Levy Area (MLA) and receive 6,000 tonnes or more of construction waste in any 12-month period, or
- located in the Regional Levy Area (RLA) and receive 6,000 tonnes or more of construction waste in any 12-month period from the MLA.

Otherwise, it is not proposed to apply the Standards to facilities outside the MLA, as the poor practices and impacts identified in relation to construction waste that is not from the MLA have not been identified at anywhere near the same scale in those areas. The EPA will, however, monitor practices at C&D waste facilities that receive construction waste outside the MLA to assess whether there would be a net benefit to introducing the Standards elsewhere in NSW.

The proposed Standards require C&D waste facilities to:

- implement inspection requirements
- implement sorting requirements
- ensure that construction waste that has been inspected and sorted in accordance with the Standards is generally not mixed with other waste at the C&D waste facility
- implement waste storage requirements
- ensure that construction waste is only transported from the C&D waste facility if it has been handled in accordance with the Standards on site.

The inspection requirements involve an inspection of each load at a C&D waste facility's weighbridge by an appropriately trained person while the waste is still in the vehicle. Each load must then be tipped and spread at a designated inspection point for determining whether it is free from asbestos and can be lawfully received at the facility.

At the tip and spread area, loads of construction waste found to contain asbestos must be immediately re-loaded and rejected from the facility. Other waste types that are not permitted to be received by the facility must be removed from the load, or the entire load must be rejected. Rejected loads are to be recorded in a register and accepted loads will be sorted into specific categories. All construction waste will also need to undergo a specific sorting process.

The Standards will prohibit the transport of construction waste from a C&D waste facility unless it has been inspected, sorted and stored in accordance with the Standards and consists of a single waste type or is a residual of these processes. This is to improve the quality of recovered materials and prevent cross-contamination of materials, to ensure that human health and the environment are protected.

The Standards will commence six months after commencement of the Amendment Regulation to allow industry time to adjust their waste management practices to the Standards.

## 4.2.2 Waste levy concession for recovered fines

Most licensed NSW landfills are required, at the end of each business day, to apply a 'cover' to any exposed waste to prevent odour and vermin and to reduce the infiltration of any rainfall to minimise leachate. A variety of materials – including VENM (clean-soil), spray-crete (manufactured lightweight foam/concrete) and tarpaulins – are other forms of daily cover that are currently applied at landfills.

The Amendment Regulation includes a waste levy concession of 75% on recovered fines that are applied as daily cover at landfills.

With the 75% concession, the operator of the landfill that receives and applies the compliant recovered fines for daily cover will only need to pay 25% of the applicable levy rate. Each facility will only be able to receive a limited quantity of recovered fines for land application as daily cover per annum to ensure that the discounted levy rate does not become a mechanism for waste levy avoidance. The aim is to facilitate a fit-for-purpose land application of a waste material that cannot be further recovered or processed and that is not fit for purpose in the construction or agricultural industries.

Given the risks with lower-quality recovered fines in the natural environment, the EPA seeks to incentivise these fines being placed in landfills, where they meet the conditions of an alternative daily cover specification, rather than being used for fill or construction works in the natural environment. Landfills are less sensitive receivers than the natural environment and are engineered to manage the risks associated with these potentially contaminated materials.

The concessional levy rate will commence six months after commencement of the Amendment Regulation to allow C&D waste facilities and landfills time to adjust their waste management practices to the specifications. The EPA also intends to introduce other measures over the next six months to improve environmental outcomes in relation to re-use of 'recovered fines' that meet the conditions of a resource recovery order and exemption.

### 4.2.3 Prohibition of exhuming of waste

The Amendment Regulation includes a new clause 110A making it an offence to exhume waste from a current or former landfill site. The occupier of land that is or was a landfill site must ensure that waste is not exhumed from the land.<sup>8</sup> No transported waste deduction will be able to be claimed for any unlawfully exhumed waste, so that facilities cannot profit from unlawful conduct.

This amendment is designed to address the risks of exhumation set out in section 2.3.4 of this BRS. The EPA will consider granting approval in limited circumstances where exhuming waste is necessary for operational works. Waste disposal facilities would need to provide detailed impact assessments and demonstrate an understanding of all material contained in the relevant cell.

## 4.3 Alternative option: The proposed amendments with some additional requirements

An alternative option, which is not in the Amendment Regulation but has been assessed for comparative purposes, would involve the same elements of the Amendment Regulation, but would also:

- require the hardstand for the tip and spread inspection at C&D waste facilities to be concrete, rather than impermeable material as set out in the Standards
- include a general prohibition on the transport of waste from licensed landfills.

## 4.4 Alternative option: Set resource recovery targets

This alternative option would not set prescriptive requirements for the management of construction waste. It would only set resource recovery rates that must be met by all C&D waste facilities.

An option that was previously consulted on was that C&D waste facilities in the regulated area would be required to meet the following resource recovery targets for construction waste over any 12-month period:

- 75% for any facility that receives more than 30,000 tonnes of construction waste in the relevant 12-month period (large facilities)
- 50% for all other C&D waste facilities (medium-sized facilities).

For a C&D waste facility to meet its target, it would need to recover the minimum percentage of construction waste received and send it off-site by sorted waste type and/or under a resource recovery order.

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<sup>8</sup>This prohibition will not affect the operation of a scheduled waste facility that is operating on a former landfill site if the landfill site is closed and capped and no waste is removed from beneath that cap, if the waste is exhumed because of works authorised in writing by the EPA, if the waste is exhumed in an emergency to protect human health or the environment or if the waste is exhumed in accordance with a direction of the EPA.

# 5 Costs and benefits of options

The identification and costs and benefits of options set out in this part of the BRS are limited to only those parts of the Amendment Regulation that impose a material regulatory burden. The Amendment Regulation includes other changes that are considered minor, improve clarity or are likely to reduce regulatory costs. For full details on all other proposed changes, please see Appendix A.

## 5.1 Base case

The base case is the status quo or 'business-as-usual' scenario. It involves continuation of the existing Waste Regulation without any change.

The base case is not separately assessed, but rather all other options are assessed in terms of their impacts relative to the base case. That is, the options assessed below reflect costs and benefits that are incremental to the base case. If none of the options can demonstrate a net benefit relative to the base case, the base case is the preferred option.

Under the base case, C&D waste facilities are assumed to cause the same risks of harm to human health and the environment and maintain their current levels of resource recovery, and some landfills continue to exhume waste.

## 5.2 Costs and benefits

The EPA engaged an independent consultant to conduct a cost-benefit analysis of these reforms.<sup>9</sup>

### 5.2.1 Benefits of the proposed changes

There are several benefits expected to flow from the introduction of the Standards and the concessional levy rate for recovered fines applied as daily cover at landfills:

- Avoided costs of cleaning up construction waste that re-enters the environment as contaminated material after being processed at a C&D waste facility of at least \$2.5 million per year. There are also costs of cleaning up material that does not meet specification for land application due to poor processing (e.g. contains excess plastics or glass). The recipient of the material may need to clean up this material (as it may appear to be litter) for safety and amenity reasons.
- Reduced risk of exposure to asbestos and other hazardous material through better screening of waste loads and prohibition of exhuming of waste. This has not been quantified, as it can be difficult to link adverse health outcomes with specific incidents of exposure. Nevertheless, the EPA considers this a significant benefit of the proposed Standards. For example, some recent estimates of treatment costs for lung cancer and mesothelioma are around \$30,000 to \$50,000<sup>10</sup> per person. Further, in 2014–15 the NSW Government paid out \$90.269 million in compensation benefits, including \$9.050 million in health care and funeral benefits for dust-related diseases. Many of these related to asbestosis.<sup>11</sup> In addition there are the costs of death, which have been estimated by various academic studies to be \$4.2 million.<sup>12</sup>
- Improved resource recovery is assumed because under these reforms, C&D waste facilities are required to implement a number of procedures that result in the inspection and separation of waste material on site. This is estimated to provide a benefit of approximately \$24.5 million per annum.

<sup>9</sup>This cost-benefit analysis was conducted by Marsden Jacob Associates (see assumptions relied on in Appendix B).

<sup>10</sup>The Mesothelioma Centre: <https://www.asbestos.com/treatment/expenses/>

<sup>11</sup>NSW Government, Workers' Compensation (Dust Diseases) Board Annual Report 2014–15.

<sup>12</sup>Australian Government, Department of the Prime Minister and Cabinet, Office of Best Practice Regulation, Best Practice Regulation Guidance Note: Value of statistical life, December 2014: [https://www.pmc.gov.au/sites/default/files/publications/Value\\_of\\_Statistical\\_Life\\_guidance\\_note.pdf](https://www.pmc.gov.au/sites/default/files/publications/Value_of_Statistical_Life_guidance_note.pdf)

- Economic value in creating a new outlet for recovered fines. This proposal is likely to avoid some of the social cost of waste, as well as providing resource recovery facilities with an outlet for low-grade recovered fines that otherwise would be subject to full levy liability. This proposal will also provide a benefit for landfills because it will provide them with a cheaper source of daily cover to VENM, which currently has only a 10% levy concession.
- Preventing the exhumation of waste at current and former landfill sites will deliver multiple flow-on benefits, including a reduction in costs associated with exhuming waste, and avoided costs associated with landfilling that waste again. It is not possible to accurately determine how much exhumation of waste currently occurs in NSW without EPA approval, as facilities undertaking this activity for non-operational purposes do not readily provide the EPA with details about their exhumation activities. However, if it is assumed that 30,000 tonnes per annum is being exhumed without EPA authorisation and then re-landfilled elsewhere, these avoided costs would total approximately \$90 per tonne, and approximately \$2.7 million per annum.

## 5.2.2 Costs of the proposed changes

The most significant burden created by the Amendment Regulation is the new requirement that C&D waste facilities must comply with the Standards as a condition of their licence.

Action required by Standards	Type of cost
Allocate a dedicated tip and spread area in accordance with the requirements of the Standards not less than 100m <sup>2</sup> from an impermeable material	Construction costs: it is anticipated that a number of facilities will need to construct a tip and spread area
Engage appropriately trained personnel or provide additional training to current staff	Financial cost of ensuring personnel are trained in asbestos awareness and removal
Inspect the top of each load to determine if load contains asbestos waste and unlicensed materials	Time cost for inspections
Record details of loads and rejected loads	No additional cost: record keeping of loads is already required under clause 27 of the Waste Regulation For rejected loads, time cost of recording details of rejected load (assumed to be undertaken by the personnel performing the inspection)
Loads to be tipped and spread on dedicated impermeable surface	Time cost
Trained personnel to inspect surface area, turn load to check for asbestos or unpermitted waste types	
Sorting of waste into individual waste types	Time cost Equipment cost
Separated waste types must be stored in a separate storage area that is clearly labelled or signposted	Financial cost to ensure separation and signposting
Each business day, trained personnel must inspect each signposted area to determine whether waste is appropriately stored	Time cost

Overall, the actions required by the Standards would include:

- the hiring of staff member(s) (on average, full-time equivalent) able to oversee all inspections and record relevant details. The average cost of one employee (including salary, overheads and on-costs) is assumed at \$84,000 per annum per C&D waste facility. At poor performing medium-sized C&D waste facilities, it is assumed one staff member would be required, while more staff members would be required at poor performing large C&D facilities. At facilities that already have robust inspection procedures, no additional staff members would be required.
- the cost of undertaking training in asbestos awareness and removal is estimated at \$700 per person.<sup>13</sup> It is assumed that each C&D waste facility may need to ensure up to three staff are trained, leading to a total cost of \$2,100 per waste facility. This is a once-off cost only, although allowance should be made for staff turnover or refreshment training; therefore, it has been assumed this cost is incurred every five years.
- limited equipment and infrastructure costs to comply with the inspection and sorting requirements in the Standards. For instance, it is assumed that medium-sized facilities with a lower recovery rate will need two additional bobcats (or similar) to support sorting and management of waste, and some operators will need a hardstand for the tip and spread inspection (discussed further below).

The estimated cost to C&D waste facilities is approximately \$119 million (at 7% discount rate over 10 years), comprising capital and recurrent costs.

However, each C&D waste facility will already have varying degrees of measures in place that already meet, or could be used to meet, the new requirements. Around 40% of C&D waste facilities already demonstrate high rates of resource recovery, suggesting they already have arrangements in place to appropriately inspect, sort and separate waste types.<sup>14</sup> It is therefore assumed that for those facilities, compliance with the proposed Standards should not result in a significant change in costs. However, some waste facilities may need to spend significantly more upfront to make the site suitable for meeting these standards.

The prohibition on exhuming waste from current landfills without EPA approval may lead to a lost opportunity cost to landfill operators by limiting the amount of waste they could otherwise receive as landfill. However, as stated in relation to benefits of exhuming waste, it is not possible to accurately determine how much or where exhumation of waste currently occurs in NSW without EPA approval, and associated lost opportunity.

### 5.2.3 Findings of cost-benefit analysis

The cost-benefit analysis finds that the proposed reforms deliver a net economic benefit. The net economic benefit was calculated to be approximately \$70 million over a 10-year analysis period and increasing to \$115 million over a 20-year analysis period.

	Costs (\$m)	Benefits (\$m)	NPV (\$m)	BCR
C&D waste facilities	\$118.83	\$174.53	\$55.70	1.47
Government	\$3.86	\$0.00	-\$3.86	N/A
Other environmental benefits and costs	\$0.00	\$18.12	\$18.12	N/A
<b>Total</b>	<b>\$122.69</b>	<b>\$192.65</b>	<b>\$69.96</b>	<b>1.57</b>

<sup>13</sup>Class A Asbestos Removal courses range from around \$650 to \$750.

<sup>14</sup>Marsden Jacob Associates, op. cit.

## 5.2.4 Impact on competition and small business

Any regulatory proposal needs to be scrutinised carefully to assess whether it could have an adverse impact on the ability of firms or individuals to enter and participate in the market. As a matter of good public policy, it is a fundamental principle in NSW that any new legislation (both primary and subordinate) will not restrict competition unless it can be demonstrated that the:

- benefits of the restriction, as a whole, outweigh the costs, and
- objectives of the legislation can only be achieved by restricting competition.

A measure is likely to have an impact on competition if any of the questions in the following table can be answered in the affirmative.

Competition test question	Assessment
Is the proposed measure likely to affect the market structure of the affected sector(s) (i.e. will it reduce the number of participants in the market or increase the size of incumbent firms)?	Possibly
Will it be more difficult for new firms or individuals to enter the industry after the imposition of the proposed measure?	Possibly
Will the costs/benefits associated with the proposed measure affect some firms or individuals substantially more than others (e.g. small firms or part-time participants in occupations)?	Possibly
Will the proposed measure restrict the ability of businesses to choose the price, quality, range or location of their products?	No
Will the proposed measure lead to higher ongoing costs for new entrants that existing firms do not have to meet?	No
Is the ability or incentive to innovate or develop new products or services likely to be affected by the proposed measure?	No

The proposed reforms may have competition effects because implementation and compliance impose a relatively lower cost for the larger facilities than for smaller facilities, because they can exploit scale economies. For example, the cost of a hardstand, waste storage infrastructure and making sure staff are appropriately trained would be proportionally costlier the smaller the business.

Against this, proposals are required to ensure the environment, community and waste industry are protected against the poor practices of certain operators in the waste industry. The poor practices are leading to unfair competition within the waste market and an uneven playing field. A level playing field is likely to attract new investment and innovation by firms to the construction waste sector of the waste industry because the costs of regulation will be faced by all firms and better reflect the community's expectations concerning waste management.

Therefore, overall, it is assessed that any minor restrictions on competition are outweighed by the policy outcomes of the proposal.

In addition, the waste levy concession for recovered fines will 'create' a new outlet for this waste. The waste levy concession is to incentivise the lower-grade recovered fines being processed to be applied as daily cover in landfill rather than being opportunistically blended into recovered wastes for re-use in the environment. This deduction aims to minimise the risk of exposure of the community and environment to potentially contaminated material.

## 5.3 Impacts of including alternative requirements in the proposed Amendment Regulation

The alternative variation options set out in section 4 would involve the same elements of the Amendment Regulation, but would also:

- require the hardstand for the tip and spread inspection at C&D waste facilities to be concrete, rather than impermeable material as set out in the Standards
- include a general prohibition on the transport of waste from licensed landfills.

### Better Regulation Statement

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These measures would have broadly the same costs and benefits as above, except:

- There would be additional costs associated with having a concrete hardstand for the tip and spread inspection. The direct costs of having a concrete hardstand may be significant (estimated to add a capital cost of around \$500,000 in total across all sites) and there may be additional indirect costs to waste facilities by making their sites less flexible and adaptable to changes over time. Against these additional costs, there is unlikely to be any material change in the benefits associated with the proposed Standards. Feedback from consultation also highlighted that the costs of a concrete hardstand were onerous and unnecessary, and the environmental objectives can be achieved by requiring hardstands to be made from other materials. On this basis, it is determined at this stage that the hardstand need not be concrete.
- A general prohibition on the transport of waste from a licensed landfill has potential to add to the environmental and human health benefits of the Amendment Regulation. The prohibition would also have added to costs as it would have denied scheduled waste disposal facilities the right to claim a transported waste deduction. As highlighted through consultation, a general prohibition would create problems for disposal facilities that also undertake recycling activities, and it is possible that more material would be landfilled by smaller facilities in regional areas. At this time, the environmental and human health benefits can be achieved by other means, such as through revised licence conditions customised for the circumstances of a particular facility.

## 5.4 Impacts of setting resource recovery targets

Earlier information available to EPA suggested that setting resource recovery targets of 75% for larger C&D waste facilities and 50% for medium-sized C&D waste facilities has the potential to increase the net benefit of the reforms.

This was driven by the understanding that C&D waste facilities could find the lowest-cost means to achieve the target. On this basis, resource recovery targets were canvassed as an option in previous consultation. Stakeholders were generally not in favour of targets.

Application of resource recovery targets are complex and there are many factors within the waste industry that could impact the implementation and effectiveness of these targets.

Importantly, setting targets at a level considered reasonable for the industry could potentially result in perverse incentives for facility operators who are already achieving recovery rates that are greater than the proposed benchmarks; that is, they could reduce their recovery rates. When such perverse incentives are taken into account, the introduction of the Standards for C&D waste facilities as set out in section 4.2 of this paper is the preferred option.

Further, there may be other risks in setting targets:

- The resource recovery targets may encourage facilities to reject loads that contain lower recycled content, and this would reduce a facility's ability to meet their resource recovery target.
- To bolster their resource recovery rates, larger facilities could use their market power and superior inspection resourcing to turn away C&D waste that is highly contaminated, thereby making it harder for smaller facilities to meet recovery targets.

The EPA believes that – to minimise the risk of potential negative and perverse outcomes for the environment, community and businesses – further analysis and consideration needs to be undertaken before any targets could be introduced.

## 5.5 Other matters addressed in the Amendment Regulation

Principle 6 of the better regulation principles requires that when regulations are reviewed, consideration should be given to simplification, repeal, reform, modernisation or consolidation of existing regulation. Appendix A contains proposed reforms that aim to clarify and streamline the existing regulations. They contain proposals that are expected to impose no material regulatory impact.

# 6 Consultation

## 6.1 Consultation undertaken

Formal consultation on proposed changes to the waste regulatory framework was conducted in 2016 and 2017 and included the following.

### Initial consultation in 2016

In November 2016, the EPA issued a consultation paper on the proposed reforms. In response to the consultation paper, 32 written submissions were received.

The EPA issued a consultation report on the initial consultation (see [Initial Consultation Report](#)).

In response to the feedback received through the initial consultation process, several changes were made to the reforms, as set out in the Initial Consultation Report.

### Second consultation in 2017

During October–December 2017, consultation included the following:

- Consultation paper, draft Regulation and proposed Standards were published on the EPA website and NSW Government 'Have Your Say' website. These were accompanied by a media release, letters and emails to EPA waste updates subscribers and industry stakeholders. The consultation paper invited formal submissions on the proposed changes. The range of stakeholders contacted included all environment protection licence holders for waste activities, government agencies, industry associations, environmental groups, consultants, peak NGOs, landfill operators, the peak waste and recycling associations, and many small and medium-sized enterprises.
- The EPA held four industry forums in Parramatta, Wollongong, Coffs Harbour and Newcastle. Attendees included C&D waste recyclers, consultants, building and development industry representatives, local government and peak industry bodies. During the forums, the EPA explained the most significant proposed changes and responded to the questions and issues raised. The EPA also received feedback from attendees on the proposed changes.

The EPA believes that all stakeholders that are likely to be impacted by the changes have been notified of the changes or can reasonably be assumed to have been informed via industry associations or business operations.

## 6.2 Outcomes of 2017 consultation

Forty-four written submissions were received from industry, government and the public on consultation on the draft Regulation and Standards. Of these submissions, just under half contained generally supportive statements of the proposals and their principles. Some commended the NSW Government for its efforts in addressing C&D waste practices and recovery through the draft Standards, making improvements to the handling of asbestos waste and introducing the offence of exhuming waste from landfills.

Other submissions raised concerns with the changes to some of the proposals that were raised in the initial consultation paper but were removed from the draft regulation; mainly in relation to the implementation and compliance timeframes and the mechanisms to set and manage the mandatory resource recovery rates. Some submissions provided suggestions for how the proposals can be implemented and managed, or recommendations on how to improve the proposed changes.

The peak waste management associations expressed support for the general intention of the proposals and the benefits of providing a level playing field in the construction waste sector of the waste industry, and acknowledged that the changes addressed issues raised during the implementation of the Waste Regulation.

Many submissions opposed the prohibition against landfills sending waste off-site and claiming a transported waste deduction, particularly expressing concern it may undermine legitimate resource recovery at regional landfills.

Some submissions also raised concerns that a 50% concessional levy rate for recovered fines would act as an insufficient market incentive to place recovered fines in landfills. Other submissions expressed concerns about the necessity and cost implications of requiring tip and spread areas under the Standards being made from concrete.

In response to the feedback received through the consultation process and in light of the impact of China's National Sword policy, some changes have also been made to the Amendment Regulation since consultation. The most significant of these changes are set out in the following table.

A number of submissions also expressed concerns about the repeal of the proximity principle offence. Concerns included the additional risks to the environment, health, safety and the waste hierarchy arising from the long-distance transport of waste for disposal. Only a small number of submissions supported repeal of the proximity principle offence.

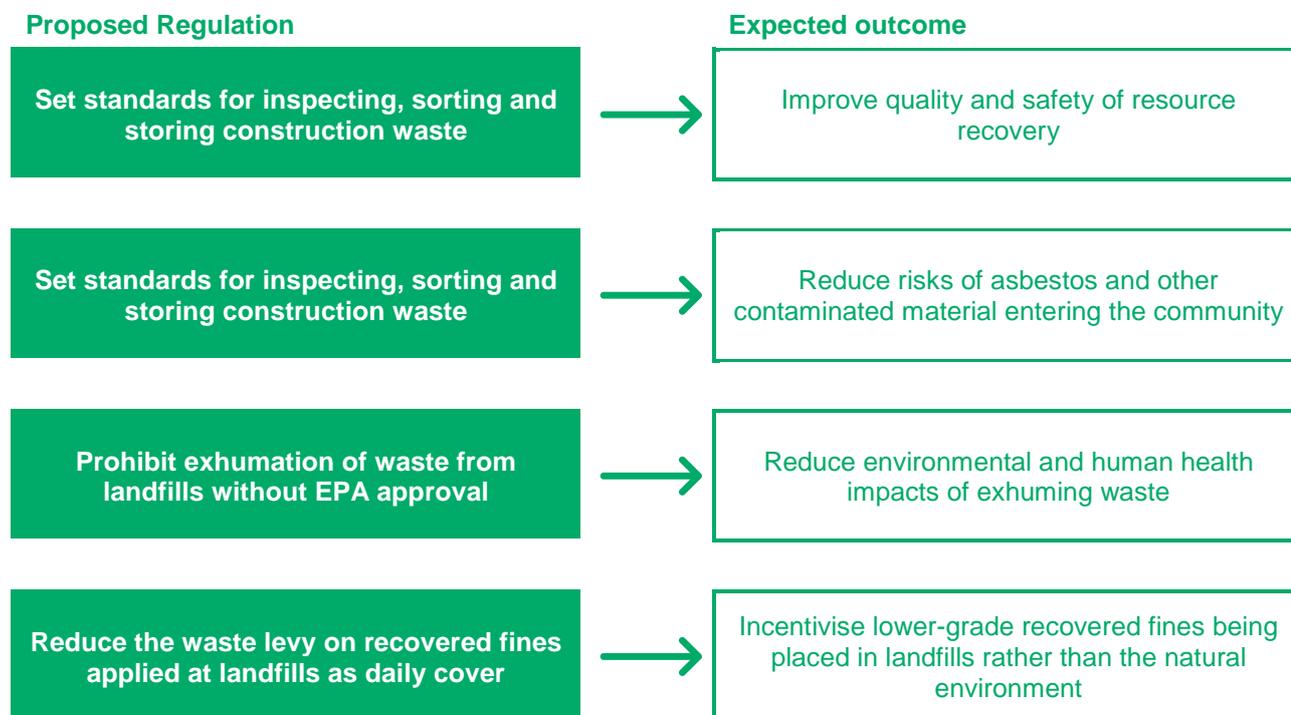
Issue	How Amendment Regulation takes account of issues raised
Transport of waste from a landfill	<p>The proposed prohibition on licensed landfills transporting waste, and claiming a transported waste deduction (other than unlawfully exhumed waste), has been removed</p> <p>Existing regulatory measures will be used to ensure that waste transported off site from a licensed landfill does not pose a risk of harm to the environment or human health</p>
Standards: tip and spread inspection area requirements	<p>'Inspection point 2' under the Standards will no longer be required to be constructed from concrete, but can be any suitable impermeable material</p>
Discounted levy rate for recovered fines used as daily cover at landfills	<p>The waste levy concession for recovered fines used as daily cover will be increased from 50% to 75% of the applicable levy rate</p>
Transported waste deduction at levy-liable waste facilities other than landfills	<p>The prohibition on levy-liable waste facilities other than landfills claiming a transported waste deduction after 12 months has been removed</p>
Proximity principle offence	<p>The Government has carefully considered the numerous submissions received during consultation that were supportive of the proximity principle.</p> <p>In the absence of a national approach to address the adverse impacts on human health, the environment and the waste hierarchy caused by the unnecessary long-distance transport of waste for disposal, the proximity principle offence will be retained in the Waste Regulation.</p> <p>The offence forms part of an integrated waste regulatory scheme in NSW designed to protect the environment and the health of the community by:</p> <ul style="list-style-type: none"> <li>• seeking to avoid harm caused by the inappropriate handling of waste generated within the State</li> <li>• promoting the waste hierarchy by favouring waste avoidance and recycling over disposal.</li> </ul> <p>The NSW Government will also continue to advocate for a robust national regulatory response to address these adverse impacts and promote a sustainable resource recovery industry throughout Australia.</p>

A more detailed summary of issues raised during the second consultation period, and the EPA's response, is set out in Appendix C to this BRS.

# 7 Preferred option

## 7.1 Preferred options

The Amendment Regulation is determined to be the preferred option. The Amendment Regulation is effective in addressing the identified objectives.



The Amendment Regulation is considered to achieve the greatest net benefit of the options identified and assessed.

Option	Net benefit
The Amendment Regulation	Approximately \$70 million (net present value, 7% discount rate, 10 years)
The Amendment Regulation with variations	Substantial additional cost compared to the preferred option, but unlikely to result in a corresponding increase in benefit
Mandate resource recovery targets	Potential for greater net benefit, but poses significant additional risks that could reduce net benefit as well as result in other undesired behaviour

## 7.2 Conclusion

The cost-benefit analysis in the BRS finds that in all cases the benefits of the proposed reforms are likely to outweigh the costs. Many of the proposals impose a minor impact or seek to modernise, streamline and clarify the regulation.

Taken together, it is assessed that the implementation of the Amendment Regulation will provide a considerable net benefit for NSW society, the environment and human health.

## 8 Evaluation and review

The Waste Regulation is currently due to be automatically repealed on 1 September 2020 under the Subordinate Legislation Act.

The EPA will commence a review into the operation of the Waste Regulation, including the Amendment Regulation, by early 2019. Information and evidence in relation to compliance and the success of the Amendment Regulation will inform future action and the development of the legislative framework.

The robust record-keeping, monitoring and reporting systems established by the Waste Regulation and this Amendment Regulation will enable the EPA to conduct a comprehensive review of the effectiveness of the legislation and whether it is meeting its intended objectives.

The EPA will also conduct ongoing site inspections and monitoring of facilities and licensees, and review data reported and records to assess the compliance and effectiveness of the Amendment Regulation. The EPA will also continue to liaise with industry to ensure the legislation is as targeted and effective as possible.

The information gained through these mechanisms will inform the review of changes to the waste regulatory framework contained in the Amendment Regulation.

This evidence-based approach to evaluating the effectiveness of the Amendment Regulation is critical to ensure effective and balanced regulation.

# Appendix A: Other matters addressed in the Amendment Regulation

The Amendment Regulation contains a number of further amendments to the Waste Regulation, the Act and POEO General Regulation. These amendments have been assessed as minor in nature and will not place any material costs on society that would merit a cost-benefit analysis.

The measures include those discussed below.

## New eligible operational purpose deductions

**Amendment of clause 15 of the Waste Regulation by including bedding layer material and biofilter media in the list of materials that can receive an operational purpose deduction**

The EPA has the power to approve a levy deduction for the use of waste for an operational purpose at a levy-liable waste facility. This is referred to as an 'operational purpose deduction'.

In the *Environmental Guidelines: Solid waste landfills 2016* the EPA has promoted the use of a bedding layer above the geosynthetic clay liner in landfills to prevent tearing and puncturing of the landfill liner. The EPA also recognises that certain waste materials can legitimately be used as biofilters to minimise odour at waste facilities. However, both of these waste materials are not currently listed in the Waste Regulation as waste materials that can receive operational purpose deductions.

## Options

### Base case (business as usual)

Bedding layer material and biofilter media will continue to be excluded from the list of materials that can receive an operational purpose deduction.

### Proposed amendment

Clause 15 of the Waste Regulation will be amended to enable levy-liable waste facilities to seek an operational purpose deduction for waste that is used as:

- (a) bedding layer to protect landfill lining systems
- (b) biofilter media for pollution or odour control.

If the EPA approves the waste for operational use at the facility, the facility may only seek an operational purpose deduction in respect of waste to be used in bedding layers and biofilters in accordance with requirements set out in the facility's licence. The EPA may also exempt the facility from the requirement to hold a licence for the scheduled activity of waste disposal in respect of waste used at the facility used as an operational purpose.

### Summary

Of the options evaluated, the proposed amendment will provide the greatest benefit to NSW.

These changes extend the range of materials that can be used for operational purposes at a waste facility. This will provide benefit for waste facilities to improve operations at the facility and remove existing regulatory burden.

# Improved monitoring of waste at licenced facilities

## Clarify volumetric survey and stocktake requirements

**Amendment of clause 23(1)(b) of the Waste Regulation by removing the requirement for a mandatory annual volumetric survey at scheduled waste facilities other than landfills and instead allow the EPA to require a facility to carry out a volumetric survey or similar waste stocktake**

To provide the EPA with data from levy-liable facilities, clause 23 of the Waste Regulation requires that all scheduled waste facilities other than landfills conduct annual volumetric surveys of their waste and provide the results to the EPA. In this section, these facilities are referred to as 'recycling facilities'. Landfills are also required to conduct a volumetric survey twice a year.

These surveys can be valuable to both the operators and the EPA in determining compliance with the relevant licence conditions, such as complying with stockpile limits and helping with stock management.

The EPA understands, however, that for recycling facilities there are tools that can be better suited than volumetric surveys to conduct stocktakes of waste at particular points in time.

## Options

### Base case (business as usual)

Under the base case, levy-liable recycling facilities will continue to be required to conduct annual volumetric surveys.

### Proposed amendment

The proposed changes will remove the requirement for levy-liable recycling facilities to undertake mandatory annual volumetric surveys. These facilities will only need to undertake a volumetric survey, or similar calculation to determine the volume of waste at the facility at a given point in time, as and when required by the EPA by notice in writing.

The EPA may also require the occupier of a levy-liable recycling facility to undertake another type of stocktake, in a form and manner approved by the EPA (e.g. a survey that relies on corporate or other records), if this is considered more suitable for a particular purpose.

## Summary

Of the options evaluated, the proposed amendment will provide the greatest benefit to NSW.

The EPA has already issued exemptions from the requirement for recycling facilities to undertake mandatory annual volumetric surveys in 2016 and 2017. As a result, this amendment clarifies current practice, and removes regulatory burden for the regulator and stakeholders.

## Measure mass loss/gain

**Insertion of new clause 25A in the Waste Regulation to allow the EPA to estimate changes to mass of waste**

The EPA has introduced the Waste and Resource Reporting Portal (WARRP) to enable industry to report monthly online on the amounts of waste received and sent from a scheduled waste facility. These reports provide the EPA a better understanding of the waste movements at a facility and enable the EPA to work out the correct levy liability.

However, waste such as green waste and alternative waste treatment material may undergo mass change while at a scheduled waste facility. This needs to be accounted for in determining the amount of waste at a facility at a particular point in time.

To be able to effectively regulate the management of waste stockpiles at scheduled waste facilities, and for a streamlined waste levy system, it is critical that the EPA has flexible and robust methods to determine the amount of waste onsite.

## Options

### Base case (business as usual)

Currently, under the Waste Regulation, the EPA does not have a specific authority to estimate changes to mass of waste that occurs after the waste has been received at a scheduled waste facility.

### Proposed amendment

The Amendment Regulation allows the EPA to estimate changes to mass of waste. This clause will apply if the EPA reasonably believes that the mass of waste may have changed while it is at a scheduled waste facility or the occupier of the facility has incorrectly calculated the mass of waste at a facility. The EPA may consult with the facility in this process and may take into consideration all available information including the facility's records and the results of any volumetric surveys.

The estimated amount can be used to reduce or increase levy liability for that amount of waste, and to determine whether a scheduled waste facility is in breach of its authorised amount as outlined on the environment protection licence for the facility.

To make sure that the EPA has accurate data about the amount of waste actually present at a facility at a particular point in time, this measure will enable EPA to take proactive measures if it determines that waste has undergone a substantial mass change while at a facility. The EPA will be better able to regulate the facility and calculate the correct measurement of waste; allowing for legitimate external factors and climatic conditions.

### Summary

Of the options evaluated, the proposed amendment will provide the greatest benefit to NSW.

These changes provide clarity for the EPA and industry, and are likely to be cost neutral or cost minimal.

## Remove weighbridge requirements at certain facilities

**Amendment of clause 36 of the Waste Regulation to remove the requirement for a weighbridge to be installed at scheduled waste facilities that receive *only* hazardous waste, liquid waste, restricted solid waste or clinical and related waste**

Clause 36 of the Waste Regulation requires all levy-liable waste facilities to install a weighbridge, to weigh loads of waste entering or leaving the facility.

However, there are other, more appropriate methods for calculating the weight of hazardous waste, liquid waste, restricted solid waste or clinical and related waste for facilities that only receive these types of wastes.

## Options

### Base case (business as usual)

Under the base case, scheduled waste facilities that receive only hazardous waste, liquid waste, restricted solid waste or clinical and related waste will continue to be required to install a weighbridge.

### Proposed amendment

The proposed changes will prescribe that scheduled waste facilities that receive only hazardous waste, liquid waste, restricted solid waste or clinical and related waste will not be required to install a weighbridge.

### Better Regulation Statement

## Summary

Of the options evaluated, the proposed amendment will provide the greatest benefit to NSW.

This amendment clarifies current practice, and should be cost neutral.

## Install video-monitoring

### Amendment of clause 39 of the Waste Regulation to clarify the requirements for waste facilities to install video monitoring

To be a more efficient regulator, the EPA needs robust and effective powers to monitor in real time suspected illegal activities at the waste facilities it regulates and where necessary take appropriate regulatory action. To achieve this objective, it is necessary for clarification of circumstances and requirements for waste facilities to install video monitoring as directed in writing by the EPA.

## Options

### Base case (business as usual)

Clause 39 of the Waste Regulation currently allows the EPA to, by written notice to an occupier of a scheduled waste facility, require the occupier to install and operate a video-monitoring system that conforms with the specifications in the notice and to operate the system during the times specified in the notice or at all times.

The occupier must comply with the requirements specified in the notice within the period specified in the notice, ensure that video-monitoring records are kept for at least one year after being made, and make those recordings available for inspection and copying by an authorised officer on request.

### Proposed amendment

The power for the EPA to require the occupier of a scheduled waste facility to install and operate a video-monitoring system will be amended to clarify that any written notice issued by the EPA may specify the manner in which video-monitoring systems are to be installed, operated and maintained.

The power to require video monitoring will also be amended to ensure that no activity takes place under the environment protection licence for the facility at any time when the video-monitoring system is not fully operational. This is to ensure that facilities required to install and maintain video-monitoring systems are not able to avoid the regulatory oversight of the EPA. Facilities will also be required to keep records for three years instead of one. This change is needed to ensure the EPA is effectively able to regulate and ensure compliance with the provisions of the Waste Regulation.

## Summary

Of the options evaluated, the proposed amendment will provide the greatest benefit to NSW.

These changes provide industry with clarity about how video-monitoring systems can be used, and increased transparency and probity, and should not lead to significant increased costs.

## Improved handling of asbestos waste and increased fines for asbestos offences

### Clarification of clause 78 and clause 80 of the Waste Regulation, and increase of penalty amounts

The EPA has conducted a number of investigations into asbestos management at waste facilities and during transport. These investigations revealed some issues with the transport and handling of asbestos waste, specifically the point of disposal and the material used to cover asbestos waste. These issues have the potential to cause avoidable harm due to public exposure to asbestos waste.

The potential harm to the public from the lack of compliance with the existing requirements has led the EPA to further clarify the requirements for transporting asbestos waste and disposing of asbestos and to also propose increasing the penalties for not complying with these requirements.

## Options

### Base case (business as usual)

The provisions of clauses 78 and 80 of the Waste Regulation and the penalties for non-compliance remain unchanged.

### Proposed amendment

The EPA proposes the following changes to the Waste Regulation to improve management of asbestos:

- Asbestos transport – Clause 78 of the Waste Regulation is clarified to require that all loads of asbestos waste must be fully covered and leak-proof during transportation. In addition, if a load of asbestos waste is
  - bonded asbestos, it must be securely packaged during its transportation
  - friable asbestos (asbestos that can be crumbled, pulverised or reduced to powder by hand pressure), it must be kept in a sealed container during its transportation
  - other asbestos waste (including asbestos-contaminated soils), it must be wetted down during its transportation.
- Asbestos disposal – Clause 80 of the Waste Regulation, regarding disposal of asbestos waste at landfills, will be amended so that
  - the occupier of the landfill and the person unloading or disposing of the asbestos waste at the landfill must prevent dust from being generated from the asbestos waste
  - the EPA can provide written authorisation for landfills (licensed and unlicensed) to use alternative cover material for asbestos waste; that is, material other than VENM
  - if the depth of any alternative cover material for asbestos waste in clause 80 of the Waste Regulation is not suitable, an alternative depth can be specified by the EPA in the facility's licence or written authorisation.

The offences under clauses 78 and 80 can be dealt with by way of penalty notices. Where a penalty notice is issued by the EPA, the penalty notice amounts for a breach of any of these requirements, or of requirements to ensure that asbestos waste does not escape from a vehicle (under clause 78 of the Waste Regulation), will increase to \$15,000 for corporations and \$7,500 for individuals. Where a penalty notice is issued by a council, the penalty notice amounts will increase to \$8,000 for corporations and \$4,000 for individuals.

This aligns with the increases in penalty notice amounts introduced in May 2014 with respect to offences such as pollution of waters and breach of licence condition.

### Summary

Of the options evaluated, the proposed amendment will provide the greatest benefit to NSW.

The proposed amendments to asbestos transport and disposal are minor amendments intended to reduce the risk of exposure to the public and clarify regulatory burden for industry.

The increases in the fines for asbestos offences are designed to provide an effective deterrent to mishandling asbestos waste and minimising the associated risk of harm to human health and the environment. They increase transparency and probity.

# Changes to the land pollution offence

## Amendment of the land pollution offence in clause 109 of the POEO General Regulation to clarify its application relating to the management and remediation of contaminated land

The 2014 waste reforms prescribed that land pollution was deemed to have occurred if hazardous waste, restricted solid waste, more than 10 tonnes of asbestos waste or more than 5 tonnes of (or 500) waste tyres was applied to land, unless it had been authorised by an environment protection licence. This is specified in clause 109 of the POEO General Regulation 2009. However, the waste regulatory framework generally applies to off-site management or disposal of waste.

Clause 109 was not intended to prescribe on-site land application of these types of waste as automatically constituting land pollution, where such land application is generated:

- in accordance with an approved voluntary management proposal, management order, ongoing maintenance order, or public positive covenant or restriction under the *Contaminated Land Management Act 1997* (CLM Act), or
- as part of category 1 remediation work carried out under *State Environmental Planning Policy No. 55 – Remediation of Land* (SEPP 55).

These other laws (CLM Act and SEPP 55) restrict on-site land application of this material.

## Options

### Base case (business as usual)

The POEO General Regulation will continue to prescribe on-site land application of the waste types outlined in clause 109 as automatically constituting land pollution.

### Proposed amendment

The EPA proposes the amendment of clause 109 of the POEO General Regulation to clarify that on-site land application of hazardous waste, restricted solid waste, more than 10 tonnes of asbestos waste and more than five tonnes of (or 500) waste tyres will not automatically constitute land pollution where such land application is generated:

- in accordance with an approved voluntary management proposal, management order, ongoing maintenance order, or public positive covenant or restriction under the CLM Act, or
- as part of category 1 remediation work carried out under SEPP 55.

'On site' is a reference to the premises on which the waste was generated.

On-site land application of these wastes may still constitute a land pollution offence under section 142A of the POEO Act if it causes degradation of the land, resulting in actual or potential harm to the health or safety of humans, animals or other terrestrial life or ecosystems, or actual or potential loss or property damage, and it is not authorised by the framework specified above.

In addition, land application of hazardous waste, restricted solid waste, more than 10 tonnes of asbestos waste and more than 5 tonnes of (or 500) waste tyres received from off site will still automatically constitute land pollution, unless it has been authorised by an environment protection licence.

## Summary

Of the options evaluated, the proposed amendment will provide the greatest benefit to NSW.

This amendment acts to formalise current practice, increase transparency and probity, clarify regulatory burden for the regulator and stakeholders and should be cost neutral or cost minimal.

# Amendments to licensing requirements

**Clarification of licensing requirements in Schedule 1 of the Act so that they are clear and include facilities that could pose significant environmental risks**

Compliance campaigns and industry feedback have revealed that some activities listed in Schedule 1 of the POEO Act are unclear or do not expressly include some facilities that present risks to the environment and human health. This includes intermodal waste transport facilities, facilities receiving biosolids, and energy recovery facilities.

The activities listed in Schedule 1 of the POEO Act are known as scheduled activities that require an environment protection licence from the EPA to be lawfully carried out. If the description of a scheduled activity is unclear then potentially harmful activities that require a licence are not being regulated by the EPA and may increase risk and result in impacts to the environment and community. At resource recovery, waste processing and waste storage facilities, these impacts include dust, noise and odour. If inappropriately managed or abandoned, such facilities can have excessive stockpiles and also release gases into the environment, and leaching can lead to contamination of groundwater or waterways.

The EPA has a responsibility to ensure these facilities meet minimum environmental criteria to ensure protection of the environment and human health, and a consistent and level playing field across the industry.

The EPA also has a responsibility to ensure that regulatory resources are allocated appropriately to those facilities that pose the most risk. Some activities, such as facilities operating solely as timber-cutting yards, have inadvertently been captured by the wording of Schedule 1 of the POEO Act.

## Options

### Base case (business as usual)

No amendments are made to the POEO Act Schedule 1 licensing categories and they remain uncertain, and activities that pose a risk of harm to the environment continue unregulated.

### Proposed amendment

The EPA proposes the following amendments to Schedule 1 of the POEO Act.

#### ***Energy recovery facilities***

Clause 18 of Schedule 1 will be amended to clarify the circumstances in which a resource recovery exemption is required under clause 40 of Schedule 1 of the POEO Act for a facility that is also required to be licensed for energy recovery.

#### ***Timber-cutting yards***

Facilities will not be required to be licensed under clauses 34, 41 and 42 of Schedule 1 of the POEO Act if the only waste received from off site is untreated wood waste (other than sawdust or wood shavings) that is being processed by cutting, splitting or otherwise reducing into small components (other than by chipping) for the purpose of being sold as firewood.

#### ***Waste storage facilities***

Clause 42 of Schedule 1 of the POEO Act will be amended to make explicit that facilities will be required to be licensed for waste storage (if they receive over 6000 tonnes of waste a year, or have over 1000 tonnes of waste on site each year) if waste is only being transferred between units of rolling stock, motor vehicles or trailers.

#### ***Biosolids***

The definition of organics in clause 50 of Schedule 1 of the POEO Act will be amended to clarify that the only biosolids defined as putrescible organics are unstable or untreated biosolids.

## Better Regulation Statement

## Summary

Of the options evaluated, the proposed amendments will provide the greatest benefit to NSW.

The changes regarding timber-cutting yards and energy recovery are aimed at reducing the unnecessary administrative burden in relation to these facilities. The clarification of which biosolids are non-putrescible organics will help facilities to determine the threshold at which they will need to be licensed for composting under clause 12 of Schedule 1 of the POEO Act. These changes clarify regulatory burden for the regulator and stakeholders and should be cost neutral or cost minimal.

The amendment to clause 42 of Schedule 1 clarifies that waste storage facilities include facilities where waste is only being transferred between units of rolling stock, motor vehicles or trailers. This clarification is consistent with the EPA's interpretation of current clause 42; the amendment is being made to provide clarity and transparency for industry regarding the requirement to be licensed for this activity.

Facilities that fall within the scheduled activity of waste storage are required to pay licensing fees and have associated licensing administration costs. They are also liable for the waste levy on each tonne of waste entering the facility, subject to deductions for waste being lawfully sent off site, and required to have a weighbridge and meet record keeping/reporting requirements. The amendment is cost neutral or cost minimal as facilities are already subject to these requirements under EPA's interpretation of the current wording in clause 42.

## Other changes

The Amendment Regulation also includes a series of minor amendments that are machinery in nature, such as:

- updating the references in the regulation to local government areas that have become out of date since council amalgamations
- clarifying that the shredder floc and VENM concessional levy rate only applies at waste disposal facilities
- clarifying the application of transported waste deductions
- clarifying that the EPA can take into consideration whether a person has failed to pay any fee under environment protection legislation, in determining whether a person is a 'fit and proper person'
- clarifying the application of the waste levy at waste facilities other than landfill
- clarifying the circumstances in which resource recovery exemptions can be granted.

## Costs and benefits of proposed amendments

The amendments in this Appendix 1 are minor.

In summary, the proposed amendments:

- either remove or clarify regulatory burden for the regulator and stakeholders
- clarify current practice (in some circumstances)
- are cost neutral or cost minimal
- increase transparency and probity.

The EPA has considered the need for government action, and has clearly established the objectives for these reforms.

The benefits of the reforms are that they simplify, remove or clarify regulatory burden for the regulator and stakeholders. They are either cost neutral or cost minimal. The reforms increase transparency and probity for stakeholders. In some circumstances the review of the existing law has led to the conclusion that the regulatory burden is not in proportion with the environmental harm, and this is addressed by the proposed amendments.

# Appendix B: Modelling assumptions

The following table summarises the key costs and benefits that were included in the Marsden Jacobs cost-benefit analysis.

Costs	Benefits
Additional capital equipment	Revenue from increased recovery and sale of recyclate
Additional compliance	Avoided landfill costs
Enforcement costs	Avoided waste exhumation and transport
Additional labour costs	Avoided recovered fines cost
Additional land costs	Avoided clean-up costs

The following modelling assumptions were used.

Assumption	Unit	Figure	Source
Analysis period	years	10	
Discount rate	%	7%	NSW Treasury
Expected annual growth rate in product	% p.a.	1%	Average Growth of Building and Construction in NSW 2011–2015
Increase in recycling (current <50% recovery)	%	15%	NSW EPA
Increase in recycling (current 50–75% recovery)	%	5%	NSW EPA
Increase in recycling (current >75% recovery)	%	0%	NSW EPA
Current value of recyclate	\$/t	\$20.00	From Marsden Jacob initiated peer review analysis, 85% is bricks, concrete and aggregate, 11% soil
Expected change in value of recyclate	%	0.0%	
Total landfill cost (economic)	\$/t	\$46.91	Marsden Jacob analysis
Direct landfill cost	\$/t	\$45.52	
Landfill externalities (air quality)	\$/t	\$0.25	
Landfill externalities (disamenity)	\$/t	\$1.14	
Recovered fines cost	\$/t	\$5.00	

## Facilities

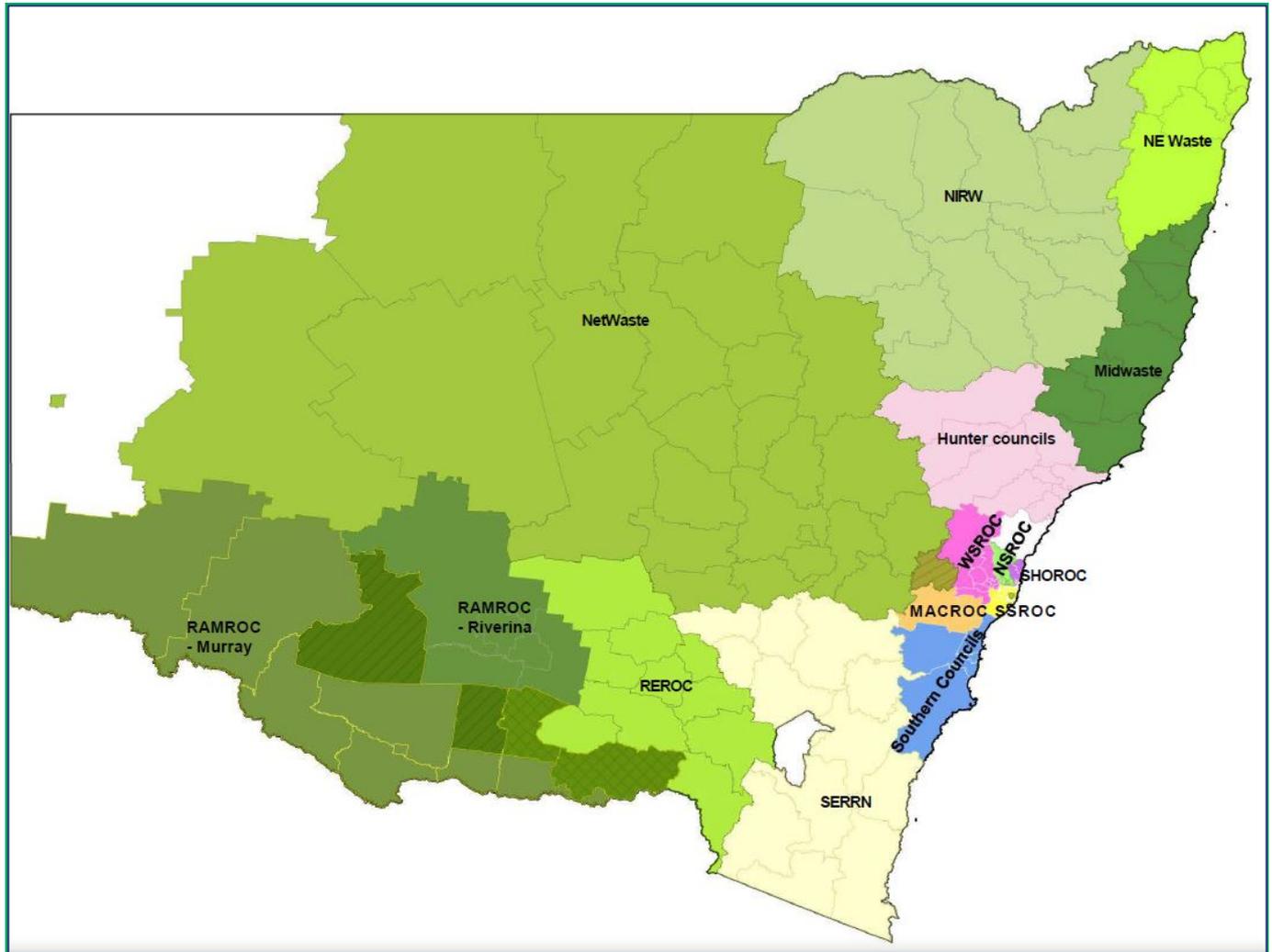
The state-wide C&D waste facilities have been split into three categories (small, medium and large) based on their historical annual processing tonnage. A summary of the specifics of the three categories is shown below.

	Small	Medium	Large
Description	Annual processing between 6,000 and 30,000 tonnes	Annual processing between 30,000 and 70,000 tonnes	Annual processing more than 70,000 tonnes
Total number of facilities	20	10	36

## Recovery rate

The base analysis assumes that the reforms led to improvements in the current resource recovery rates for facilities located in the following regional waste group zones (see the following figure): Hunter Councils, MACROC, NSROC, SHOROC, SSROC and WSROC. For other ROC zones no increase is assumed due to the challenges presented by transport distances.

### Regional waste groups



For facilities in these zones the following increases were assumed:

- facility with current recovery rate of less than 50% of waste received = 15% increase in recovery rate
- facility with current recovery rate between 50% and 75% of waste received = 5% increase in recovery rate
- facility with current recovery rate exceeding 75% of waste received = 0% increase in recovery rate.

# Appendix C: Issues raised in the consultation

## 1. Comments on the Draft Regulation

This section provides an overview of the comments received on the Draft Regulation and the Government's response to those comments.

All submissions made comments on the draft Protection of the Environment Operations Legislation Amendment (Waste) Regulation 2017, which were consulted on between October and December 2017 (**Draft Regulation**). Submissions were generally supportive of the proposed amendments. Despite this, respondents also showed concern over some of the changes. The table below summarises the submissions relating to the Draft Regulation and the response of the NSW Government.

### Comments on the Draft Regulation

Item/Clause in Draft Regulation	External consultation comments	Government response
<p><b>2 Commencement timeframe</b> Regulation commences from date of publication and schedule 2 [29] (Part 8A C&amp;D facilities) comes in six months after publication</p>	<p>Concerns were raised that a six-month transition period for the Standards and an immediate commencement date on publication for the elements of the Draft Regulation may be insufficient to implement the changes required at a facility level.</p>	<p>Commencing the Standards six months from the date of publication is sufficient time to allow operators of C&amp;D waste facilities to implement the measures required by the Standards.</p> <p>The procedures required by the Standards are considered 'minimum' measures in order to protect the environment and human health.</p>
<p><b>Schedule 1 Clause 42 (2C) of the POEO Act</b> Inclusion of a requirement to comply with waste storage conditions even if the waste is merely being transferred between units of rolling stock, motor vehicles or trailers</p>	<p>Several submissions supported the inclusion of rail operators in the waste regulation framework because their current exclusion makes the system inconsistent and imposes an unequal burden of environmental controls.</p> <p>A submission raised concerns about the impacts the requirement to comply with the Standards would have on an intermodal transport business because it would now be required to inspect, sort and store C&amp;D waste in line with Standards. The submission recommended alternative procedures.</p>	<p>It is fundamental to protect human health and the environment and provide a level playing field that all facilities storing, handling, processing or recovering large quantities of C&amp;D waste are licensed, subject to appropriate conditions and regulated accordingly.</p> <p>The proposed amendments clarify existing scheduled activities and do not unfairly burden or discriminate between facilities. They apply equally to all facilities that fit into the category of a C&amp;D waste facility.</p> <p>The EPA may grant exemptions to the Standards, which will only be used in exceptional circumstances to ensure regulatory consistency, a level playing field for industry and that human health and the environment are protected.</p>

<p><b>Clause 3 of Waste Regulation</b> Amendment of the councils named in the MLA to update names based on council amalgamations</p>	<p>One council submitted that it should be classified as in the RLA on the basis that it is a disadvantaged community with different challenges from those of a metropolitan council.</p>	<p>This comment is beyond the scope of the current changes; however, the EPA is aware of these concerns and has received previous correspondence on this issue.</p>
<p><b>[9] Clause 12(7)(c) of Waste Regulation</b> Removal of current resource recovery order for recovered fines and new use of recovered fines as daily cover at landfills with 50% levy discount</p>	<p>Submissions were in favour of the use of recovered fines as alternative daily cover. However, the following concerns were raised:</p> <ul style="list-style-type: none"> <li>• Reducing the levy on fines may create a levy loophole that facilities may abuse, which may decrease resource recovery rates.</li> <li>• A 50% levy concession is insufficient; instead a greater levy discount would create an effective economic incentive.</li> </ul> <p>Some submissions also requested clarification on how the new resource recovery order process would work, what the specifications would be and who could obtain one.</p>	<p>The NSW Government has considered the submissions and reviewed its position as to the rate of levy concession. Recovered C&amp;D fines produced in accordance with prescribed specification and applied as alternative daily cover at scheduled waste disposal facilities will be subject to a 75% concession.</p> <p>Licence conditions will be used to limit the annual quantity of discounted recovered fines a facility can claim as daily cover.</p>
<p><b>Clause 15 of Waste Regulation</b> Approval of operational purpose – to permit (with the approval of the EPA) the use of waste as biofilters or bedding layers in a landfill</p>	<p>Submissions requested clarification on the type of waste that can be used as a biofilter, and whether ‘biofilter media’ applies to biofilters for pollution or odour control in the form of biocovers on landfill batter slopes.</p> <p>Submissions suggested the Draft Regulation should be changed to match the Landfill Guidelines, by permitting the same amount of clay liner as permitted in the Landfill Guidelines to be eligible for operational purpose deductions.</p>	<p>The regulation has been amended so that specifications on the type of waste for biofilters will be included in the licence (rather than Waste Levy Guidelines). This will allow flexibility to determine appropriate material on a case-by-case basis and analyse the receptor environment.</p> <p>In relation to clay liners, this is beyond the scope of the current changes, but the EPA will consider this for future regulatory reform.</p>
<p><b>Clause 16A of Waste Regulation</b> Inclusion of a requirement that a scheduled waste facility (i.e. not a scheduled waste disposal facility) may only claim a levy deduction from its required contribution on waste that has been on the facility for 12 months or less</p>	<p>Submissions raised concerns about Clause 16A, including the following:</p> <ul style="list-style-type: none"> <li>• Concerns were raised that the 12-month timeframe to claim a deduction may be insufficient to allow regional council facilities to stockpile enough C&amp;D waste to recycle it in an economically viable way. Two years was submitted as a more appropriate timeframe.</li> <li>• Some industry representatives raised concerns that 12 months was insufficient time to stockpile and process waste and claim a levy deduction. They felt that it would reduce resource recovery rates and increase gate fees.</li> </ul>	<p>Given current pressures faced by the recycling industry the NSW Government has reviewed the submissions and determined that it will not impose a 12-month limitation on claiming a transported waste deduction at this time.</p> <p>The EPA may revisit this issue in the future.</p>

<p><b>Clause 25A of Waste Regulation</b> Allows the EPA to estimate changes to mass of waste</p>	<p>Responses raised concern that the waste loss estimation may be too subjective. Some submissions requested clarification on how this clause will be applied.</p>	<p>The EPA will have a robust policy to provide a framework to ensure this process is methodical, transparent and fair.</p>
<p><b>Clause 39(2)(a1) of Waste Regulation</b> Provides the power for the EPA to require, by notice in writing, that the operator of a scheduled waste facility install, operate and maintain a video-monitoring system and ensure that no activity takes place under the environment protection licence at the relevant facility when the video-monitoring system is not fully operational</p>	<p>Submissions requested clarification as to what 'fully operational' means. Other concerns raised included the following:</p> <ul style="list-style-type: none"> <li>• Facilities often have multiple cameras, so operations should be able to continue if only one camera is not operational.</li> <li>• It may be problematic for facilities in regional areas where a camera system can go down, but waste disposal community services cannot be disrupted, and getting service operators to repair the cameras may take weeks.</li> </ul>	<p>The power is a discretionary tool allowing the EPA to require video monitoring to determine compliance or contravention with the requirements of the Draft Regulation. The notice issued by the EPA will specify the requirements as to the installation, operation and maintenance of the video monitoring system.</p>
<p><b>Clause 39(2)(b) of Waste Regulation</b> Requirement to store video recordings for three years</p>	<p>While there was no objection to the requirement to store video recordings generally, submissions raised issues with the cost associated with storing video recordings for three years.</p>	<p>The requirement to store video footage for three years is necessary and reasonable in the circumstances, noting that the requirement to store the recordings is not a general ongoing requirement but only required in circumstances where a facility has been directed to comply with the conditions of a notice issued under clause 39(1)(a).</p>
<p><b>Clause 71 of Waste Regulation</b> Repeal of proximity principle offence</p>	<p>A number of submissions expressed concerns with the repeal of the proximity principle offence. Concerns included the additional risks to the environment, health, safety and the waste hierarchy arising from the long-distance transport of waste for disposal. Only a small number of submissions supported repeal of the proximity principle offence.</p>	<p>The NSW Government has carefully considered the numerous submissions received during consultation that were supportive of the proximity principle. In the absence of a national approach to address the adverse impacts caused by the unnecessary long-distance transport of waste for disposal on human health, the environment and the waste hierarchy, the proximity principle offence will be retained in the Waste Regulation. The NSW Government will also continue to advocate for a robust national regulatory response to address these adverse impacts and promote a sustainable resource recovery industry throughout Australia.</p>

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**Clause 78 and 80(3) of Waste Regulation**

Clarification of asbestos transport and disposal

Submissions sought clarification about:

- the definitions of 'leakproof' and 'no dust generated from the waste'
- who is responsible for wetting asbestos loads, and who will monitor and enforce this requirement
- who is responsible for unloading.

Clear guidance was requested by councils on how to ensure new asbestos-related responsibilities are met.

Concerns were also raised about the requirement for 500mm of cover over asbestos that is already wrapped, primarily due to cost and additional effort.

The language of the provision is clear without clarification or supporting guidance material.

Clause 80 provides that both the person who unloads or disposes of the asbestos waste at the landfill site and the occupier of the site are responsible for ensuring that no dust is generated.

In relation to cover for wrapped asbestos, this is beyond the scope of the current changes. The EPA will consider this for future regulatory reform.

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**Clause 90B of Waste Regulation**

Defines a C&D waste facility as a facility:

- in the MLA that receives 6,000 tonnes or more of construction waste from the MLA in any 12-month period, or
- in the RLA that receives 6,000 tonnes or more of construction waste from the MLA in any 12-month period

Submissions raised concerns with the definition in this clause, and made recommendations for amendments. Responses raised issues with the fact that:

- Setting a 6,000 tonne threshold creates an unequal playing field in the industry.
- The definition of C&D waste could end up capturing commercial and industrial waste types.
- The definition will class more landfills as C&D facilities – possibly creating issues with splitting licences.
- Once a facility stops receiving C&D waste its classification as a C&D facility expires after two years, as endless C&D classification may cause problems.

Some submissions recommended that:

- the definition be amended to any facility in the regulated area that receives more than 6,000 tonnes of C&D waste, regardless of its origin
- the clause should be amended to refer to a scheduled waste facility that 'is not predominantly a scheduled waste facility', to ensure landfills will continue to undertake resource recovery.

Several submissions opposed the one-size-fits-all approach of the minimum standards because the reforms target a small number of rogue operators, but the consequences are wide ranging on

The NSW Government notes that industry is generally supportive of the introduction of Standards for managing construction waste imposed by the reforms.

EPA compliance campaigns have identified that a significant number of C&D waste facilities are engaged in poor practices and procedures that fail to sufficiently protect the environment and human health.

It is the EPA's position that the Standards are minimum standards that should be practices undertaken by all legitimate facilities. Requiring all facilities that meet the prescribed threshold to comply with these practices creates a level playing field and will improve the practices of the sector as a whole.

Under the Act, 6000 tonnes of annual through-put is the threshold that triggers the requirement to hold a licence for the scheduled activities of resource recovery, waste processing and waste storage. It is therefore the threshold for the Standards, provided the facility is not solely a scheduled waste disposal facility.

At this stage, it is not proposed to apply the Standards to facilities outside the MLA, as the poor practices and impacts identified in the MLA have not been identified at anywhere near the same scale elsewhere in NSW. The EPA will, however, continue to monitor practices to assess whether there would be a net benefit to introducing the Standards elsewhere in NSW.

	<p>lawful operators. Some stakeholders felt the changes would drive waste to landfill, reduce resource recovery rates and increase landfill gate fees, and recommended the EPA focus on investigating and prosecuting rogue operators rather than introducing regulation on the entire sector.</p>	<p>The provision also allows for exemptions from the Standards. Exemptions will only be issued in exceptional circumstances to ensure regulatory consistency, a level playing field for industry and that human health and the environment are protected.</p>
<p><b>Clause 110A of Waste Regulation</b> Makes it an offence for the occupier of land that is or was a landfill site to exhume waste from the land</p>	<p>While many submissions showed support for the ban on exhuming waste, others raised concern that this clause may prevent facilities from recycling waste at the tip face. Further, submissions requested:</p> <ul style="list-style-type: none"> <li>• clarification of what constitutes 'exhumation'</li> <li>• exemptions for operational work (e.g. gas and leachate management works) that requires waste to be resumed</li> <li>• that the offence only applies to the regulated area.</li> </ul>	<p>The ordinary meaning of the word 'exhume' is sufficiently clear without further clarification.</p> <p>The prohibition on exhuming waste is important and intended to apply state wide because landfills are designated as the final resting place for waste and should not be disturbed. This is to protect the environment and community from the many hazardous materials in landfills.</p> <p>The provision allows for exemptions in appropriate circumstances, such as operational work, if authorised by the EPA in writing.</p>
<p><b>Clause 110B and clause 16(3) of Waste Regulation</b> Makes it a condition of an environment protection license for a scheduled waste disposal facility that waste must not be transported from a scheduled waste disposal facility, unless an exception applies</p>	<p>Responses raised concerns with this condition, on the basis that:</p> <ul style="list-style-type: none"> <li>• it may require some facilities to split their licence, which may be a particular issue in regional areas, as many are operating transfer stations within landfill sites due to issues such as space limitations; instead, a site-by-site assessment process was suggested</li> <li>• it may decrease recycling activities occurring at landfills</li> <li>• regional councils have built community recycling centres at landfills.</li> </ul> <p>Submissions further requested exceptions for concrete and timber in the provision.</p> <p>Some submissions also requested changes to allow transfer of wastes between council's own waste facilities.</p>	<p>The NSW Government has considered the numerous and detailed submissions and will remove this provision from the reforms.</p> <p>At this time, the EPA will pursue its objectives to improve environmental controls and procedures in waste processing activities using existing regulatory and compliance tools.</p>

## 2. Comments on Draft Standards

This section provides an overview of the comments received on the Draft Standards and the NSW Government response to those comments.

The majority of submissions also made comments on the Draft Standards for Managing Construction Waste that were consulted on between October and December 2017 (**Draft Standards**). Generally, submissions were in support of the implementation of blanket standards across the C&D sector. The table below outlines the submissions relating to the Draft Standards and the response of the NSW Government.

### Summary of key specific comments on changes to the Draft Standards

Item/Section in Draft Standard	Submission	EPA response
<b>Standard 1: Inspection Requirements</b>		
<b>Standard 1.1</b>		
<b>Inspection Point 1</b>		
At the <b>verified weighbridge</b> , trained personnel must:	While the overall purpose of Standard 1.1 was generally supported, submissions expressed concerns that it may be too prescriptive and may pose practical issues.	The requirements of Standard 1.1 are appropriate and clear. C&D facilities that receive over 6,000 tonnes of construction waste in a year should be appropriately set up and equipped to inspect each load of waste arriving at their premises to ensure it may be lawfully received at the facility.
<ul style="list-style-type: none"> <li>inspect the top of each load from an elevated inspection point or by using a video camera connected to a monitor and determine whether the load contains any asbestos waste</li> <li>where the load is reasonably suspected to contain any asbestos waste, reject the entire load of waste by directing the driver to immediately leave the facility and record the required information in the C&amp;D waste facility's rejected loads register</li> <li>where no asbestos waste is observed in the load, record the details as required by clause 27 of the Waste Regulation and cause the load of waste to proceed directly to inspection point 2.</li> </ul>	<p>Some concerns were that:</p> <ul style="list-style-type: none"> <li>inspecting for asbestos at the weighbridge may pose problems as most loads are delivered as covered and must therefore have the cover removed</li> <li>the consigner of waste, as opposed to the facility, should be held responsible to ensure waste being sent for recycling is asbestos free</li> <li>rejecting loads with isolated asbestos may risk financial viability – if only a small amount of asbestos is found, the load should instead be decontaminated.</li> </ul>	<p>The requirements are designed to reduce the risk of facilities processing asbestos or other contaminated waste and prevent that hazardous material from entering recycled products and becoming an environmental and public health risk as those products are distributed into the community.</p> <p>The EPA considers it essential that facilities take all appropriate steps to reduce the risk of asbestos and other contaminants entering recycled products to protect the quality of those products, and to protect the environment and public health.</p> <p>The weighbridge is the appropriate location for the initial inspection of a load of construction waste for the presence of asbestos.</p>
<b>Standard 1.2</b>		
<b>Inspection Point 2</b>		
At inspection point 2 – tip and spread inspection area.	While there was general support for inspection requirements, some submissions were concerned about particular provisions, such as the requirement:	The Standards are designed to strike the necessary balance between ensuring C&D waste facilities have appropriate environmental procedures in place and day-to-day operational requirements.
<b>Definition</b>		Facilities need to appropriately arrange their business operations in order to minimise the risk of harm to human health and the environment.
Defined as a dedicated working area located on a C&D waste facility after the verified weighbridge where each load of construction waste is temporarily deposited and spread for the purpose of inspection for unpermitted waste types within the load. It must:	<ul style="list-style-type: none"> <li>for a fixed tipping area, due to the shifting nature of many facilities and operations</li> <li>to have a concrete hardstand, as a compacted surface area may be sufficient</li> <li>to prevent run-on and run-off from the hardstand, as this may</li> </ul>	The EPA has considered the submissions in respect of

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<ul style="list-style-type: none"> <li>• have a minimum surface area of 100 square metres (m<sup>2</sup>)</li> <li>• be large enough so that each load of construction waste deposited for inspection can be clearly identified and delineated</li> <li>• be a hardstand designed and constructed from concrete to withstand the spreading and scraping of waste and the load and frequency of incoming vehicles and machinery used at the C&amp;D waste facility</li> <li>• be designed and constructed to prevent both run-on and run-off from surface water.</li> </ul>	<p>not be possible in all circumstances.</p> <p>Submissions requested further information as to how to inspect loads and what process to follow when unacceptable waste is found, and who bears disposal costs.</p> <p>Submissions expressed concern that the tip and spread process may create log jams at facilities. To avoid this, it was suggested that loads be pre-assessed at the generator's site.</p>	<p>inspection area 2 and determined that a dedicated tipping area or tipping areas is required but that it may be made out of impermeable material other than concrete so long as it meets the requirements of the Standards.</p> <p>The Standards will commence six months after commencement of the Proposed Regulation; this will enable industry to adjust its waste practices in consultation with the EPA, and clarify appropriate processes to follow.</p>
<p><b>Standard 1.3</b> <b>Training Requirements</b></p> <p>Requires that all personnel undertaking any task involving the Standards receives training on:</p> <ul style="list-style-type: none"> <li>• the provisions of the POEO Act and its regulations</li> <li>• the conditions of the EPL for the C&amp;D waste facility</li> <li>• the requirements of the Draft Standards</li> <li>• asbestos awareness and removal.</li> </ul>	<p>While submissions acknowledged the need for employees to undergo training, some raised concern with:</p> <ul style="list-style-type: none"> <li>• the level of training required, noting that staff currently complete general asbestos awareness training</li> <li>• the associated costs of increased training, particularly due to high staff turn-over.</li> </ul> <p>Some submissions suggested that the EPA should fund the training or a real-time EPA database of rejected loads be made available.</p>	<p>It is essential to the aim of preventing risks to human health and the environment and promoting adherence to the waste hierarchy that staff are appropriately trained in asbestos management and aware of the conditions under which the facility is lawfully required to operate.</p> <p>The EPA has considered the submissions and determined that, for the purpose of completing tasks required by the Standards, trained personnel only need to complete a bonded asbestos removal course if they are involved in that particular task.</p>
<p><b>Standard 1.4.3</b> <b>Rejected Loads Register</b></p> <p>Requires that certain information, including the name and address of the site from which a rejected load was transported to the C&amp;D waste facility, is recorded in the Rejected Loads Register.</p>	<p>Submissions raised concerns that this requirement may not be practical, as drivers may refuse to provide the generation site.</p> <p>Submissions recommended that a real-time EPA database of rejected loads be available, that sends a notification of a rejected load to other facilities.</p>	<p>In response to these submissions, the requirement to record the address from which the rejected load was received has been removed considering the difficulty in obtaining this information.</p> <p>The EPA will also explore opportunities to integrate rejected loads registers into an EPA database.</p>
<p><b>Standard 2: Sorting requirements</b></p>		
<p><b>Standard 2.1</b> <b>Sorting</b></p> <p>Requires that C&amp;D waste that has proceeded through inspection points 1 and 2 is sorted and classified into individual waste types for the following purposes:</p> <ul style="list-style-type: none"> <li>• further recovery at another C&amp;D waste facility</li> <li>• further processing or mechanical sorting at the C&amp;D waste facility</li> <li>• transport to a waste facility that can lawfully receive the waste, or</li> </ul>	<p>Some submissions supported the sorting requirements in Standard 2.</p> <p>Other submissions expressed concern with this requirement, indicating that it may be too strict in nature, claiming:</p> <ul style="list-style-type: none"> <li>• it is not possible to sort with 100% accuracy</li> <li>• Standards fail to recognise the current classification of mixed waste as a legitimate product</li> <li>• sorting would require new equipment, which may not be feasible at all sites.</li> </ul> <p>Some submissions were against the sorting requirement, as some facilities only receive loads of a</p>	<p>C&amp;D waste facilities are licensed to receive construction waste for the purposes of resource recovery and waste processing and associated storage before transport off-site.</p> <p>Sorting waste for the purpose of recovery or further processing is a necessary element of these processes and entirely consistent with the licensing framework, the objects of the POEO Act and the principles of the waste hierarchy.</p> <p>The Standards also include exceptions in specific circumstances where only single waste types are received at a facility.</p>

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- disposal at a lawful waste disposal facility.
- single waste type, so should not have to thoroughly inspect, as this will add significant costs.

### Standard 3: No mixing of waste

#### Standard 3.1

Construction waste that has been inspected and sorted in accordance with Standards 1 and 2 must not be mixed with any other waste at the C&D waste facility unless:

- that other waste has been inspected and sorted at the C&D waste facility in accordance with Standards 1 and 2
- it is of the same waste type.

#### Definition

Waste type means the waste types described in 'Table 3.1: Waste Types' in the EPA's Waste Levy Guidelines.

Some submissions raised issues with this standard, on the basis that it may be hard to enforce. Concerns were also raised that it may prevent the mixing of C&D bricks with VENM.

Submissions also sought clarification about what people can and cannot do with mixed waste, considering that mixed waste is currently a distinct waste type in the Waste Levy Guidelines

A key objective of the Standards is to prevent the contamination of resources recovered from C&D waste.

The requirement not to mix waste that has been inspected and sorted in accordance with the Standards with waste that has not been is fundamental to achieving this objective.

Adjustments have been made to this Standard to allow for the processing of waste to meet resource recovery orders and the recovered fines alternative daily cover specification.

### Standard 4: Waste storage requirements

#### Standard 4.1

#### Waste storage requirements

All construction waste received at the C&D waste facility that has been inspected and sorted in accordance with Standards 1 and 2 must be stored in separate storage bays, by individual waste type, that are clearly labelled by waste type.

Submissions raised the following issues:

- the requirement to immediately go to the storage areas prevents blending and options for further assessment
- inspection of each waste storage area and record keeping is too onerous.

Submissions requested clarification regarding:

- what EPA training will be provided
- if a facility must store construction waste before it can be processed into product.

Clearly identifiable separate waste storage bays are an essential measure at any waste processing, storage or resource recovery facility to prevent cross-contamination. Record keeping is necessary to ensure waste is stored appropriately.

C&D facilities should already be sorting and classifying waste as part of their business and have a responsibility to ensure staff are trained to carry out their duties, identify and classify waste types.

The EPA considers the Standard is sufficiently flexible to accommodate the full spectrum of legitimate processing and recovery operations. The Standards will commence six months after commencement of the Proposed Regulation; this will enable industry to seek clarity from the EPA on any outstanding process issues.

#### Standard 4.1.2

#### Waste stored in unpermitted waste storage area

All unpermitted waste types must be moved to a waste storage area in accordance with these Standards and transported to a waste facility that can lawfully accept that waste within one business day of receipt at the C&D waste facility.

Submissions raised concern that one day is insufficient time to get unpermitted waste off site, and suggested that having a maximum quantity or longer time frame may be a more appropriate approach.

In response to these submissions, a time period within which unpermitted waste must be transported off a C&D facility is not prescribed.

C&D waste facilities are permitted by their licences to receive certain types of waste only. The licensee bears the responsibility to ensure that the conditions of its licence are complied with and that appropriate procedures and processes are in place to deal with unpermitted waste types as they appear.

### 3. Miscellaneous comments

This section provides a summary of overall comments received on the reforms and other comments relating to EPA initiatives outside the scope of this consultation process.

A number of submissions made overall comments on the reforms or made comments about other EPA initiatives or legislative frameworks. The table below outlines these overall and general comments and provides the NSW Government response.

#### Summary of miscellaneous comments

Consultation comment	EPA response
Some submissions recommended the EPA use WasteLocate to track C&D waste through all facilities, and connect it to waste classification reports and waste management plans associated with development consents.	The NSW Government is considering opportunities to expand the use of WasteLocate to improve practices throughout the waste sector.
Submissions expressed disappointment about the removal of the minimum recycling targets.	The NSW Government appreciates support for the recycling targets. However, the targets had to be removed from the current reform package because of implementation issues. The EPA may explore other opportunities to introduce recycling targets in future.
A submission raised concerns about a lack of EPA resources to enforce requirements of proposed changes.	The EPA will undertake all appropriate action to enforce the requirements of the Draft Regulation and the Draft Standards.
A submission recommended the EPA should support long-term sustainable markets for large volumes of recovered material, because current market demand is insufficient for the volume generated.	Under the \$802 million Waste Less, Recycle More Initiative, the NSW Government has put in place multiple funding programs to support industry to increase and improve recycling, including funding infrastructure, market development and recycling innovation.
A submission recommended that facilities that can demonstrate they have followed the Standards correctly should be afforded regulatory leniency should asbestos pass through undetected and accidentally end up in a product.	The EPA Compliance Policy (available at <a href="http://www.epa.nsw.gov.au">www.epa.nsw.gov.au</a> ) summarises the agency's approach to compliance and enforcement and explains how the EPA works to achieve compliance and drive improved environmental performance. The policy reflects the agency's values as an independent, accountable and modern regulator. The EPA will take compliance action to enforce the Standards once they commence in line with this policy.
A submission suggested the EPA reintroduce licensing for waste transporters so they incur the waste levy, which can only be discharged at the gate of a licensed waste facility.	The NSW Government will consider this suggestion and may explore opportunities to expand the licensing framework in future.