

# AUSTRALIAN SUSTAINABLE BUSINESS GROUP'S

Submission on

**NSW Government's 20 Year Waste Strategy**

October 2019



Sydney, Brisbane

## Table of Contents

1	INTRODUCTION.....	3
2	FILLING UP NSW’S LANDFILLS.....	4
2.1	Asbestos Waste .....	4
2.2	Queensland’s Waste Levy Impact.....	5
2.3	Closure of Alternative Waste Facilities.....	6
2.4	Need for New Landfills .....	6
2.5	Waste to Energy .....	7
2.5.1	Pilot Plant and Commissioning.....	8
2.6	Gaining Planning Permission for Waste Management Facilities Difficulties.....	8
3	ISSUE ENVIRONMENTAL PROTECTION V CIRCULAR ECONOMY .....	10
4	THE WASTE LEVY.....	13
4.1	History of the Waste Levy .....	13
4.2	Overview and Purpose .....	14
4.3	Basis For the Levy .....	15
4.4	Future Levy Prices and Revenues .....	15
4.5	How well has the Levy Performed?.....	17
4.6	Levy has an Upper Limit .....	17
4.7	Distribution of Levy Funds.....	18
4.8	Industrial Ecology .....	19
	APPENDIX 1.....	21
	APPENDIX 2.....	23

# 1 INTRODUCTION

The Australian Sustainable Business Group (ASBG) welcomes the opportunity to comment on *NSW's 20 year Waste Strategy* (the Strategy).

The [Australian Sustainable Business Group](#) (ASBG) is a leading environment and energy business representative body that specializes in providing the latest information, including changes to environmental legislation, regulations and policy that may impact industry, business and other organisations. We operate in NSW and Queensland and have over 110 members comprising of Australia's largest manufacturing companies and other related businesses.

ASBG represents a broad range of industries and businesses, consequently represents the business waste generation areas and the concerns affecting them. Business wishes to reduce waste to landfill, recycle and reuse wastes made and supports government policy in this direction. However, it is concerned that some recycling schemes which have been supported by Government are very expensive and may justify the costs incurred.

For example, recycling pizza boxes back into cardboard or paper consumes more energy and water and other natural resources that went into making the product in the first place. Many wastes are better off going to a landfill for environmental reasons.

Concern is also applied where a recycling becomes ideological, or a token policy reaction, rather than one based on economics, science and environmental outcomes. An example is the current bans occurring on plastic straws etc. While the intent is well founded, it detracts from the main sources of marine plastic pollution such as fishing gear etc.

The waste levy is a major burden on business and industry, raising costs and making NSW's manufacturers less internationally competitive. Consequently, ASBG does not support the current high levy rates and argues that other approaches can and have achieved better results than the blunt economic instrument of a levy. Better use of the levy moneys can also generated very good diversion from landfill as only 19% is used for waste management in NSW. However, NSW along with the rest of the developed world is facing a recycling crisis due to trade barriers by our largest suppliers of imported products. Industry especially has been left disproportionately low levels of waste funding from the grant programs funded by the levy. This allocation needs to improve.

This submission focuses on the following key areas:

- Filling up of NSW landfills, largely due to NSW Government Waste policies and recent actions and proposed actions to rectify this.
- Difficulty where environmental protection policy generally over-rules or creates considerable regulatory difficulties for the recycling (downcycling) of old products into land or a thermal process
- The Waste Levy and its poor allocation back to waste management. Businesses contribute around 65% of the revenue but receive less than 30% of the grant funding, which in its entirety has 19% of the levy revenue allocated to it.

## 2 FILLING UP NSW'S LANDFILLS

*The points of this section are:*

- *NSW landfills are starting to fill at a much accelerated rate due to asbestos waste policy, Queensland's levy and other recent EPA actions*
- *Sydney area is expected to be squeezed on suitable landfill airspace within 10 to 15 years*
- *Planning consent approval for new landfills is a very difficult process and expected to take 5 to 10 years for a new landfill to open*
- *Other waste infrastructure is required such as Energy from Waste facilities and new improved recycling (decontamination) plants, but all face considerable planning approval difficulties which requires assistance from the Government to*

Waste management in NSW is facing a nexus requiring urgent planning for future waste infrastructure now or a waste crisis will emerge especially over the second half of the 20 year strategy. Multiple issues, some NSW Government led and other external pressures, are significantly increasing the landfilling of waste including:

- NSW's approach to asbestos waste
- Shrinking manufacturing sector reducing market opportunities for recycled materials
- Impact of Queensland's Waste Levy, which will drive at least 500,000 tonnes per annum of C&D and contaminated soils back into the Sydney market from July 2019
- The Government's closure of Alternative Waste Facilities(AWT,) which was diverting ~550,000 t of general waste away from landfill, now this input can only go to landfill
- Extreme planning difficulties in siting Energy from Waste facilities
- China's National Sword impacts and corresponding knock on effects, which increase volumes of collected recycle into landfill due to lack of an end market and processing infrastructure.

### 2.1 Asbestos Waste

*Key points in this section:*

- *Asbestos waste must go to landfill by law there is no other choice*
- *Asbestos waste is a very large waste stream and growing due to having essentially a zero concentration limit*
- *Asbestos waste is filling landfills at 3 MT p.a. rate representing over 22% of all landfilled waste in NSW*
- *NSW Government must find new landfill space or alternatives for the vast quantities of asbestos waste it has deemed to be asbestos waste*
- *An alternative solution is proposed*

Management of asbestos waste in NSW has moved from a risk-based approach to one based on beliefs, absolutes and perhaps fear. Asbestos in NSW is unique among environmental contaminants as its mere presence makes a waste asbestos waste. There is no limit, no science backing the zero threshold, just its presence. Four recent changes in NSW have strengthened this position including:

- The *Asbestos Waste Bill* undermines confidence in C&D recycling due to unscientifically based liabilities, especially from the proposed presence based approach. It also enshrines the presence of asbestos as a key position under the POEO Act.
- The *EPA v Grafil CCA* case changed the Court's interpretation of what is asbestos waste, again no limit is supported based on the legislation, and the definition of waste capturing many by-products and other materials as wastes

- Amendments to the *POEO (Waste) Regulation* due to uncertainties on when and how the EPA will be satisfied transport to *bond fide* recycler has been achieved and or EPA believes the mass balance provided by a C&D recycler.
- *Standards for managing construction waste in NSW* → this is little different from its drafts which were considered unworkable by ASBG<sup>1</sup> and the C&D recycling sector.

NSW Parliament has made its concerns on asbestos clear, that even a single fibre is hazardous — a myth generated out the USA’s litigious compensation focused legal processes. This leaves the EPA waste strategy to pick up the consequences of such a position, resulting in vast quantities of asbestos waste being generated. The Asbestos Safety Eradication Agency (ASEA) in their [National Strategic Plan for Asbestos Management and Awareness 2014 - 2018 Final Report](#), lists the volumes of asbestos waste being generated in each state. These figures show NSW is by far the largest generator of asbestos waste. Waste data for NSW is displayed in this table:

<b>Table 1: Asbestos Waste in NSW</b>		
<b>NSW Asbestos removed (friable)</b>		
<b>Year</b>	<b>Sheet m<sup>2</sup></b>	<b>tonnes</b>
2014	269,067	110,978
2015	354,682	702,878
2016	269,789	1,164,947
2017 to Sept	385,405	2,021,497
2018 to July	237,919	1,576,593

Since 2014 the density of m<sup>2</sup> of sheet per tonne has dropped from 2.4 to 0.15. Also catching is the 2 million tonnes (Mt) generated from January to September in 2017, then 1.57 Mt for the first 6 months of 2018. This indicates an annual rate in excess of 3 Mt in 2018.

ASEA indicated the data came from the NSW EPA, largely from Waste Locate tracking system data and other sources. Given that NSW sent 7.1 MT of waste to landfill, asbestos waste generation, made up of very lightly contaminated soils represents 44% of all wastes in NSW. This sounds incredible and the data requires rechecking. In addition, a significant portion may still be going to Queensland due some loopholes in its laws. Despite questionability of the amounts, asbestos waste is a growing and significant source of waste that cannot be recycled or reused (POEO Act) that must be landfilled, but it is consuming NSW landfills at an alarming rate.

Given the increase in the vigilance on asbestos waste at waste and recycling facilities and at construction and remediation sites the volume rate is expected to increase. Currently ASBG conservatively estimates at least 1.5 MT of asbestos waste is being landfilled in NSW with the remainder going to Queensland or Victoria landfills.

ASBG has proposed an alternative approach to the proper burial of asbestos in soils waste < 1% in Appendix 2.

## 2.2 Queensland’s Waste Levy Impact

*Key points in this section:*

- *Queensland was accepting about 1.4 MT pa of waste from NSW in 2018-19.*
- *Queensland’s \$75/t levy is designed to deter this waste and will, via economic means prevent much of it entering Queensland.*
- *NSW is to expect a large increase in this waste going to NSW landfills rather than to Queensland.*

<sup>1</sup> See [ASBG’s Submission on Asbestos Management in C&D Recycling](#) 2014

Prior to Queensland introducing its levy on 1 July 2019, ASBG estimates about 1.4 MT of waste was being transported out of NSW into South East Queensland in 2018-19. ASBG is concerned about the forecast diversion back of at least 500,000 tonnes per annum into the Sydney area as a direct result of the introduction of Queensland's Waste Levy. The bulk of this waste is C&D material and contaminated soils.

For NSW to properly manage this additional waste amount the EPA should be encouraging investment in the C&D and contaminated soil treatment sector. However, this strategy, with its tighter controls, increased liabilities on recyclers the reverse will occur. Consideration of the impacts on remaining landfill capacities, C&D recycling and other recycling should be part of this strategy. If C&D recycling becomes too costly against landfill this affects 4.5 million tonnes of C&D material NSW currently recycles each year. A good strategy will consider the full impacts of its actions, which include the costs in managing asbestos waste and the supply of infrastructure to achieve effective outcomes.

## 2.3 Closure of Alternative Waste Facilities

*Key points in this section:*

- *NSW EPA changed its mind on ATW waste exemption, rescinding it with little warning*
- *About 400,000 tpa of waste which was diverted to landfill will be sent to landfill*

The EPA pulled *Resource Recovery Order And Exemption For Agricultural Use Of Mixed Waste Organic Material* in late 2018. The five AWTs business model has now collapsed after being supported by the NSW EPA since the early 2000. However, these AWTs were processing around 400,000 tpa away from landfills, but now no more. The amount must be added to the quantities going to landfill which were not.

This is an example what happens when a waste exemption is revoked after a waste market has been developed with NSW Government policy support. This also creates uncertainty and increased risk in the NSW recycling sector as which other recycled material may be revoked due to a tightening position on environmental protection.

## 2.4 Need for New Landfills

*Key points in this section:*

- *Given the asbestos waste, Queensland's levy the AWT change, NSW landfills should expect to received an at least an additional 1.2 MT pa in 2019-20. NSW received about 7.1 MT p.a.in 2017-18 to landfill , which will blowout to at least 8.3 MT p.a. and will continue to increase.*
- *No new putrescible landfills for the Sydney area have received planning permission since 2000.*
- *Landfills are the last stop for waste when other alternatives fail; essential infrastructure.*
- *Given the pressures on NSW landfill new landfill space is urgently needed, research and planning should start immediately.*

While the Government has tried to minimise waste to landfill, the Government's policies and practices have directly resulted in a very larger increase in waste to landfill. Asbestos, environmental protection as with AWTs closures, stopping the Eastern Creek Energy from Waste (EfW) facility from being built have resulted in landfilling becoming the only real solution.

Feedback from the EPA's initial 20 year strategy is that NSW will increase its waste generation by 34% by 2030. Considering NSW's population will increase by 10-12% this is a major increase in the total waste generated. This aligns with what GHD said at ASBG's Waste Seminar in April 2019, where a 43% increase in putrescible waste to 4.3 MT in the Sydney area. Another area of concern is the anticipated 124% rise in digital equipment in homes

over the next 5 years or so. Transitioning to electric vehicles also generates its waste issues; old liquid fuelled vehicles and the newer electric vehicles as they add to old cars.

ASBG estimates over the last 12 months at least 1.2 MT p.a. increase has been going into NSW landfills. This is assuming asbestos waste was already a major contributor in the lead up to this. Given the current research this could increase to 11.1 MT pa by 2030 in a business as usual model.

While siting new landfills and EfW plants appear as a difficult process for community and the Government, it is a necessary action. Waste can always be better diverted from landfills, but if landfill capacity does not exist then major health issues follow. International examples exist:

- [Naples Waste Management Crisis](#)
- [Lebanese Waste Crisis](#)

***R1 ASBG recommends that the strategy provide for the long term supply of landfill capacity to ensure there is a safety valve for the generation of waste if diversion practices do not deliver.***

## 2.5 Waste to Energy

*The points of this section are:*

- *Energy-from-waste (EfW) methods are used extensively in Europe, China and growing in North America.*
- *China is importing a number of high energy waste streams for energy recovery (e.g. tyres) from Australia as the economics justifies this.*
- *AWTs and other recycling systems future require EfW infrastructure to operate effectively.*
- *Linked with the siting of landfills EfW plants should also be assisted in their siting.*

Many developed countries widely use energy-from-waste (EfW) methods to deal with certain waste streams, which are currently landfilled in NSW. Examples include:

- [Europe in 2017](#) has 492 EfW plants operating processing 96 MT p.a. of waste
- [Japan has](#) 1,162 EfW plants processing more than 57 MT of waste in 2017
- [USA in 2015](#) has 75 EfW plants processing 12.8% (33.5 Mt) of the country's solid wastes

EfW facilities need to be included to the list of waste infrastructure to be considered to cater for future waste management infrastructure. There are many high energy waste streams produced from recycling facilities which could benefit from a NSW EfW facility.

Waste plastic is to be subject of control under the Basel Convention and will be controlled under the Federal Hazardous Wastes (Imports Exports) Act, where the end use of the wastes in other countries must be considered. This will place further constraints on plastic wastes being exported recycling. Added to this is COAG's communiqué that plastic, paper and glass wastes will be banned from export. Given the poor recycling of plastic across Australia and the highly mixed and contaminated waste recycle streams generated, EfW offers a stop gap measure to higher recycling options before landfill becomes the only option.

Overall, waste-to-energy facilities do require being part of the mix of waste facilities to ensure NSW runs an efficient waste management program.

EfW are also not final disposal facilities for wastes and do not directly expose waste to the environment like a landfill does. They are a treatment process and should be treated similarly to other treatment processes such as recycling facilities.

The NSW EPA's Energy from Waste Policy (EfW) is a blunt instrument using a one size fits all approach. It assumes all EfW processes are incineration and large scale accepting in a broad mixed range of waste. Consequently other alternative EfW processes are captured under the EfW policy subjecting them to extremely difficult planning and very costly and unnecessarily monitoring requirements. An example of alternative EfW processes include:

*Example 1*, a cement kiln can accept in coal washery waste, which includes a mix of carbon, silicon and other inert materials. The coal percentage can be quite low, less than 10%, but when fed into the top the kiln can replace a considerable amount of coal. The same can be said for other more homogeneous wastes such as untreated timbers, rubber, etc. These wastes are a poor fuel, but good replacement for other raw materials and provide an energy source are best covered under the EoWC framework. Alternatively if the cement kiln accepted Refuse Derived Fuel (RDF), which made up 25% of its energy for the process, this could be better service via the EfWP.

*Example 2* is the use of marginal fuels in ceramics, such as saw dust, coal washery fines, and coal combustion products. Here coal combustion products already have an EoWC.

*Example 3*: a coal fired power station accepting less than 5% wood waste blended in with its coal.

*Example 4*: [CDP Waste2Energy](#) was an Australia company holding a licence for a process to convert plastics, wood and other carbon based materials into liquid fuels,. This is achieved at a temperature of less than 200°C. Converting plastic waste involved the dissolving of the plastic in hot oil, adding a simple reagent/catalyst and subjecting the mix to high shear. Diesel and kerosene type liquid hydrocarbons can be made. This company has gone into liquidation due to difficulties in meeting EfW Policies around Australia as it was often lumped in with MSW incineration requiring the same controls, monitoring etc in other jurisdictions. [NSW's EfW Policy Statement](#) mandates continuous monitoring on all EfW plants regardless of size on air emissions such as HCl, CO etc. Typically this costs \$1 million in capital expenditure, which is a game stopper for smaller EfW systems. Also this type of EfW should be at a higher order in the waste hierarchy than combustion and energy recovery.

**R2 ASBG recommends a supplemental EfW Policy should be made which includes alternative EfW processes.**

### 2.5.1 Pilot Plant and Commissioning

ASBG members also raise the issue of the high costs and lack of tolerance for any exceedances during pilot and commissioning phases of innovative uses of fuel additives. With innovative methods, there will be adjustment periods during its development and commission phases where process improvements are required. Being intolerant to minor glitches in meeting standards also needs to be considered in the EfW Policy, until the plant can reach an acceptable set of outcomes.

**R3 ASBG recommends a separate and more flexible regulatory oversight approach to pilot plants and commissioning processes for new waste infrastructure, especially EfW processes.**

This can include a new POEO Act Schedule 1 activity.

## 2.6 Gaining Planning Permission for Waste Management Facilities Difficulties

*Key points in this section:*

- *All waste infrastructure faces challenges during the planning consent process*



- *Landfills and EfW facilities have the most difficulty*
- *Scare campaigns are often used to prevent such developments*
- *Forward planning and site selection for zoning is required to forward communities about the intended future use of the land.*
- *Support from a separate NSW Government agency than planning, in aiding community engagement to promote the facilities is required*

ASBG is concerned that the difficulties in gaining planning permission from local communities will undermine good and essential waste management infrastructure in the future.

International examples show what can happen if the planning process for waste infrastructure fails. Naples, Italy had a major waste crisis<sup>2</sup> as it had closed its last municipal waste landfill, yet considerable protests by locals across the region prevented a new landfill or waste management system from gaining planning permission. Hundreds of thousands of tonnes of waste were left in the streets or dumped along roads outlying areas with no controls. The solution was to force the siting of a new waste incinerator and to ship excess wastes to Germany and to the Netherlands. Essentially the solution has not been solved and continuing opposition to the siting of new waste management facilities to deal with the waste in Naples is preventing the issue from being solved at the regional level.

ASBG considers that a similar level of opposition to siting waste facilities can occur in NSW. The solution is one of long term planning, community education and rewards for the local area which accepts these highly necessary but unfashionable developments.

The old adage is that supply is essential, then we can argue price. Supply of landfill space can then controlled either or both by price and quotas can be then negotiated and set. So Sydney can still run a restricted waste to landfill policy, but at least have emergency capacity to deal with failure of various other waste policies.

Use of special planning zones is urgently required to permit new landfill development and improve better resource recovery, preferably close to the main points of waste generation. There is no doubt this will be a challenging exercise, but landfills are a necessary, but unfashionable development. Better planning can also encourage the development of zones and improved resource recovery by new facilities and a network of waste exchange for complementary industries.

**R4** *ASBG recommends the Department of Planning Industry and Environment, to deal with the siting of future waste management infrastructure including, establishing special zones, community consultation programs and assistance for those willing to accept such facilities in their areas.*

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<sup>2</sup> [http://en.wikipedia.org/wiki/Naples\\_waste\\_management\\_issue](http://en.wikipedia.org/wiki/Naples_waste_management_issue)

### 3 ISSUE ENVIRONMENTAL PROTECTION V CIRCULAR ECONOMY

The points of this section are:

- *The circular economy was broken with the start of China's National Sword Policy which has spread.*
- *Australia has limited manufacturing sector to accept recycled materials.*
- *The source of much of our consumer waste comes from imported goods.*
- *Downcycling will be a major way in which NSW can recycle its wastes.*
- *Downcycling which involves application to land or thermal processes are exposed to very tight regulatory conditions and oversight making this approach difficult and only limited markets are expected.*

Balance between the Environmental Protection and the Circular Economy policy direction has been distinctly swung against the circular economy, significantly increasing recycling costs and liabilities.

For NSW to properly manage this additional waste amount the 20 year strategy should be encouraging investment in:

- Construction and demolition waste recycling sector
- Contaminated soil treatment and recycling sector
- Energy from Waste
- Recycling in specific markets and materials
- Boosting end markets in appropriate recyclable materials

Australia in the short to medium term simply does not have the capacity to recycle most of its waste materials back into similar products from which they are made. The reasons are simple China's National Sword broke a working Circular Economy where used materials can go back to the manufacturing sources which consume them. Australia simply does not have the manufacturing capacity to absorb such materials. Just consider plastic recycling.

#### **Box 1: Plastic Waste in Australia**

The [2016-17 Australian Plastics Recycling Survey](#) said: *Of the 415,200 tonnes of plastics collected for recycling, 180,100 tonnes (43.4%) was reprocessed in Australia and 235,100 tonnes (56.6%) was exported for reprocessing.* So consider the mass balance, 3.513 MT of plastic is consumed and 12% is recycled, so 88% of this waste is landfilled or remains in the anthropogenic sphere. Australia only recycles 5.1% internally and remains flat; *'Local reprocessing was flat from 2015–16, with export for reprocessing falling by 20%.'* As export is falling more is landfilled. Also 2.33 MT of all plastics were imported in 2015-16, leaving about 1.03 Mt made locally, simply about 70% of all plastic is imported. Consequently, there is no way that Australia has the manufacturing capacity to fill the 70% gap of imported plastic. If an export ban is applied it will mean that all this currently unrecyclable plastic will simply be landfilled, with a few Energy from Waste facilities operating in WA.

In addition, the internet has been a disruptive force against newspapers. It was recently announced that the Norske Skog newsprint mill will be closed by the end of the year to be replaced by equipment to supply cardboard market and not newsprint. While there is some capacity for existing cardboard mills to accept newsprint this is generally limited to a maximum around 15%. Nevertheless, there is still an export market for newsprint and paper outside China, India and South East Asia, such as the USA. These export markets need to be kept open, raising concerns of the reach of the Commonwealth Government's proposed ban on plastics, paper and glass.

For Australia there are two main options:

- Use [downcycling](#) where the used materials is made for a lower use
- Reform the recycling processing facilities so they can produce a recycled material suitable for overseas markets

The third option is starting new and expanding existing internal recycling sectors. While this is strongly supported, it will only manage small increases in quantities currently being recycled in Australia the short and medium term. Growth of this sector is possible but will take time, but is subject to major cost and attitudinal issues towards waste and its source separation especially for kerbside sources.

Downcycling usually involves the placement of waste into land. For example, recycling of glass into engineered fill, crushing of concrete into road base, using certain plastics to supplant bitumen in asphalt, or burnt for energy use or thermally treated etc. In addition all recycling systems will generate a waste stream due to the contaminants being removed from the input stream. Because downcycled wastes will be technically put back into the environment, this triggers environmental protection laws which are highly restrictive.

A strategy based on recycling will face considerable difficulties and costs associated in meeting tight environmental controls and liabilities. Consideration of the impacts on remaining landfill capacities, C&D recycling and other recycling should be part of this strategy. If C&D recycling becomes too costly against landfill this affects 4.5 million tonnes of C&D material NSW currently recycles each year. A good strategy will consider the full impacts of its actions, which include the costs in managing asbestos waste and the supply of infrastructure to achieve effective outcomes.

For licensed sites a major issue is the variation of enforcement and interpretation between different EPA inspectors and assessors. While a firm but fair approach is considered optimal, ultra conservative interpretations of EPA policy and rules is not uncommon. The NSW Audit office found<sup>3</sup> *The EPA has not balanced its devolved regional structure with appropriate governance arrangements to give it assurance that it applies a consistent approach to enforcement. and.. the devolved regional structure the EPA has adopted in delivering its compliance and regulatory functions, increases the risk of inconsistent compliance decisions and regulatory responses.* Hence, the heavy handed approaches used by EPA as enforcement measures resonate through the industry sector. As a consequence, ASBG expects more prosecutions based on tiny amounts of asbestos will be pursued if the poor management of front line inspectors continues. The question is how aggressively will the rules be pursued on facilities trying to do the right thing, using the focus of the presence of asbestos and not a risk-based or flexible approach?

In essence NSW Government has painted itself into a corner, calling for more recycling, but stifling it with a grid lock approach to new waste infrastructure, excessive regulation and oversight when solutions are found.

### 3.1 Need for Certainly

ASBG members find the current choice of materials, especially for packaging difficult. Uncertainty over which material type will be the more easily recycled in a sustainable manner in the future makes current choices a more of lottery. Until recycling systems settle down and new markets for recycled materials emerge and existing ones expand, prediction of future trends is currently at a level of high uncertainty.

While NSW Government policy can support certain recyclable material types, it will have limited control. It would be better for a national approach to be adopted so appropriate economies of scale can effect sustainable recycling solutions for each material type. Even a national approach will be significantly affected by international conditions. Australia is a net importer of many of its consumer goods where material choice is made based on the suppliers main market. In addition, non-tariff barriers like China's National Sword and recent changes to the

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<sup>3</sup> Regulation of water pollution in drinking water catchments and illegal disposal of solid waste, NSW Audit office July 2018

Basel Convention are also subject to future changes which can be unpredictable creating recycled material market disruption. As a consequence, NSW should not undertake unilateral actions in the recycling area, as this can result in highly inefficient and costly waste recycling practices, which will largely be transferred via higher product prices.

ASBG fully supports the continuation of the Australian Packaging Covenant Organisation and encourages the EPA to continue to support its work in reducing packaging waste to landfill and litter reduction.

ASBG refers to our prior submission [\*NSW Circular Economy Policy Statement and Discussion Paper 2018\*](#) for further details regarding our position on this area.

## 4 THE WASTE LEVY

The waste levy in NSW has a long history, but moved away from its secondary function of being balanced with its environmental costs in the late 1990s. Currently it is expected to exceed \$800 m in revenue and will grow due to the increased flows into landfills in NSW. Very little of its revenue, about 19% currently has been hypothecated back to the waste sector. It is now largely a cash cow funding other Government environmental actions and expenses, exceeding 2.5% of the State Budget. Changes or discounts to the levy must satisfy both the EPA and Treasury, requiring reviews by both environmental scientists and economists.

### 4.1 History of the Waste Levy

*The points of this section are:*

- *The history of the levy is one based on funding a Government agency to assist Local Government and the waste industry manages NSW's wastes effectively.*
- *It moved from an assistance program to one of regulation in the 1990s.*
- *Later it moved to a program of raising revenue for other environmental programs and other internal revenue, with little allocated to waste management.*

The commencement of the waste levy was set up to fund what was then called the Metropolitan Waste and Disposal Authority, now through various name changes and legislative responsibility changes it is called WSN Environmental Services, which is being sold.

Chronological events regarding the levy include:

- 1980's: In the early 1980's the levy applied only to Sydney Wastes, and was set at 51 cents per tonne to fund the Metropolitan Waste Disposal Authority in the 1970s.
- 1992: After the formation of the Environment Protection Authority in 1992, the regulatory functions that covered the levy was passed to the EPA.
- 1996: the EPA published RIS on the Waste Minimisation and Management Regulation 1996 – this proposed the levy be set at a maximum of \$27.50/t over time based on 50% greenhouse emissions from methane and transport and amenity costs.
- 2001: the levy was again reviewed under the Review of the *Waste Minimisation and Management Act 1995*, with the proposal being to increase the:
- Sydney Metropolitan Area (SMA) from \$17/t in 2001 to \$25/t by 2010 then capped with CPI increases included.
- Extended Regulated Area (ERA) (Hunter and Illawarra) to go from \$8/t to \$25/t by 2013 then capped with CPI increases included.
- 2005: The RIS On the Protection of the Environment Operations (Waste) Regulation 2005 proposed to continue to maintain increases in the levy at \$1/t in the Sydney Region and \$1.50/t in the ERA.
- 2006: Using a pre-election promise the Government, with no further consultation increased the levy rate of the Sydney area from \$1/t pa to \$6/t pa and the ERA to increase to \$7/t.
- The Liquid Waste levy was introduced in October 2007 commencing at the SMA rate, but applies to any waste generated across NSW. This was capped to ensure it did not exceed the transport costs to Victoria and undermine the NSW liquid waste treatment industry.
- 2009: The SMA to increase by \$10/t plus CPI until 2016, ERA to commence at \$10.50/t plus CPI until 2011, where it will increase to \$11.50/t plus CPI up to mid mid 2013. It is not legally clear that the levy continues after this date. (Note there is an error in the Richmond Review as it assumes \$10/t + CPI for the ERA.)
- 2009: The waste and environment levy was extended to include local government areas along the coast north of Port Stephens to the Queensland border and the Blue Mountains and Wollondilly local

government areas. This extended area is known as the 'Regional Regulated Area'. The RRA commenced at \$10/t and increase by \$10/t plus CPI.

- 2009: from 1 September 2009 a \$15/t for coal washery wastes applies.
- In 2013 the three metal shredders received a 50% discount in the levy due to competition from overseas shredders for raw materials. The levy was making their business model unviable. Not this discount ended in mid 2019 due to the China National Sword and closure of such international markets.
- Around 2012-13 the levy exceeded the costs of transporting waste out of NSW and into other jurisdictions. Queensland is where the bulk of levy affected waste is sent.
- In 2019 Queensland stated in Parliament that about 1.3 MT of waste is being received for other states, but mainly from NSW.

## 4.2 Overview and Purpose

*The points of this section are:*

- *The main official purpose of the levy is to drive resource efficiency, though this is achieved in a blunt and inefficient manner.*
- *NSW's budget for the levy is in part driven by the allocation of grant moneys available.*
- *In 1996 the levy was justified on external costs with 50% representing methane and greenhouse emissions. Commonwealth Greenhouse costs on landfill will result in paying a double greenhouse tax.*

The purpose of the waste levy according to EPA<sup>4</sup>:

*The waste and environment levy is designed to encourage resource recovery and recycling of waste. It is generally added to the disposal charges set by landfills. It provides businesses, councils and individuals with an incentive to reduce the amount of waste they generate and encourages them to seek legitimate alternatives to landfill disposal (consistent with the 'Objects of the Act' in Section 3 of the POEO Act).*

The POEO Act s3 Objects of the Act state:

*(a)(iii) the reduction in the use of materials and the re-use, recovery or recycling of materials*

This objective in itself imposes a limit to recovery or recycling of materials. To recycle materials back to their original form or close to it requires a separation process. Such processes require energy and some means of separation, such as washing or heating etc. At some point where the input stream contains too high a level of other materials (contaminants) the net environmental cost of recovery becomes less than the environmental costs of energy in and other natural resources. The end point being is that landfilling must be a part of the waste management infrastructure.

According to EPA the waste and environmental levy is there to provide an incentive to reduce and divert waste away from landfill. Importantly, the levy's priority is to raise revenue, but to reduce waste generation and avoid landfill. However, in practice it comprises a significant proportion to NSW's State budget and exceeds 2%. Waste in NSW funds many environmental projects, which tend to be based on which tend to be based on non-waste issues with the biological side of environmental issues (flora, fauna and riparian zones) featuring.

Expenditure of levy moneys is budgeted for up to 2019-20, with only the Waste Less Recycle More funding arrangements available representing 19% of expenditure. Industry generally pays for at least 50% of the levy, but is poor represented in the waste grant programs which favour Local Government.

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<sup>4</sup> [Waste and Environment Levy an Operational Guide](#)

Given the forward expenditure programs there is concern the revenue from the levy is a necessary part of budget income and Treasury will expect such income levels despite the level of resource recovery achieved in NSW. This also imposes a conflict with other programs to improve resource recovery. If lower cost approaches are used (see s5.4) this will lead to lower amounts of wastes requiring paying for the levy, threatening expected income to Treasury. Though it is noted that the budgets of the last 5 years did consider levy revenue would be affected by lower volumes of waste paying for it as its rate increases. However this did not occur as was volumes to landfill increased rather than decreased, against budget estimates.

#### 4.2.1 Basis For the Levy

In the *Environment Protection Authorities Regulatory Impact Statement: Proposed Waste Minimisation and Management Regulation 1996*, it established the breakdown of the external costs for Sydney and Regional landfills. Sydney landfill external costs were estimated to be in the range of \$13.10 to \$33.20 per tonne and comprised of :

- Greenhouse gas emissions cost, based on methane emissions from landfill and estimating an external environmental (greenhouse) cost of between \$7.80 to \$14.60 per tonne of waste in the landfill.
- Local Amenity Costs based on a landfills lowering of property values in its vicinity and costed at between \$0 to \$3.70 per tonne of waste.
- Transport Corridor Costs from environmental harm, noise and air pollution and congestion and accident costs caused by transporting wastes at between \$2.30 to \$2.90 per tonne.

Given this calculations were used to justify increasing the levy. However, there is an issue with the levy also applying to methane emissions as these are to be covered under the [Emissions Reduction Fund](#) (ERF) covering landfill gases. As a result of the introduction of the EFR to landfills there may be an argument that these are being double taxed for methane emissions under the levy and the ERF.

### 4.3 Future Levy Prices and Revenues

*The points of this section are:*

- *The waste levy is budgeted to increase slowly until 2021-22, but ASBG considers this to be an underestimate*
- *ASBG estimates the levy revenue will increase to over \$900 m in 2019-20 and \$922 m in the next year.*
- *Sydney area will continue to have the highest priced waste management program in Australia detracting from business profitability and future investments.*
- *The levy has a detrimental impact on many waste recycling facilities which requires rectification to avoid perverse environmental outcomes and economic harm to the industry.*

Currently the levy comprises of 3 areas and 2 waste stream types, which are described in table 2. Note that from 1 July 2013 the ERA rate equalled the SMA rate. From 2015-16 the levy rate only increases at CPI rates.

<b>Table 2 NSW Waste and Environmental Levy Current and Future Predicted Rates (Future rates are based on an average 3% CPI rate)</b>					
<b>Year</b>	<b>Sydney Metro SMA</b>	<b>Hunter/ Illawarra ERA</b>	<b>Extension to Qld boarder RRA</b>	<b>Liquid Waste Levy TLW</b>	<b>Coal Washery Levy</b>
2008-09	\$46.70	\$40.00	-	-	-
2009-10	\$58.40	\$51.50	\$10.00	\$55.00	\$15.00

2010-11	\$70.30	\$65.30	\$20.40	\$63.00	\$15.30
2011-12	\$82.20	\$78.60	\$31.00	\$64.50	\$15.75
2012-13	\$95.20	\$93.00	\$42.30	\$66.44	\$16.20
2013-14	\$107.80	\$107.80	\$53.70	\$68.43	\$16.70
2014-15	\$120.90	\$120.90	\$65.40	\$70.50	\$17.22
2015-16	\$133.10	\$133.10	\$76.70	\$72.60	\$15.00
2016-17	\$135.60	\$135.60	\$78.20	\$72.60	\$14.20
2017-18	\$138.20	\$138.20	\$79.60	\$76.50	\$14.50
2018-19	\$141.20	\$141.20	\$82.70	\$76.50	\$14.79
2019-20	\$143.60	\$143.60	\$82.70	\$76.90	\$15.00
2020-21	\$146.47+	\$146.47	\$84.35	\$77.00	\$15.00

+assumed to increase at + CPI from 2019-20 on wards

ASBG has estimated the future revenues from the levy, based on a number of assumptions and compared these to the budgeted figure used in NSW's last budget papers.

These assumptions include:

- The rate of wastes attracting the landfill levy remain static over this period. This reflects the expected inelastic effect of price on waste disposal tonnages to be in proportion to the increase in population numbers over this time period.
- Estimations on the quantities of solid, liquid and coal washery wastes were made using EPA reported amounts adjusted to 2009 figures.

<b>Table 3 Estimated Revenue from Waste Levy – and Forward Estimates and its Error Rates (\$millions)</b>				
<b>Year</b>	<b>Total Revenue \$m</b>	<b>Budget prior year est. \$m</b>	<b>Difference \$m</b>	<b>Difference %</b>
2008-09	\$245	\$245	0	0
2009-10	\$321	\$305	\$16	5.25%
2010-11	\$368	\$385	-\$17	-4.42%
2011-12	\$433	\$447	-\$14	-3.13%
2012-13	\$460	\$472	-\$12	-2.54%
2013-14	\$465	\$489	-\$24	-4.91%
2014-15	584	\$529	\$55	10.40%
2015-16	704	634	\$70	11.04%
2016-17	726	565	\$161	28.50%
2017-18	769	568	\$201	35.39%
2018-19	772	516	\$256	49.61%
2019-20	771est	539	\$232	43.23%

The NSW's Budget has for the last 4 year forecast the levy will result in more than a 40% diversion away from landfills and other levy attracting deposits. ASBG considers these rates of diversion completely wrong. ASBG estimates the waste levy revenue for 2019-20 will be around \$900 m, not \$777 as the forward estimated predicts, which is better than the 43% error for 2018-19 forecast.



## 4.4 How well has the Levy Performed?

*The points of this section are:*

- *NSW's performances on resource recovery are of middle range.*
- *Despite NSW having the most expensive levy program, other jurisdictions perform better even when no levy is present.*
- *Other incentive and specialist waste agencies provide some of the best result at a much lower cost to the tax (levy) payer.*
- *NSW needs to consider supporting the waste sector by similar actions and not rely so heavily on the blunt instrument of the levy.*

While the levy is designed to deliver a diversion of waste its performance is poor compared to other jurisdictions which have much lower levy rates, for example in 2006–07<sup>5</sup>:

- South Australia has the highest municipal diversion rate of 54%; NSW achieved 38% (SA had no waste levy at the time)
- Victoria had Australia's highest Commercial and Industrial waste diversion rate at (69%) where NSW has the lowest at 44%; Victoria had a levy rate of \$15/t and NSW had a levy rate of \$30.80/t.
- Construction and demolition waste in NSW was 67%, and South Australia achieved 79% with no levy.

Reasons for this given are that other jurisdictions which use special waste agencies appear to have achieved better waste diversion performance outcomes.

Other reasons the levy has not performed well considering its revenue, is its detrimental impact on the local recycling industry, in particular as paper, metal, glass and cardboard. The levy drives up these recycling industry costs by its impact on their wastes and increasing the level of contamination in their feed stock.

## 4.5 Levy has an Upper Limit

*The points of this section are:*

- *All recycling processes have their uses determined by market prices and their processes be recognised as to their function and role in waste management infrastructure.*
- *The waste levy can skew the economics to favour recycling to a limit.*
- *The waste levy if set too high can result in environmental harm, but driving recycling beyond its environmental benefits. (Zero waste to landfill polices are idealistic and run counter to the second law of thermodynamics.)*
- *Recycling has its limits where it is better for the environment to landfill certain highly contaminated waste streams.*
- *Innovative recycling systems are not well supported in NSW, but should be.*

There is an upper limit to the levy both economically and environmentally. If the levy is set too high it can require the treatment of waste streams to absorb more energy and other raw materials, than it is trying to avoid resulting in a negative environmental outcome. Little research has been done in this area, and it would vary considerably from materials to locational issues. ASBG also recognises most recycling is limited by economic issues rather than environmental ones. However, the point is that there is a limit to a levy amount and we have little idea where this lies.

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<sup>5</sup> NSW Parliamentary Briefing Paper: [Waste: Comparative Data and Management Frameworks 2010](#)

While the levy has an environmental limit, it should also consider the economic limits and where it should sit in terms of cost impacts.

## 4.6 Distribution of Levy Funds

*The main points of this section are:*

- *Financial support for C&I and C&D wastes have been tiny over many years.*
- *NSW is falling behind on other states in funding innovative waste solutions.*
- *A portion of the levy should be allocated to waste management activities including generators.*
- *Allocation of funding should be in proportion to the waste types contribution to levy revenue including: C&I, C&D, municipal, coal washery and liquid wastes.*
- *Liquid wastes to attract at \$2m per annum fund to reduce such wastes from the liquid waste levy.*

Support for Commercial and Industrial (C&I) and Construction and Demolition (C&D) waste by the NSW Government has been tiny over many years, despite these areas paying 68% of the waste levy. A punitive levy only approach has achieved modest performance in resource recovery, even when compared to jurisdictions which have no levy, but use alternative means including considerable support for these waste sectors .

Revenue from NSW's levy is largely used to fund Local Government, water, parks, biodiversity and other non-waste environmental activities. Waste management overall has received only a small portion of the levy revenue, usually less than 5%, though this has increased to about 19% recently, with Local Government receiving the vast bulk of this.

ASBG supports an economic review of the expenditure of levy money given the current waste crisis. Expenditure should also focus on seeking new waste infrastructure sites. If NSW does not start to include support to the C&I and C&D areas NSW will fall further behind in waste management outcomes and generate increased perverse environmental outcomes. As the NSW is the most expensive across Australia, in terms of revenue raised, NSW will have the most expensive waste management systems, operating at much lower efficiencies per tax dollar collected and spent on it. NSW businesses are already suffering from the highest waste utility costs in Australia which undermines business investment and NSW's future economic growth.

Victoria can claim to be already far in front of NSW with its [HazWastefund](#)<sup>6</sup>. This is on top of the funding from the prescribed waste levies to Sustainability Victoria, though this has been underspent to the tune of \$0.5b. Despite this Victoria has many claims of innovative and effective programs dealing with hazardous wastes. NSW lacks these programs.

Queensland's \$75/t levy on General Solid Waste (GSW) will be almost fully hypothecated with about 77% going back to improving waste management. Queensland will have perhaps the most generous waste grant program in Australia which includes 50% levy discount for most recycling processes on their waste streams.

ASBG considers that just because a waste sector performs far better does not mean it cannot achieve even larger improvements. On this basis C&I wastes and C&D waste streams should at least be provided a similar proportional funding arrangements to that suggest as to supporting municipal waste streams.

**R5** *ASBG recommends that a waste management fund supporting the non-government C&D and C&I sectors be established and its size should be proportional to the contribution these sectors contribute to the levy.*

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<sup>6</sup> The HazWastefund is financed by the prescribed waste levies on Cat B and Cat C wastes.

## 4.7 Industrial Ecology

*The points of this section are:*

- *Industrial ecology is not well supported.*
- *Overseas programs have proved very effective in reducing wastes and improving the efficiencies of resource use.*
- *NSW Government should consider the introduction of similar schemes.*

Much work has already been undertaken by companies to pursue industrial ecology strategies. The NSW Government [Sustainable Advantage program](#) is an excellent approach to reducing waste and improving efficiency.

Apart from some support from the Sustainable Advantage program, internal issues within EPA have resulted in lengthy and complex processes to obtain approval for innovative reuse of wastes. The regulatory conditions and cautious approach from EPA add to the delays and uncertainty in pursuing effective waste exchange programs being implemented.

What is required are programs and forums which cut through the red tape and encourage and permit businesses to identify innovative means to reuse wastes and improve efficiency.

**R6** *ASBG recommends an improved grant program to cut red tape and assist industrial waste generators to better divert waste streams away from landfills and or reduce volumes.*

## 5 CONCLUSION

The 20 year strategy was called for due to the current waste crisis issues especially with recycling. However, when looked at more deeply, there are a number of other factors which require the strategy to take action soon. Key outcomes for the strategy includes:

- Providing for future waste infrastructure, not just in terms of recommendations, but real zones and sites for unpopular waste infrastructure development such as future landfills and EfW facilities.
- Proactively support the siting of new waste infrastructure, including landfills and EfW facilities via use of proactive siting and new zoning.
- Seek alternative methods for the management of low level asbestos waste as it is filling our landfills at a unsustainable pace.
- Research recycling markets and the longer term development of new recycling infrastructure which will provide either for export markets or internal markets with an emphasis on downcycling.
- Review the regulatory structure for recycling and reuse of waste materials for land and thermal application to remove red tape where possible and improve this market size.
- Review the waste levy in its effectiveness and purpose.
- Revise the grant and hypothecation programs from the levy and allocate funding based on the source of the revenue.

This submission has been prepared with the input and assistance of members of ASBG's Policy Reference Group (PRG).

Should you require further details and clarification of the contents of this submission please contact me.

**Yours Sincerely**

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## APPENDIX 1



### ASBG's Framework Approach to a Revamped/Reengineered Recycling System

ASBG has developed this long term framework, based on member input, in response to the increasingly difficult economic environment of recycling across Australia. To provide confidence that businesses are concerned about recycling ASBG is looking to maintain existing recycling levels in this time frame. ASBG's key actions include:

**Scale of the issue and response:** Identification of the scale of the economic problems affecting recycling. Its purpose is to identify the extent of support and investment required in the sector. Minimising cost to revamp recycling is essential.

**Physical Approaches:** The two bin recycling system is no longer effective and new systems are required in collection, transport, MRFs and recycling facilities aiming for lower contamination levels and higher quality recycled products attracting higher prices. A key element in this approach is to develop a national *Agreed standardised set of source separated categories* for collections, which is likely to increase the number of categories for collection. Standardised inputs with should provide increased certainty in reengineering MRF and other recycling facilities. Improved education of the public and other recyclate generators will be simplified and revamped following this standardisation.

**Markets – New and expanding existing:** Improved lower contamination levels via use of *source separated systems* will deliver higher classes of recyclate for domestic and international markets. However, there is a need to develop new end uses for recycled materials, such as those based on engineered fill, down cycling and other markets. Adoption of recycled content procurement policies by Government is also required. For example, require the use of glass fines for engineered materials by government agencies in infrastructure, provided standards are met. *Industry innovation* → Supporting concept to market ready innovative new recycled materials, processes, products and end markets, including regulatory and grant supports and removal of green tape.

**Regulatory / Policy Framework:** Working with industry and the waste sector to deal with recycling in a cooperative manner to develop efficient governance and remove over regulation [green tape] on recycling, such as:

- *Outcome* based [environmental] measures preferred with *process and activity* based measures avoided.
- Avoid regulation of B2B by-product recycling where a common raw material used in another *bond fide* process.
- Promote the use of EfW, including use of existing industrial thermal processes.
- Establish the national waste database, increased waste tracking and economic modelling of waste and recycling.
- Review waste levies to: better support recycling via hypothecation and levy discounts on their waste streams, lowered to levels to reduce illegal dumping and disposal and to disincentivise long haulage of waste.
- Government to lead in progressing regulatory approvals for new and reengineered recycling facilities.
- Review of planning rules to increase community responsibilities for their wastes on a regional basis as in the UK.
- Remove planning approval road blocks to waste infrastructure, recognising waste is also a local health issue.

**Financial Support and Approaches:** including new grant schemes for new kerbside bins, MRF upgrades, and market support. Revised contracts to better share the risks in recycling markets between Councils and contractors. Development of low cost finance such as Australia's CEFC to support the revamped recycling system funding required.

### Main Actions for Governments based on the above:

Progress an efficient; low-cost revamped reengineered recycling system with actions to:

1. Develop *Agreed standardised set of source separated categories* for collection.
2. Develop *recycled product standards* that are cost effective and environmentally responsible.
3. Review waste legislation, levies and polices to enable recycling to become efficient and profitable again.
4. Establish National, State and Territory Taskforces to enable the above actions, which include all major stakeholders to facilitate a new revamped and reengineered recycling system for Australia.
5. Establish improved financial funding for improved recycling.
6. Identify the scale of the recycling issue, the economic impact and support required and to establish the balance between onshore and off shore processing.

## APPENDIX 2



### Specific Resource Recovery Order and Exemption for Low Concentrations of Asbestos in Soils or Special Low level Asbestos Soil Landfill Licence

#### Background

The amount of lightly contaminated asbestos impacted soils contributes significantly to scarce landfill capacity. Finding alternative methods to safely bury asbestos materials can be critical in avoiding difficult siting issues associate with new landfills or their extensions.

#### Types of Soils – SRRO Criteria

Asbestos impacted soils would be the only waste type considered. No other waste incorporated into the soil would be acceptable. It is proposed that the *RRO for Excavated Natural Material or Special Landfill* be the basis for the soil and eliminating other wastes other than asbestos. If a Special landfill is (must be) used then the proposed SSRO would establish its acceptance criteria. Only asbestos cement containing materials would be acceptable.

- Only soils with 1% or less non-friable asbestos in soil weight to weight basis would be acceptable.
- This SRRO/E would not apply to friable asbestos.
- The SRRO criteria could limit the sources where the process is vetted e.g. by a Contaminated Site Auditor.
- A visual inspection process be used to enforce the 1% concentration limit

**Issues:** Determining if the maximum concentrations are exceeded, but the reason for the 1% is to avoiding the blending of soils and asbestos to take advantage of this approach, hence the 1% limit is suggested. Hence, strict adherence with the 1% should not be the priority as the outcome is to prevent blending, by making it cost prohibitive at 1%.

#### Transport

Transport of the asbestos impacts soils under the SRRO would not change from provisions under the POEO (Waste) Regulation as it is still *asbestos waste*.

#### Tracking

Either the On-Line Waste Transport Certificate or WasteLocate could be used to track this waste. The on-line system ensures the site of generation is linked into the system, so may be preferred over WasteLocate in some circumstances.

#### Resource Recovery Exemption / Landfill Licence - Types of acceptance areas

Sites accepting burial of low level asbestos contaminated soils would need to meet criteria including:

- A predesigned cell arrangement for burial of a minimum size
- On a site, which requires fill primarily for specific infrastructure projects e.g. roads, rail, airports etc
- Design to be approved by a Certified Contaminated Land Auditor
- During the operation of the cell, it will be audited on a regular basis
- Final capping to be subject to a verification audit by a Certified Contaminated Land Auditor
- Mapping of the cell to be recorded on the title and made available for a dial before you dig requirements
- Use of other mapping systems to accurately identify the location
- A gatehouse which processes acceptances, but not requiring a weighbridge

## Acceptance

Use of this SRRO/E will need to be tightly constrained at the land application side. Only larger prepared sites would make the economics of pre assessment work. If this is not considered effective enough the SRRE could set a minimum quantity requirement. It would also need to pass other criteria such as applies to all RROs and RREs:

- Is genuine, rather than a means of waste disposal
- Is beneficial or fit-for-purpose, and
- Will not cause harm to human health or the environment

Only sites that have applied for the SRRE or have the Special Landfill and met its criteria will be accepted. This would require approval from the EPA. Approval would be based on the following conditions:

- Vetting of the soils on receipt
- Tracking using WasteLocate or on-line tracking system → the site must have permission to receive this waste
- Having a rejection procedure
- Identification of disposal areas
- Procedures to minimise emissions during tipping → inappropriately delivered soils will be rejected until changes from that source are demonstrated
- Immediate coverage as per landfill conditions (s80 POEO (Waste) Regs)

## Legislative exemptions

Legislative exemptions are the key advantage offered to use this SRRO/E and may include:

- No waste levy would apply: Acceptance of the material would be on a contract basis with no public access. This could be seen as extending a contaminated site to include a remote site in its operations. Having no waste levy and not being a landfill should provide significant cost advantages and save on limited landfill space. This could be a boon for major projects, Councils and other public works areas where low level asbestos concentrations in soils is a current major cost.
- Need for an EPL can be avoided: Being a monofil and similar to the currently permitted on-site approach with the auditing by a contaminated site auditor.
- Tracking and site vetting would be included unlike other RREs
- It would need to be exempt from s81 of the POEO (Waste) Regulation 2014.



Alternatively, it could be licensed as a landfill, but with a small set of controls and conditions. Such as it will not require leachate controls, simplified gate controls and record keeping.