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Dear Stephen

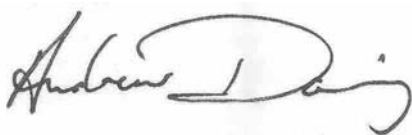
The Australian Sustainable Business Group (ASBG) welcomes the opportunity to comment on the *Proposed Protection of the Environment Operations (Waste) Regulation 2014 - Regulatory Impact Statement (Consultation)*, which includes:

- [draft Protection of the Environment Operations \(Waste\) Regulation 2014](#)
- [NSW Waste Regulation – The CIE \(cost benefit analysis\)](#)

This submission was prepared with the assistance of ASBG's Policy Reference Group and ASBG's members.

Should you require further information, clarification or details on the submission please contact me on 02 9453 3348.

**Yours Sincerely**



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# AUSTRALIAN SUSTAINABLE BUSINESS GROUP'S

Submission on

Proposed Protection of the Environment Operations (Waste)  
Regulation 2014 - Regulatory Impact Statement (Consultation)

June 2014



Sydney, Brisbane

# EXECUTIVE SUMMARY

The Australian Sustainable Business Group (ASBG) welcomes the opportunity to further comment on the *Proposed Protection of the Environment Operations (Waste) Regulation 2014 - Regulatory Impact Statement (Consultation)* (draft Waste Regulation).

ASBG considers the draft Waste Regulation is a consequence of the high waste levy in NSW which will reach over \$134/t in mid 2015. Wherever a high tax or levy is applied there will be increasing incentives to evade it proportional to its scale. This leads to an ongoing process of more red tape to plug loopholes and the costly need for policing levy collection. As a consequence, the draft Waste Regulation is likely result in working against the NSW's Government's target of red tape reduction.

A major part of the Regulation is the new *Scheduled Waste Facilities* (SWF), which captures certain Environmental Protection Licences (EPL) that will require the site to pay the appropriate waste levy on their wastes at their back gates. To effectively collect this levy revenue SWFs are required to undertake a mass balance, install a weighbridge if they do not have one keep detailed records, report to the EPA and undertake monitoring of vehicles flows around the site, all so a levy amount can be calculated and collected every 56 days. ASBG is concerned there will be unintended consequences of application of SWF application which will result in perverse outcomes of reducing or closing some environmentally beneficial activities such as recycling.

Key issues considered in this submission include:

- A need for a generic flexibility arrangement on select parts of the regulation, especially for SWF, but the variation, if granted to be stipulated into the site's EPL conditions.
- The need for clarification of which EPLs will be captured as SFW as the draft regulation could capture many other types, which may not be the intention of the EPA.
- Mass balances will result in errors due to mass differences from moisture, corrosion and bio-degradation and amounts of around 5% are expected. Therefore the EPA will need to accept such error rates and that these can vary for each waste processing type and even facility. Mass balance and recording details will need to be developed with consultation with each of these sectors subject to SWF classification.
- A need for further support and funding for the recycling sectors to off-set the cost impacts of the regulatory changes. This will include software upgrades and staff training and other assistance where necessary.
- Alternative weighing processes for smaller sites to avoid the cost of a weighbridge and the need to have it calibrated to a public weighbridge accuracy of about 1 kg per 10 tonnes. The error rate in the mass balances will be orders of magnitude larger than the weighbridge's accuracy. The need for verification at National Weights and Measures Act is costly and questionable. Alternative lower cost maintenance requirements could be set that will not affect the outcomes required by the EPA.
- The need to document each operational vehicle entering and leaving the site along with a reason is an overly costly requirement. This requirement should be removed or substituted so that only non-waste vehicles above a minimum carrying capacity e.g. 5 tonnes be recorded.
- Metal shredding will become under economic pressure as their levy reduction is removed. Development of a long term strategy for the metal shredders is required or they may be forced to close and be exported like NSW's aluminium recycler.
- Under the Regulation scrap metal recyclers appear to be captured as SWFs possibly down to 12,000 tonnes per annum or 50 tonnes processed per day. Scrap metal recyclers should not be classed as SWFs, as is composting and paper recyclers, but should be captured as requiring EPLs down to the 12,000 tpa rate.
- The arrangements that stockpiles be only kept for 12 months is considered too restrictive for some *bona-fide* recycling activities. Use of the flexibility arrangements as discussed above would be helpful for such affected recycling activities.

- Waste asbestos measurement and classification is very confusing, difficult and legally fraught. A more practical measurement and classification assessment process is required for asbestos waste. Such a practical alternative needs to be developed with scientific professionals managing asbestos.

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# RECOMMENDATIONS

- R1 ASBG recommends the draft Waste Regulation include a legal means whereby the EPA can exempt a licence holder from sections of the Regulation, if necessary, in replacement use alternative conditions to be written into that site's Environment Protection Licence. 3
- R2 ASBG recommends the EPA publish clarification on what and which types of Environmental Protection Licences are to be defined as scheduled waste facilities' and which are not. 5
- R3 ASBG recommends the EPA clarify that pulp and paper production and contaminated soil treatment will not be reclassified as a waste facility under the proposed thresholds. 10
- R4 ASBG recommends the EPA:
- Accepts mass balance error rates associated with various waste facility operations
  - Uses waste facility activities sector specific mass balances developed over time with each sector
  - Provides exemptions in part or wholly to the reporting and monitoring requirements for certain sectors and or sizes of operation (see R2)
  - Considers the use of estimations where they prove to be practical for smaller sites. 11
- R5 ASBG recommends the EPA develop further support including additional funding mechanisms to assist:
- Current sites qualifying as SFWs deal with the weighbridge software upgrades and subsequent staff hiring and training where appropriate.
  - New SWF sites with staff training on the new legislative requirements
  - In other areas, where appropriate, to assist in the viability of existing recycling where this legislative change causes negative economic impacts. 13
- R6 ASBG recommends the EPA amend the draft regulation to provide:
- To permit alternative weighing processes for smaller sites than the requirement for installation of weighbridges.(see R1)
  - Omitting sections 35(2) (e), (f), and (h) instead rely on the standard licence conditions O 2.1 and or other additional licence conditions considered necessary for achieving reasonable mass balance accuracy 13
- R7 ASBG recommends the removal or suitable modification of s29 to cover the EPA's concerns of material movement reflecting the expected error rates for such facility mass balances. 13
- R8 ASBG recommends the development of a support strategy for the long term survival of NSW metal shredders and that the EPA work with the shredders to implement this post mid 2016. 14
- R9 ASBG recommends that the scrap metal processors:
- Activity's threshold lowered to that proposed for resource recovery of general waste
  - Be exempted as scheduled waste facilities. 15
- R10 ASBG recommends amendment to the regulation to permit a flexible arrangement on stockpiles where the licence holder can demonstrate the 12 month time period is too restrictive. 15
- R11 ASBG recommends the EPA work with the asbestos waste management sector including, waste contractors, consultants assessing asbestos, and contaminated land practitioners to identify and develop new and practical measurement and management policy arrangements for waste asbestos. 17

# 1 INTRODUCTION

The Australian Sustainable Business Group (ASBG) welcomes the opportunity to comment on the *Proposed Protection of the Environment Operations (Waste) Regulation 2014 - Regulatory Impact Statement (Consultation)*, which includes:

- [draft Protection of the Environment Operations \(Waste\) Regulation 2014](#)
- [NSW Waste Regulation – The CIE \(cost benefit analysis\)](#)

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 130 members comprising of Australia's largest manufacturing companies. Members were fully involved in the development of this submission and ASBG thanks them for their contribution.

ASBG strives to assist regulatory agencies to prepare more efficient regulatory process, with the outcome of achieving practical, efficient, low cost solutions to achieve high environmental outcomes. This is achieved by feedback from members, mostly senior environment managers, who must implement the new controls in a cost effective and pragmatic manner where possible.

NSW has reached this point in waste regulation where the scale of the waste levy is so large, representing approximately \$500 to \$600 million annually about 2% of the State Government's revenue that it would be unlikely its rate will be reduced. It has become a rusted on policy, relied upon by NSW Government to roughly support the environmental agencies and programs in NSW. Hence, its original purpose to divert waste from landfill — which it has done so, but with consequences — now includes vital support to the NSW budget.

The down side of having a high waste levy are many and include:

- Higher operational costs for businesses and residents in NSW.
- Substantial incentive to illegally dispose of waste, including dumping, disposal to avoid or reduce the levy and stockpiling.
- Impacts on the quality of recyclate (source material to the recyclers) where suppliers increase contamination levels to pass the levy costs on to the recyclers by including more unrecyclable (waste) in their supply.
- Impacting on certain recycling types, such as metal shredders, paper recyclers etc where a more than 5% of the cost of operation is the waste levy required to be paid on wastes separated from the recyclate.
- Increasing competition for recyclate from interstate and international recyclers who have much lower waste disposal costs.
- Increasing legislative controls to enable a fair and effective levy collection process, which further adds to the administrative and operational costs – red tape – of waste management.

Moving the collection point of the waste levy further up the chain is a logical step for the purpose of ensuring higher levy collection as levy evasion is high with a figure of \$100 million in missing levy revenue reported by the prior Environment Minister. However, the ability of NSW environmental laws to capture the levy at the back gate of facilities is limited to the type of licence, which the draft Waste Regulation seeks to undertake. Enforcement of

the levy on the back gate is an administratively inefficient process, which increases the administrative cost of recycling in NSW. As a consequence, certain recycling activities in NSW will suffer hardship as a result and some may close or shrink as recyclate either seeks a more profitable outcome in other states or internationally. NSW has already seen the pull out of aluminium recycling due to international market forces. With very low shipping costs to our major import trading partners additional costs imposed by inefficient regulation will have a negative impact on this sector of the NSW economy. The EPA must carefully balance the need to control rogue elements in the waste sector with the financial viability of the recycling and waste management sector. While clamping down on illegal operators, it will need to support legitimate waste management practices from the additional regulatory burdens it imposes to protect the environment and waste levy revenue. Application of the draft Waste Regulation will incur additional costs, largely administrative, to the waste sector, especially SWFs. This is a typical example of the creeping nature of red tape, something the NSW Government is trying to reduce.

The legislative approach of the regulated requirements is a blanket condition on the SWF. Use of a regulation to set conditions on licences is a blunt approach distinct from the sharp and site specific manner in which environmental licences are based. In addition, the regulation also removes the right of negotiation on a sites operation. The EPA needs to be careful when applying such blunt legal instruments that there will be collateral impacts. There are a number of examples of this given in this submission. Negatively impacting on recycling and resource recovery as a result of the draft Waste Regulation is a perverse outcome. Such unintended outcomes of a blunt instrument can be minimised, by the use of a circuit breaker in the regulation where alternative and flexible arrangements can be entered into subject to application and negotiation as licence conditions.

To prevent or counter the higher operational costs of the waste levy and the draft regulatory requirements other support practices will be necessary. The NSW Waste Less, Recycle More grant program covers some of this, but was not enough to save aluminium recycling. Other assistance packages or levy off-set subsidies will be warranted. *Ad hoc* support is already being practiced with the support for removal of lead CRT glass stockpiles, reduction in the levy for metal shredders, payment of levy costs for Lake Macquarie Councils lead based soils. ASBG believes the EPA should also consider the Richmond Reports recommendations of direct assistance to recycled product, much in the same manner as the [Product Stewardship for Oil Program](#), but funded by the waste levy. There are many advantages to payment on product rather than on waste. Waste is by far more difficult to define and quantify than a product where the market sets quality and prices. However, these issues are for future consideration, but do require a program of actions to be developed as they will arise.

Overall the draft Waste Regulation is a consequence of the high waste levy and will be one of many other types of regulatory changes necessary to control and police waste levy collection.



## 2 IMPACTS ON WASTE GENERATORS

On the face of the draft Waste Regulation waste generators; non-waste facilities are not largely affected. However, there are a number of areas where waste generators are affected including:

- Potential to be captured as a Scheduled Waste Facility (SWF)
- Liabilities associated with the management of asbestos wastes (covered in s4 of this submission)
- Increased controls on immobilised wastes
- Interstate tracking by consignors of wastes
- Flexibility issues

### 2.1 *Flexibility Issues*

ASBG considers there is a general requirement for the regulation to permit the exemption of various sections within the regulation, but specific controls to be used by the use of EPL conditions. There are many instances where the draft Waste Regulation is too inflexible and will result in unnecessary costs to recycling and businesses as a result.

While the Waste Levy Guidelines may offer some form of flexibility, the requirements under the draft Waste Regulation will dominate.

The flexibility arrangement should be broad based and cover at least the requirements for *Scheduled Waste Facilities* (SWF) such as for Part 3 Records, measurement of waste and monitoring at scheduled waste facilities. Such flexibility would assist in taking some specific sector issues within the waste facilities. However, ASBG also notes this could be abused so there is also a need to for assessment for such exemptions to be assessed in a formal manner. Part 9 may permit this in part, but it seems it is too tailored for Resource Recovery Exemptions and may not be legally broad enough.

***R1 ASBG recommends the draft Waste Regulation include a legal means whereby the EPA can exempt a licence holder from sections of the Regulation, if necessary, in replacement use alternative conditions to be written into that site's Environment Protection Licence.***

Such a provision will permit a sharper approach to licensed waste facilities in NSW. Obviously to be considered for such a variation from the standard regulation's requirement will require an application process to the EPA. If the application is accepted then the EPA can issue an exemption and develop specific licence conditions with the site licence holder. This will also add to the EPA's legislative means in which to provide flexibility, but retain control over the site in question.

### 2.2 *SWF Impacts on Manufactures*

There are a number of manufacturing sites that are also licensed as waste facilities of various types. In general these are large sites with their own waste processing, storage or recycling. In many cases they accept their old products back and recycle them. Steel production and plaster board are two examples where such activities arise.

Imposing the full requirements of a SWF across the entire site is simply impractical and overly onerous. Some of these sites have material flows in the millions of tonnes, whereas their waste streams are a tiny proportion of this. Imposition of the full requirements for SWF across a large manufacturing site due to a relatively small operation dealing with recycling is considered unworkable and is likely to result in the closure of such recycling or waste treatment activities. Many of these on-site activities were encouraged by the NSW Government, so their continuation should be encouraged and not damaged by inflexible regulation.

#### *Case Study 1*

*Caltex Refinery recently obtained a licence variation to operate a contaminated soil treatment facility on its site in Kurnell. The site accepts only hydrocarbon contaminated soils from its services station sites undergoing remediation. Soils are cleaned using a biological process to eat the hydrocarbons. Treated soils meet all the Resource Recovery Exemption criteria (ENM) and are reused. The process does not generate waste to landfill as all emissions are gaseous and subject to EPA licence conditions and oversight.*

*As the bio-pile is an adjunct to the refinery, it is a small operation representing less than 1% of mass flows around the site. Imposing SWF requirements on the entire site, just for this small on site process would likely lead to the practice being closed. Even ring fencing the process is difficult as it would need to incorporate the weighbridge at the refinery, but some distance away.*

#### *Case Study 2*

*Plaster board manufacturers and recyclers are in the business of manufacturing plasterboard. However, a number of licensed sites also operate a relatively small scale recycling processing. Some wastes will be generated from this recycling activity. Such recycling at the factory is not only a good environmental initiative, as the waste plasterboard would go to landfill, but has been encouraged by the industrial ecology section of the EPA and Department of the Environment for many years. Most of the recycled plasterboard is generated on site, but off site plasterboard is also accepted. Less than 1% of these sites mass flows involves the recycling of plasterboard from off site.*

*As these sites have Non-thermal waste processing or Resource Recovery licences on their EPLs they can be captured as SWF. The very low mass of waste material accepted compared to the raw materials and product made makes the application of SWF requirement economically unviable. If such sites are not exempt from being SWF then current collection of waste plasterboard will likely cease to avoid SWFs onerous requirements.*

#### *Case 3*

*Other manufacturing types unintentionally captured as SWFs:*

- *Steel production*
- *Lubricating oil production (a consequence of the definition of liquid waste – see 2.5)*

- *Railways*

Many of these unintended SWF sites have waste activities added to their licences as otherwise they are not permitted to accept waste materials under waste law. Some process well below the capacities listed under POEO Act Schedule 1 thresholds to enable them to conduct environmentally beneficial waste recycling and reuse. So removing the waste facility activity from their licence will simply stop them recycling.

There are many options on how to deal with this issue, all sites specific. As a consequence, this issue would be best resolved using the flexibility arrangements discussed in s 2.1 and R1. ASBG considers such site should be exempt from SWF requirements with alternative options negotiated directly with the licence holders so affected.

## **2.3 SWF Trigger**

ASBG is concerned that the exemption under schedule 4 [s8] clause 20 (3)(a) has unintended wide net, which captures Environment Protection Licence (EPL) holders as SWFs. Quote:

*The occupier of a scheduled waste facility that is not a scheduled waste disposal facility is exempt from the requirement to pay contributions to the EPA under section 88 of the Act if:*

*(a) the waste authorised to be received under the licence concerned consists only of clinical and related waste, hazardous waste, liquid waste or restricted solid waste (or any combination of those types of waste),*

The section refers to waste received, but does not include waste that is produced on site.

For example for Environmental Protection Licences (EPLs) that have a *Chemical Waste Storage* licence could be captured if they generate any waste on site.

ASBG suspects there will be other EPL unintentionally caught as SWFs under the draft Waste Regulation. The interpretation of the draft Waste Regulation is legally complex and many EPLs, which have sub-licence activity types could be included as SWF. EPA needs to clarify who is and who is not a SWF.

**R2 ASBG recommends the EPA publish clarification on what and which types of Environmental Protection Licences are to be defined as scheduled waste facilities' and which are not.**

An example of this complexity is demonstrated in s3.1 of this submission.

## **2.4 Immobilised Waste Controls**

In the RIS document the EPA makes no reference to the changes to the immobilisation classification changes. As a consequence, ASBG does not understand why such changes were necessary. New immobilisation controls appears to be set of additional conditions associated with the disposal of the immobilised waste. The new conditions place more liabilities on the persons immobilising the waste and on the landfill accepting the immobilised waste. Nevertheless, the new requirements tend to add further administrative conditions and costs —red tape—to the existing immobilisation approval process, but will do little to prevent illegal waste classification and disposal.

## 2.5 Waste Guidelines

*Liquid waste* and *trackable liquid waste* definitions are somewhat confused under the draft Waste Regulation's

### 4 Meaning of "trackable liquid waste"

(1) For the purposes of this Regulation, **trackable liquid waste** means liquid waste that is of a type described in Part 1 of Schedule 1 and exhibits any of the characteristics specified in Part 3 of Schedule 1.

The draft Waste Regulation refers to the *Waste Levy Guidelines*, (and others) but does not include the other related levy documents such as *Waste and Environment (Liquid Waste) Levy*, *Operational Guidance Notes*. ASBG expects the *Waste Levy Guidelines* will include the details of the above or refer to a set of Guidelines, there is scope to deal with overlap between these and the *Waste Classification Guidelines*.

For example, the scientific definition of levy applicable *liquid waste* is included in *Waste and Environment (Liquid Waste) Levy*, *Operational Guidance Notes*, but in brief in the *Waste Classification Guidelines*.

Furthermore the draft Waste Regulations Schedule 4 – Clause 20 (3)(a) states:

(3) The occupier of a scheduled waste facility that is not a scheduled waste disposal facility is exempt from the requirement to pay contributions to the EPA under section 88 of the Act if:

(a) the waste authorised to be received under the licence concerned consists only of clinical and related waste, hazardous waste, liquid waste or restricted solid waste (or any combination of those types of waste),

This clause refers to liquid waste not trackable liquid waste which is defined in s4. ASBG considers the EPA intended for the meaning of liquid waste in this context to be a broader definition than s4. S4 is calls up Schedule 1 and 3, which is vague. Particularly vague is Sc 3 *Other Reasons* which without a firm scientific level can be subject to the whim of the agency. ASBG much prefers the definition in the *Waste and Environment (Liquid Waste) Levy*, *Operational Guidance Notes* which apply to liquid wastes where the levy applies.

An example of an unintended consequence of an unclear liquid waste definition is the recycling of waste oils. Lubricating oil recycling is captured as a SWF under Resource recovery of waste oil. As discussed in s2.2 there are lubricating oil manufacturing sites that are also licensed to accept waste oil for recycling.

While the definition of trackable liquid waste is tied to the NEPM requirements, the definition of liquid waste can be made more specific and better aligned to NSW's waste legislation.

A re-write of these Guidelines would be a good opportunity to incorporate appropriate classifications and definitions in the appropriate guideline. ASBG would welcome the opportunity to work with the EPA in the development of these guideline documents.

## 2.6 Interstate and other Tracking Requirements

The new requirements for the tracking of interstate waste movements, asbestos waste and tyres will impose changes for many in the waste sector. Interstate transport tracking is supported by ASBG as currently no data available on the leakage of wastes into other states especially Queensland.

These changes will generate additional educational requirements on the use of the EPA's on-line tracking system for at least the interstate wastes. As it affects the consignor, many generators will need to be made aware of this change. ASBG looks forward to supporting the education of this and other changes the new regulation brings once it becomes law.

### **3 IMPACT ON RECYCLERS AND OTHER WASTE FACILITIES**

Traditional recycling such as metals, paper, glass etc, are facing tough economic conditions. In NSW they are they subject to very high environmental standards, there are substantial environmental regulatory issues and the impact of the waste levy. With high regulatory imposed operating costs, recycling in many areas is facing competition from other states in Australia, but also from international competition for their input streams. With back loading shipping costs as low as \$15/t, competitors from China, Vietnam and other South East Asian countries pose a real threat of moving NSW's recycling processes off shore.

A case in point is the announced closure of Alco's Yennora aluminium recycling plant later in 2014. This plant recycles 55,000 tpa of scrap aluminium and produces 125,000 tpa of rolled product of which 30% is exported. The site directly employs 190 people, which in turn supports about 3 times this many jobs in the local community. Aluminium recycling is far more preferable than aluminium smelting as it consumes only 5% of the total energy of the latter. Discontinuation of aluminium recycling in NSW is a very disappointing outcome and something to be avoided. While there are many reasons given for the closure including an oversupply in the rolled aluminium sheet products internationally due largely to new plants opening in China and South East Asia, the added regulatory burden does nothing to encourage waste recyclers to remain.

What has happened with aluminium recycling can also occur in other recycling areas. The NSW Government must ensure that any collateral economic impacts as a result of the waste levy and costs associated with environmental controls are addressed or at least counter balanced.

#### ***3.1 Impacts of the waste facility threshold changes***

ASBG members in the waste sector generally support the thrust of the draft Waste Regulation, including the reduction in licensing threshold to 12,000 tonnes per annum (tpa) or 1,000 tonnes stockpile for Resource Recovery, Waste Processing (non-thermal) and Waste Storage. However, the main trigger threshold will be the 50 tonnes processing per day, as this represents about two truck loads.

ASBG is concerned the new threshold will capture EPL sites where larger capacity sites will be exempt from being classed as SWF, but smaller ones not so. The reasons for this are the potential for two EPL classifications for SWF exempt facility types which is displayed in table 1 along with the proposed new thresholds for waste facilities.

Table 1: Licence Thresholds for Types Included in the draft POEO Regulation	
Licence Type	Threshold
<b>Contaminated soil treatment</b>	treat more than 1,000 cubic metres per year of contaminated soil received from off site to incinerate more than 1,000 cubic metres per year of contaminated soil, or to treat (otherwise than by incineration) and store more than 30,000 cubic metres of contaminated soil, or to disturb more than an aggregate area of 3 hectares of contaminated soil.
<b>Scrap metal processing</b>	capacity to process more than 150 tonnes of scrap metal per day or 30,000 tonnes per or 50,000 tonnes per year (if carried out wholly indoors)
<b>Pulp and paper production</b>	capacity to produce more than 30,000 tonnes per year of paper, paper pulp or pulp products
Proposed New Thresholds	
<b>recovery of general waste</b>	involves having on site at any time more than 1,000 tonnes, or 1,000 cubic metres, of waste involves processing more than 50 tonnes of waste per day or 12,000 tonnes of waste per year
<b>non-thermal treatment of general waste</b>	involves having on site at any time more than 1,000 tonnes, or 1,000 cubic metres, of general waste involves processing more than 50 tonnes per day, or 12,000 tonnes per year, of general waste
<b>waste storage</b>	more than 1,000 tonnes, or 1,000 cubic metres, of waste (other than waste referred to in paragraph (a) or (b)) is stored on the premises at any time, or more than 12,000 tonnes of waste (other than waste referred to in paragraph (a) or (b)) is received per year from off site

Given the POEO Act definition of *general waste* includes metal, paper and cardboard, building and demolition waste then the *affected activities*: contaminated soil treatment, scrap metal processing and pulp and paper production, could also be licensed under at least one of the three *new threshold waste facility activities* listed in table 1. Current this is not an issue as the thresholds are similar. But when the waste activities threshold drops then affect activities could be licensed as such.

Hence, licensing the affected activities, below their specific threshold (12,000 tpa), as waste facilities as a general classification at the lower threshold, means they will become SWF. Affected activities over their specific thresholds (30,000 tpa) are exempted under Schedule 4 [s8 Clause 20] as SWF, excepting scrap metal processing.

Here we have the dilemma; does the EPA wish to ignore licensing contaminated soil processing and pulp and paper production, but capture scrap metal processing? Let's look at each affected activity:

- **Pulp and paper production** → 6 sites are licensed. If all plants in NSW are above the 30,000 tpa threshold then this is not an issue, but are there smaller plants?
- **Contaminated soil treatment** → Depends on if the operation accepts off site wastes or not. There are a few which do operate with this type of licence, so smaller operations could be captured. Then there is the

trigger for on-site soil treatment such as immobilisation or other treatments. Again some currently smaller contaminated soil treatment could be captured.

- **Scrap metal processing** → 14 sites are currently licensed. However the industry reports there are many sites operating just below the licensing threshold which could be captured as non-thermal treatment, recovery of waste or waste storage.

It appears the main area where the new thresholds could apply<sup>1</sup> is on scrap metal processing. In general the larger scrap metal processors would welcome the capture of these smaller operators to be licensed. An inspection of the yellow pages shows there are over 150 companies offering scrap metal recycling. Many of these would be either already licensed (landfills and transfer stations offer this service) or under the 12,000 tpa and other thresholds. Nevertheless, there is a mismatch between scrap metal processors and other waste facilities if the threshold remains at the 30,000 tpa threshold.

ASBG believes it is not the intention of the EPA to include smaller contaminated soil treatment nor pulp and paper production sites as waste facilities and none as SWFs.

**R3 ASBG recommends the EPA clarify that pulp and paper production and contaminated soil treatment will not be reclassified as a waste facility under the proposed thresholds.**

Scrap metal processing is different and is dealt with under section 3.4 Scrap Metal Processing Issues.

### **3.2 Use of Mass Balances**

Under s88 of the POEO Act all waste facilities that are required to be licensed are required to pay the EPA in respect of all waste received at the facility such contribution as is prescribed by the regulations. Given the broad definition of waste in the POEO Act, all recycle can be defined as waste.

The proposed Waste Regulation defines **scheduled waste facility(SWF)** – a waste facility that is required to be licensed under the Act because it is used for the storage, treatment, processing, sorting or disposal of waste. The regulation then permits deductions on the levy payable by including:

- The levy amount which has been paid for at another facility (s14)
- Materials used on site for operational purposes some of which can be classified as waste (s15)
- Recovered, recycled or processed at that facility and transported from the facility to another place for a lawful use or to another facility which does the above (s16)
- Other exemptions such as dredging spoil, emergency and disaster waste etc (s21)

So the above sections require a measure of inputs and outputs of SWFs and identification of what are wastes and non-wastes (no levy payable) on the outputs. The waste Regulation then spells out in various detail how these items are to be measured, recorded and reported on. It also requires the measurement, locations and assessment of stockpiles of waste materials.

Such an approach can be called a mass balance. A mass balance put simply is:

$$\text{Mass in} = \text{Mass out} - \text{accumulation}$$

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<sup>1</sup> Application of scrap metal processing activity is a specific activity type and would likely overrule the use of a waste facility.



While simple to describe, a mass balance can be a substantial challenge to measure. Errors due to leakages of mass are a common measurement issue. Mass balancing of waste facilities such as a recycling plant will also pose similar problems such as:

- **Moisture** → If recyclate is accepted across a weighbridge in the morning, but gets rained on during its storage its mass will increase. Product and wastes will also vary according to rain fall and evaporation. At least 5% or larger errors can occur, especially for hydrophilic materials such as cardboard or paper. Moisture can be added or removed and is a reversible process weather dependent.
- **Corrosion** → this generally affects metals, but can impact on other substances. Reaction with oxygen, e.g. steel rusting will increase its mass which is generally irreversible.
- **Bio degradation** → biologically reactive materials, especially putrescible wastes will emit bio-gases such as CO<sub>2</sub>, methane and other substances due to micro-organisms eating the waste or other chemical reactions usually oxidizing the waste into a gaseous state. Such action will reduce mass and is generally irreversible.
- **Fuel use** → plant work require to move wastes between weighbridges and point of use or stockpiling will result in weight losses.

Under s8 of draft Waste Regulation the accuracy of measurement of waste implies it set at 0.005 tonnes or +- 5kg. However under the National Measurement Act verification is about 1 kg for 10 tonnes. Imposing standards of accuracy way beyond the accuracy required is considered an unnecessary cost and only convenient for the regulator. Given the typical errors associated with undertaking a mass balance, use of a 0.005 accuracy in a weighbridge is pointless when 5+% errors will occur from moisture variations alone.

ASBG is concerned that older weighbridges may need to be replaced or upgraded at a significant cost impost and not covered under the work done by The CIE. Hence a grandfathering of weighbridges should be considered or a lower level of accuracy required. Queensland's [Waste Reduction and Recycling Act 2011 \(s43\)](#) simply requires weighbridges to be kept in proper working order and repaired in the shortest practical time. Additionally, there are the POEO Act's sections and corresponding licence conditions requiring maintaining plant and equipment; *S66 (1)(i) Licence conditions – Monitoring the operation or maintenance of premises or plant*, and is include in virtually all EPLs the following condition:

- 02.1** All plant and equipment installed at the premises or used in connection with the licensed activity:
- (a) must be maintained in a proper and efficient condition; and
  - (b) must be operated in a proper and efficient manner.

ASBG considers the draft Waste Regulations' s35(2) (e), (f), (h) and in some cases (i) on weighbridge verification, maintenance and uptime redundant as it can be adequately managed through this existing licence condition.

The EPA must accept there are practical limits to achieving an accurate mass balance. It is not a financial accounting process, it is a physical process in the real world and unavoidable errors will occur. The EPA and the SWF will not be able to have a reasonable error rate until data is collected and assessed over time.

#### **R4 ASBG recommends the EPA:**

- **Accepts mass balance error rates associated with various waste facility operations**
- **Uses waste facility activities sector specific mass balances developed over time with each sector**
- **Provides exemptions in part or wholly to the reporting and monitoring requirements for certain sectors and or sizes of operation (see R1)**
- **Considers the use of estimations where they prove to be practical for smaller sites.**

Reporting and monitoring requirements under the draft Waste Regulation are considered to impose very high costs especially for smaller sites or sites that have alternative systems which would meet most of these requirements. However, there is no power to the EPA to vary these requirements

### 3.2.1 Administration Costs

The administration costs given in The CIE report, according to members do not reflect the true cost of the impact of the monitoring and reporting conditions in the draft Waste Regulation. The CIE's table appears below:

#### Summary of costs and benefits of amendments to the waste levy framework

Impact from proposed amendment	Amount
	\$ million
<b>Benefits</b>	
Reduced waste management costs	38.63
<b>Costs</b>	
<b>Industry</b>	
Capital cost of weighbridge and software (50%)	1.30
Record-keeping and reporting	0.50
Volumetric surveys	3.86
<b>Government</b>	
Capital cost of weighbridge and software (50%)	1.30
Administration and enforcement	3.86
<b>Total costs</b>	10.83
<b>Net benefit</b>	<b>27.80</b>

*Note:* Estimates expressed in present value terms over a 10 year period, using a discount rate of seven per cent.

*Source:* CIE estimates (CIE 2014, pp. 33–34).

Of the costs in the table above the Record-keeping and reporting costs of \$500,000 are simply unrealistic. ASBG members, who will be SWFs, report the need to hire new staff to undertake this task, with individual members reporting at least 4 new staff each to cope with the proposed record keeping and monitoring. These costs are not reflected in the assessment above. Training costs, such as operating any new software and the new recording requirements alone would far exceed the figures provided above. These costs were not included in The CIEs modelling. Also the \$34.70/hr is earnings per employee which ignores the overhead costs to waste facility operators, which is generally close to double this rate.

Weighbridge costs, while new weighbridges will be assisted with the grant provisions by the NSW Government, no such funding has been allocated for existing weighbridges. Upgrades in software cost for existing weighbridges are in the order of \$30,000 and many likely SWF sites have older software. The CIE report only considered new weighbridges. Members have also provided feedback that the cost of a new weighbridge to the specifications required would cost overall including engineering works and especially where there is a lack of space and or new access road required this cost can easily exceed \$1.3 million. This is far higher than the top rate of \$150,000 for a large weighbridge cited in The CIE report.

**R5** *ASBG recommends the EPA develop further support including additional funding mechanisms to assist:*

- *Current sites qualifying as SFWs deal with the weighbridge software upgrades and subsequent staff hiring and training where appropriate.*
- *New SWF sites with staff training on the new legislative requirements*
- *In other areas, where appropriate, to assist in the viability of existing recycling where this legislative change causes negative economic impacts.*

Also there is an implied accuracy in weighbridges. Under s8 of draft Waste Regulation the accuracy of measurement of waste implies it set at 0.005 tonnes or +/- 5kg. It also specifies the weighbridge must be verified under the *National Measurement Act 1960*, which sets accuracy of about 1 kg for 10 tonnes<sup>2</sup>. For levy collection purposes this level of accuracy is not warranted as the mass balance errors will be orders of magnitude larger. Alternative methods in establishing weighbridge accuracy as discussed in *section 3.2 Mass balances*. ASBG believes use of existing licence conditions can achieve the outcomes required by the objective of the draft Waste Regulation. Additionally the need for weighbridges at all SWFs is a very costly and unnecessary on smaller sites where alternative weighing systems can be employed.

**R6** *ASBG recommends amending the draft regulation:*

- *To permit alternative weighing processes for smaller sites than the requirement for installation of weighbridges.(see R1)*
- *Omitting sections 35(2) (e), (f), and (h) instead rely on the standard licence conditions O 2.1 and or other additional licence conditions considered necessary for achieving reasonable mass balance accuracy.*

The requirement under s29 to record all operational vehicles that enter and leave the site plus the reasons for this is overly onerous. Not all vehicles enter sites using the weighbridge; hence an extra staff member and or expensive video with number plate capturing software would be required. S29 should be either removed or rewritten to include vehicles over certain carrying capacity e.g. 5 tonnes be recorded.

As discussed in s2.2 of this submission there are many licensed manufacturing sites which are likely captured as SWFs. Most of these sites have in comparison very small volumes of waste coming in for recycling compared to the large quantities of raw materials and products. In many cases such manufacturers can accept the waste material as a back load after the product has been delivered. In practice this is a small portion of total movements. The regulation is written with only purpose built waste management facilities in mind, where the vast majority of vehicle movements involve cartage of waste. This is simply not the case for many EPLs where waste processing is a secondary activity.

Given the likely errors in mass balances as discussed above, tracking every operational vehicle goes far beyond reasonability that the mass balance process could achieve. Hence s29 is considered a impractical addition that will only add costs and not improve the accuracy of mass movements at a SWF site.

**R7** *ASBG recommends the removal or modification of s29 to cover the EPA concerns of material movement reflecting the expected error rates for such facility mass balances.*

### **3.3** *Metal Recycling*

NSW's metal shredders are particularly vulnerable to competition for their recycle scrap, especially from Chinese buyers. This was recognised by The CIE in 2011 and later by KPMG who recommended that a reduction in the levy rate should apply.

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<sup>2</sup> National Measurement Regulations 1999 [Schedule 9 - Maximum permissible uncertainty and maximum permissible variation--mass \(Inspectors' Class 1, Class 2 and Class 3 standards](#)

As a result *residual waste generated directly (at an approved waste facility) from the shredding of scrap metal (s(7)(b))* was granted a 50% levy reduction from 1 September 2013 to 1 July 2016 and a 25% reduction from then until 1 July 2018. This was a welcome relief for the metal shredders in NSW which faced a similar fate to that of the aluminium recycling plants.

### 3.3.1 Levy Assistance to Metal Shredders

Considering that the draft Waste Regulation permits the exemption of levy for wastes sent to *bona-fide* recycling facilities, this presents a considerable risk for the metal shredders. *Bona-fide* recyclers of scrap outside of NSW are out of the controls of NSW law and subject to other jurisdictions environmental standards and controls. Considering that over 15% of scrap, and in increasing amounts, is collected processed into bailed lots and shipped overseas to metal shredders, NSW shredders face an increasingly competitive international market and meet the same fate as aluminium recycling.

The issue becomes what is a *bona-fide* recycling operation outside of NSW. Under the Australian Constitution there is free trade between states, but there is a loophole where if environmental controls are not considered satisfactory in the Australian state of destination then the regulatory of origin can prevent its export. There is no doubt this is a complex legal area, but could be explored by the NSW EPA as a possible course if other legal mechanisms fail.

ASBG is concerned that NSW's metal shredders face increasing competition for their scrap recyclate, especially from overseas if the dollar drops in value. The EPA has two options in which to assist the shredders:

- Continue with the reduction in the waste levy amount at 50%
- Undertake assessment of *bona-fide* recycling in other jurisdictions and internationally- refusing export to sites where environmental performance cannot be demonstrated

The latter is a complex and difficult practice, so this leaves us with the current levy discount. The stepped reduction of the levy going to zero by 2018 assumes the shredders will have a miraculous improvement in their reduction in shredder floc, through improved technology improvements. ASBG metal shredder members already report they are using world best practice technology. The three licensed shredders have extensive data on their material flow and can provide mass balance data if and when required.

Metal shredders and the EPA need to develop a strategy post 2016 to secure the long term future of metal shredding in NSW. This may mean further adjustments to the waste levy and or other assistance measures including grants and assessment of export of scrap recyclate out of NSW.

**R8** *ASBG recommends the development of a support strategy for the long term survival of NSW metal shredders and that the EPA work with the shredders to implement this post mid 2016..*

## 3.4 Treatment of Scrap Metal Processors

There are only 3 metal shredders in NSW that operate under an Environment Protection Licence. However, there are many scrap metal processors who are licensed.

As discussed in s 3.1 many new scrap metal processors could be captured as *non-thermal waste processors* or other waste facility types. In general the sector considers this is a good idea that such sites should require an EPL, but that they do not require to be SWFs.

Under schedule 4 [s8 – clause 20] of the draft Waste Regulation, paper mills are specifically exempt from being SWF, but scrap metal processing are specifically captured. ASBG does not understand why scrap metal processing are considered more of a risk than paper mills and composting. The issue is not that they should be licensed, but that they also captured as SWFs.

For currently licensed scrap metal processors there is no market failure, no illegal dumping of waste, no stockpiling or abandonment of materials and no incorrect classification of materials resulting in environmental impacts. ASBG has been informed by its members the problem area lies in the unlicensed sites, collection, storage and export of scrap to markets outside of NSW. However, simply making scrap metal processors SWF laible, will simply place additional burden on the well managed sites, leaving those below the 30,000 tpa threshold to continue without EPA licence control.

**R9 ASBG recommends that the scrap metal processors:**

- **Activity's threshold lowered to that proposed for resource recovery of general waste**
- **Be exempted as scheduled waste facilities.**

Even if a SWF exemption is given to all *scrap metal processors*, the EPA always has the option of installing additional licence conditions, such as mass balance reports. For regulatory simplicity a general SWF exemption for *scrap metal processing* is preferred. Note that the metal shredders already undertake mass balancing of their sites and would accept appropriate licence conditions to this effect.

### **3.5 Stockpile Issues**

ASBG members are concerned over the 12 month limit on stockpiles. Some waste are collected and stockpiled so they reach a critical mass before recycling or processing it on site is economic. Such practices are *bona-fide* and curtailing this practice will lead to lower recycling levels.

For example, a construction and demolition recycler offers to recycle a range of products including asphalt. However, the site needs to stockpile about 1,000 tonnes before there is enough to warrant re-setting up their sorting equipment for asphalt. To obtain 1,000 tonnes would take over a year perhaps two. Setting up to process the stockpile for under 1,000 tonnes is considered uneconomic. This means s31 can be too inflexible for legitimate recyclers operating a *bona fide* business. The purpose of an EPL is to provide a flexible and sharp negotiated regulatory instrument. By putting these conditions into a regulation this negotiation ability is removed.

**R10 ASBG recommends amendment to the regulation to permit a flexible arrangement on stockpiles where the licence holder can demonstrate the 12 month time period is too restrictive.**

Such flexible arrangements can then be installed into the sites EPL to ensure compliance within a reasonable set of agreed and negotiated criteria. ASBG considers a generic exception process is required in the regulation, possibly under Section 9 where variations to the standard regulatory requirements can be considered and enforced by EPL conditions. This is discussed also in s2.1 and recommendation R1 supports this type of flexibility.

## 4 ASBESTOS ISSUES

The draft Waste Regulation introduces two new actions on asbestos including:

- The requirement to track asbestos waste movements above 80 kg within NSW (part 7)
- Adding the 10 tonnes automatic trigger for illegally dumped asbestos waste under s142A Pollution of Land offence

Details of the tracking processes and requirements for the asbestos waste is to be further clarified in the yet to be published *Asbestos and Waste Tyres Guidelines*.

ASBG has no issue with the practical thrust of the above changes. However, these new changes add to the difficulty in management, identification and classification of what is *asbestos waste*.

Asbestos waste management is a very problematic area. Regulation of asbestos waste is very risk adverse and with the 'correct' methodologies considered overly tight and subject to a high level of legal risk. The correct management of asbestos waste is plagued by high cost, high risk and lack of clarity, with minor errors of practitioners resulting in prosecutions. Interpretation and level of detail applied to asbestos waste appears to have changed within the NSW Government and the EPA overtime. The lack of certainty makes asbestos waste management difficult to the point where insurance on asbestos sites is often unavailable. Such an approach also encourages illegal practices in this area. Recommended improvements include:

- More certainty on the rules regarding asbestos waste management
- A more practical and efficient means in which to manage this issue and clean up asbestos contamination

Under the Waste Classification Guidelines it simply says **Asbestos waste** means any waste that contains asbestos. This definition was placed into the guidelines in the mid-later 1990s when they first prepared. At the time this was interpreted as a visual test. If you could see asbestos, in its common fibre or cement bonded form, then it would be so classed. The Guidelines were amended in 2009 to plug a loophole so wastes that contain asbestos waste can be also classed under other waste classification, such as hazardous, and not solely one classification.

An ongoing issue with asbestos waste are in its measurement and subsequent classification. There is a lack of clarity on how to assess asbestos waste, especially in soils. Also compounding the issue is a disconnect between asbestos levels permitted to be left on site under the *Assessment of Contaminated Sites National Environment Protection Measure*<sup>3</sup> (the NEPM), application of Work Health and Safety controls and conditions surrounding the handling of asbestos and asbestos waste and the definition and classification of asbestos waste.

What is required is a better way to measure and classify what is asbestos waste and what is not. Hence, the issue is at what asbestos concentration level and conditions will the EPA accept, at below which it is not considered asbestos waste. Further study may be required to identify such a parameter. The EPA may find the work undertaken by the US EPA useful. Its assessment of various levels of asbestos in soils, moisture content and activity and related them to fibres in air, which is the main risk — inhalation of asbestos fibres<sup>4</sup>.

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<sup>3</sup> ACS NEPM investigation levels on asbestos are contained in its schedules, mainly schedule 1B.

<sup>4</sup> [Environmental Monitoring for Asbestos](#): Sumas Mountain Asbestos Site Selected Residential Properties

ASBG also proposes that asbestos containing wastes be assessed in three levels:

1. Asbestos waste containing harmful levels of asbestos to handlers of the material → disposal as per asbestos waste
2. Waste soils which have asbestos concentrations below a risk level and have a minimum moisture concentration → disposal as general waste – cannot be reused
3. Soils used for reuse purposes → with tighter asbestos concentration threshold levels, and used in various Resource Recovery Exemptions

**R11** *ASBG recommends the EPA work with the asbestos waste management sector including, waste contractors, consultants assessing asbestos, and contaminated land practitioners to identify and develop new and practical measurement and management policy arrangements for waste asbestos.*

A review of asbestos waste classification is minimum requirement and as such will require a review of the Waste Classification Guidelines in this area as well as those discussed in s2.5 of this submission.



## 5 POLICING WASTE LAWS

Having a high levy brings with it considerable commercial gains if it can be evaded. With such high incentives comes the need for the increased policing of the levy. Policing of the waste levy, while having been boosted by the Government's \$58 million grant program, it still has to deal with:

- A massive illegal dumping issue in levy areas
- Evasion tactics to dispose in non-levy areas where the levy applies to the waste
- Leakage issues to Queensland
- Illegally misclassifying waste and placement in illegal landfills or other waste facilities – especially affecting hazardous and restricted wastes.

No doubt the increasing levy will bring with it an increasing incentive to evade it. The policing task will be ongoing as the levy will continue to increase post mid 2015 by CPI. As a consequence, the \$58 m support for the policing of waste laws over 4 years will be an ongoing budgetary funding requirement.

If poor policing and other loopholes appear, such as leakage to non-levy jurisdictional areas, the NSW waste faces the dual competition from other states and illegal operators.

### 5.1 *Hazardous Waste and Immobilisation Policing*

ASBG believes the main environmental issue with immobilisation is the lack of policing of it. With such high landfill costs added to immobilisation costs, the cost avoidance incentives are very high. There are many ways to illegally do the correct process in managing waste that should require immobilisation including:

- Blending with other waste streams, soils etc – deliberate dilution
- Layering soils with contaminated soils to hide the materials disposed of at landfills.
- Obtaining false certificates of compliance – stating the material does not require immobilisation, but this is false.
- Shipping the material to another state that has lower environmental controls, policing and or conditions on landfills.

The EPA should consider developing specialist section to police the chemically complex area of illegal hazardous and restricted waste activities.

ASBG is concerned of reports of apparently illegal interstate waste management companies, based in other states running on non-NSW transport licences. Due to the COAG cross recognition of licensing, hazardous waste transporters can legally operate in NSW. While the transport licence is valid, they quote very low transport, treatment and disposal rates often below 50% of local market rates.

ASBG wishes to work with the EPA in educating businesses on the use of interstate hazardous waste transporters and the correct regulatory requirements and the necessary questions and required responses to ensure the waste service is legitimate.



## 6 CONCLUSION

Amending the draft Waste Regulation to include a flexibility arrangement to permit variations to the standard regulatory conditions, in the form of additional EPL conditions will provide a regulatory circuit breaker for the more onerous sections.

With careful consideration of the types of waste facilities to be classified as SWF, the right application of the new controls will be delivered effectively.

Improvements to the measurement processes, weighbridges, mass balances and documenting vehicle movements, which are practical, will ensure an efficient application of the regulation, and avoiding high costs which may require other support from the NSW Government. Stockpile management will benefit from flexible arrangements where the 12 month limit can be set for longer terms under EPL conditions.

A practical and easy to implement measurement and classification process for asbestos wastes will avoid confusion and legally difficult and fraught process of its management.

Should further information or explanation of the contents of this submission be required please contact Mr Andrew Doig on 02 9453 3348.