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Minister for the Environment
The Hon. Gabriel Upton

Mark Gifford
Acting Chairman NSW EPA

The Australian Sustainable Business Group (ASBG) wishes to raise a number of concerns regarding the *Protection of the Environment Operations Amendment (Asbestos Waste) Bill 2018* (Asbestos Waste Bill).

In addition to the recommendations made there is concern on the lack of communication and avoidance of consultation by the Government of the Asbestos Waste Bill. Its tabling at the same time as the release of the NSW Asbestos Waste Strategy is considered poor practice by Government as it implements the Strategy before any consultation can be considered.

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

Andrew Doig

Andrew Doig
CEO
Australian Sustainable Business Group (ASBG)

T. +612 9453 3348
A. (PO Box 326, Willoughby NSW 2068)
andrew@asbg.net.au

AUSTRALIAN SUSTAINABLE BUSINESS GROUP'S

Submission on

Protection of the Environment Operations Amendment
(Asbestos Waste) Bill 2018

November 2018



Sydney, Brisbane

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1 Introduction

The Australian Sustainable Business Group (ASBG) wishes to raise a number of concerns regarding the *Protection of the Environment Operations Amendment (Asbestos Waste) Bill 2018* (Asbestos Waste Bill).

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 understands that asbestos is one of the few environmental contaminants, which is directly linked to deaths of Australians and with the Government wishes the efficient and safe management of asbestos and asbestos contaminated materials. Asbestos is also a highly emotional issue with many aggrieved families requiring action by Governments to prevent and minimise future deaths from the various forms of this substance. In this regard ASBG has no issue with the increase in fine levels associated with waste offences including asbestos waste.

There are considerable powers under current NSW environmental legislation, which can adequately control and manage asbestos waste. Manage illegal asbestos waste management is considered one of adequate resourcing and policing of current laws. Asbestos waste dumping is heinous and ASBG accepts the higher penalties proposed, but not the scope and broadness of application, where concentration and risk is ignored. However, there are many *bona fide* waste operators who inadvertently become victims of asbestos contamination in recycling and product streams. NSW needs a strong waste sector to drive forward the circular economy and not be made liable where there is an acceptable level of risk involved.

The Asbestos Waste Bill, however, changes the basic premises for the management of environmental contaminants on both a health and environmental basis. The Environment Protection Authority (EPA) currently uses an evidence based, scientific, risk-based approach to its environmental protection role. However, the Asbestos Waste Bill changes this position by use of presence of asbestos in any waste material taken off site. Use of an absolute is an unscientific measure and sets a dangerous and disturbing precedent for environmental law in NSW with the potential to spread to other jurisdictions. A scientific process must be maintained especially in NSW environmental law otherwise it sets the precedent for other unscientific methods to be employed.

As a consequence of the broadness of this Bill, investment in many forms of recycling will be deterred due to the considerable new liabilities if it proceeds in this form. As any *presence of asbestos* can trigger these new offences there will be little appetite for investment in Construction and Demolition (C&D) Recycling and likely to spread to other recycling types if the offence is set too tightly.

This submission argues against the use of s241(f) as proposed in the Asbestos Waste Bill especially as the use of presence based approach is considered unscientific. At a minimum to counter the greatly increased liabilities on recycling facilities, especially construction and demolition recycling, the Bill should include a due diligence defence.

2 Asbestos Presence

ASBG is concerned over inclusion of a presence-based approach to asbestos in waste as in section [11] of the Asbestos Waste Bill— addition of:

section 241 (f) *the presence of the asbestos in the environment*, under the POEO Act.

The POEO Act 1997 contains the definition of asbestos waste in its dictionary:

Asbestos waste is waste which contains asbestos

A scientific definition of what this means has been long avoided by the EPA. With the inclusion of s241(f) the POEO Act now contains the element of presence, rather than an amount, concentration, harm level, risk or similar scientific measures. In short s241 can influence the definition of asbestos waste to include any amount or any measureable amount.

A presence approach is an absolute and would place asbestos above all other environmental contaminants. For example, radioactive wastes, dioxins, organo-chlorine pesticides, mercury, beryllium, lead, thallium, plutonium, bis(Chloromethyl) ether, 4-Aminodiphenyl, Aflatoxins, 4-Nitrodiphenyl and all other carcinogens have risk based levels set. Dioxin, which is a common by-product of combustion, is 60,000 times more toxic than cyanide, yet is assessed on a risk based process. Traces of this substance, albeit at very low concentrations are permitted.

Asbestos when reviewed on a health and risk based approach poses a health risk if it is air borne. Safe Work Australia sets a Time Weighted Average (TWA) limit for asbestos fibres in air for workplaces at 0.1 f/mL¹.

Asbestos waste in contrast covers largely solid materials and substances, but can also include liquid wastes ranging from stormwater run-off, various effluents, liquids acceptable to sewer and liquids which require specialised treatment such as hazardous wastes. Changing the definition of asbestos waste to a presence based one means that all liquid and solid wastes are deemed asbestos wastes if asbestos fibres are detected.

This leads to absurd outcomes of what becomes asbestos waste and can triggering illegal disposal of asbestos waste conditions. For example:

- Stormwater runoff from a site which has building that use asbestos roofing.
- Stormwater runoff from a product stockpile, regardless of the product, if asbestos is detected either in the stormwater and or the stockpile is that stockpile of product which was deposited on the site now deemed to be asbestos waste?
- Runoff from the vast number of buildings with asbestos roofs will contain measureable asbestos fibres, so is this to be prohibited?

Stormwater is permitted for discharge into the environment under the Resource Recovery Order and Exemption (RRO/E) for Stormwater. Under the Notes section it says that:

Stormwater remain subject to other relevant environmental regulations in the POEO Act and Waste Regulation. For example person who ... does not meet the special requirements for asbestos waste... is guilty of an offence...

So the application of the presence of asbestos to solid and liquid wastes is based on the assumption they all pose an air borne unacceptable health risk is flawed science. If there is a difficulty in setting a specific concentration threshold in solid and or liquid wastes then a use of a case-by-case risk assessment process should be employed. However, this appears not to be acceptable under by the use and interpretation of s241(f).

¹ Safe Work Australia, [Workplace Exposure Standards for Airborne Contaminants](#), 18 April 2013

3 Background Asbestos Levels

As there are only a few test methods for asbestos in soils, such as AS 4964 - 2004 application of a presence based approach with reverse onus of proof by corporations makes a no-presence of asbestos extremely difficult.

Safework Australia, states in its publication *Asbestos: Baseline Health Monitoring Before Starting Asbestos Related Work Or Removal Work*:

Low levels of asbestos fibres are present in the environment from the breakdown of asbestos products. Environmental weathering of asbestos-cement sheets in roofing and wall cladding, disturbance of asbestos from a variety of building materials like insulation, ceiling tiles, and floor tiles and asbestos release to air from clutches and brakes in cars and trucks results in asbestos fibres being widespread in the environment.

The typical environmental background in outdoor air is 0.0005 fibres/ml and 0.0002 fibres/ml in indoor air². The daily inhalation volume for an average adult is 22 m³ or 22000 litres³. This means 5500 fibres are breathed/day by the average person (proportion of time spent indoors = 20 hours/day). Despite this the general population does not contract asbestos-related disease in significant numbers. The background rate of mesothelioma is less than one per million per year. By comparison, the annual death rate for a 40 year old male in 2008 was 1.6 per thousand or 1600 per million⁴.

As a consequence, Safework Australia is saying the presence of asbestos is ubiquitous. Given any tonne of waste, which has been exposed to ambient urban air and asbestos fibres will be found if looked for. As a consequence, to prove a waste does not contain some asbestos fibres would require undefined and exhaustive testing.

² ATSDR. 2001. Toxicological profile for Asbestos. Atlanta: Agency for Toxic Substances and Disease Registry www.atsdr.cdc.gov

³ Enhealth Dept Health and Ageing Environmental Health Risk Assessment www.health.gov.au

⁴ Australian Bureau of Statistics at www.ausstats.abs.gov.au

4 Presence Does Not Relate to Risk or Harm

As asbestos is ubiquitous, with many Australian adults having measurable quantities in their lungs does not mean there is no level of acceptable risk. All other environmental contaminants are based on a health risk level of either 1 in 100,000 or 1 in 1,000,000 chance of a health impact. In the case of asbestos this is the cancer risk. Hence, the claim “one asbestos fibre can cause cancer” is considered scientifically invalid. If this were true then assuming 16 million Australians have been exposed we would expect to see a death rate of some 600,000 per annum. Instead we see around 600 annually. The average asbestos fibre ‘count’ from a typical mesothelioma cases in the UK is 102 million⁵.

Clearly asbestos is a dose related disease. Its risk levels are calculable and consequently its acceptable level of exposure risk is determinable like all other hazardous substances and chemicals. So all other substances have a tolerable risk level established, many with considerable safety margins added where there is some scientific doubt. This is the usual scientific approach. However, use of presence based system ignores scientific evidence and places asbestos in the category based on fear.

A presence based approach contains its own risks. Applying a zero tolerance to asbestos will lead to perverse outcomes:

- A presence level approach will drive up costs significantly meaning:
 - Money available for cleanup will be used on fewer sites and many will remain unmanaged due to costs
 - High costs will divert efforts away from other higher risk areas, substances etc to asbestos increasing overall health risks for communities
 - Increase the incentive for illegal dumping
- Less disposal options become available due to the high prosecution risks and operational risks required to transport and dispose of asbestos waste
- Higher prosecution risks will impact on recycling reducing its role and undermining the circular economy

As a consequence, the use a presence based approach can lead to poorer health outcomes contrary to the objectives of Guidelines to Better Regulation which require an outcomes and risk based approach. Placement of a presence based approach breaches the NSW Government’s own guidelines and represents an unscientific approach to asbestos waste management.

⁵ See article [Does one fibre really kill? Asbestos: real and perceived risk](#). Roger Willey, Safety & Health Practitioner 9/8/2015

5 Legal Interpretation

Introduction of a presence based approach establishes a new precedent where the Government replaces a science, risk-based process in contrary to the NSW Government's policy of an outcomes and risk based approach to regulation⁶. ASBG is concerned that other states and territories may also adopt this presence based approach for asbestos following NSW's lead. It will also empower the politics of fear with the consequence of encouraging further pushes for other zero tolerance levels for other flavour-of-the-month environmental contaminants. Manufacturing is in general a science based process and use of such absolutes, rather than use of science, will give NSW a poor standing internationally and undermine investment. A risk based approach to environmental law should be fundamental to its construct.

5.1 Application of s241(f)

Inclusion of s241(f) POEO Act *Matters to be considered in imposing penalty* has already been discussed in section 1 of this report as influencing the meaning of asbestos waste. To recap ASBG considers this can force the court to interpret asbestos waste as any waste containing the presence of asbestos regardless of risk.

So how will be read? Addition of s241(f) adds a substantial legal complication. Subsections of s241; (a) to (c) deal with harm to the environment, while subsections (d) and (e) deal with who is responsible. However, the new subsection (f) fits none of these categories. Here, the mere presence of asbestos and not the extent of harm appears enough to trigger a penalty. In effect it appears to overrule harm consideration in subsection (a). So a penalty is based on firstly the presence of asbestos, then if any harm occurs, assuming (d) and (e) are satisfied, further penalty can be added. The question is does this offer any opportunity for a range of penalties to be considered by the Judge? It does not appear to be the case.

5.1.1 Does it Consider Background?

There are further complications in the interpretation of s241(f). Does it mean background levels can be considered? There is no mistake that presence means any asbestos, regardless of how much in quantity or its distribution, harm or likely harm it causes. But *presence of asbestos in the environment* includes *in the environment* and this should also be considered. Here background levels could to be taken into consideration. Ambient levels of asbestos fibre s in air, water and soil can argued for consideration. Read in full s241(f) has more work to do, but what is the extent of this work? It appears *in the environment* is limited to background levels. However, as one looks at s241(f) the term presence is a hard line with no work to do other than confirm or not a presence. It would be rare for background levels of asbestos to be of significance, especially from air monitoring, which even for acceptable levels of asbestos (0.01% in soils), which trigger contaminated site investigation levels⁷ generally read very low to zero respirable fibres.

While background levels can be considered, they will be of only of consideration if there is a measurable background and that measure waste taken. Also background has work to do in which background is being considered? Is it the soil, air or even water where there is some presence of a background?

The alternative argument is if background levels can be considered then s241(a) does this work anyway in considering level of harm, so why does the Act include s241(f)? So does background counter presence or subtract from it, it is very unclear and poor drafting.

The second reading speech offer more on the use of s241(f) stating:

Finally, this bill amends the sentencing considerations under section 241 of the Protection of the Environment Operations Act to specifically list the presence of asbestos as a factor a court must consider when sentencing offenders under the Act. This amendment will apply not just to waste offences but also to other types of asbestos-related offences, such as a failure to comply with a clean-up notice involving asbestos. The changes contained in

⁶ See [Guidance for Regulatory to Implement outcomes and risk based regulations](#), October 2016 – Commissioner for Productivity

⁷ See s2.3 Assessment of Contaminated Sites NEPM, Schedule B1 [Guideline on investigation levels for soil & groundwater](#)

this bill will send a strong message that the Government will not tolerate illegal asbestos waste disposal and handling.

The second reading speech reinforces that the presence of asbestos must be considered in sentencing. This tends to suggest a flag fall amount penalty for the presence of asbestos, with other factors adding more. It also says the Government *will not tolerate illegal asbestos waste disposal and handling*. Strong words here suggest that the flag fall amount should be set high regardless of the amount of material its concentration or harm.

5.1.2 Presence and Contains

Moving back to the influence of s241(f) on the definition of asbestos waste, which is any waste, which *contains* asbestos, appears to affect the meaning of *contains*. Justice Pain in *EPA v Grafil*⁸ [c522] stated:

The definition of asbestos waste in cl 50(1) Sch 1 is any waste which contains asbestos. At issue in this case is how “contains” and “waste” should be construed. There is little guidance from the statutory context of the definition. The construction adopted by the EPA that one piece of asbestos of any type renders an entire stockpile regardless of its size to be “asbestos waste” gives rise to a potentially absurd and impractical outcome. It gives “contains” essentially no work to do. Grafil’s submission that the pieces of pipe or fibreboard or other waste that contain the asbestos mineral are the items in a stockpile that are properly considered “asbestos waste” is arguably at the other extreme of a possible application of “contains”. It is certainly a literal application. Grafil’s submission that waste in a heterogeneous stockpile alongside asbestos does not “contain” asbestos does give the word “contains” more work to do. Ultimately I do not intend in this case to determine if Grafil’s primary approach to construction is appropriate. Whether a stockpile of material can be considered “asbestos waste” is a matter of fact and degree as Grafil also submitted and must depend on the nature of the waste and the volume.

It appears a purpose of s241(f), via influence of the definition of asbestos waste, may ensure “contains asbestos” is an absolute, which appears to counter the argument that *contains* asbestos has *more work to do* in the *Grafil* case. Use of the *presence of asbestos* appears to remove this requirement. Consequently, the absurd outcomes, as predicted by J Pain, that any piece of asbestos renders an entire stockpile asbestos waste. Hence, absurd and impractical outcomes appear to be enshrined by s241(f).

The EPA has already determined that asbestos waste soils by way of its measurement process is a presence based approach through its requirement on measurement and a wastes subsequent classification. J Pain’s judgement shows the Courts are the only method which apply the risk-based and a practical approach on asbestos waste considerations. So to add in a penalty consideration for not just trace levels, but any level of asbestos is perverse and provides EPA with enormous powers to enforce absurd and impractical outcomes. If s241(f) is tested in court and is found to be of the influence and effect as described in this submission, it will provide the EPA with substantial new powers. For example, if the EPA finds any asbestos waste the accused will be forced to agree to their requirements or face a zero threshold response by the courts.

This sets a dangerous precedent for abuse by the environmental regulators. If the regulators are not strictly controlled, such power can lead to heavy application of a very harsh law. As asbestos is ubiquitous, there are many sites by its mere presence are now in breach. Consequently, the regulators can pick and choose who they dislike, look for asbestos, find it, as it is ubiquitous and extract punishment.

R1 ASBG recommends the Government take the responsible lead and abandon its presence based approach for asbestos waste and continue with the scientific risk-based approach as used for all other environmental contaminants and wastes.

⁸ See clause 522 [Environment Protection Authority v Grafil Pty Ltd; Environment Protection Authority v Mackenzie \[2018\] NSWLEC 99](#)

6 Measuring Presence

AS 4964 Method for the qualitative identification of asbestos in bulk samples is the main method used to detect asbestos fibres in soils. It is not designed for testing other common substances. In fact there is no test method available to measure asbestos in waste types other than in soils. Wastes by their nature are highly variable and are collected in various mixed forms, such as, general waste, recyclates, including paper, plastics of various mixed forms, mixed containers, glass, metals in various mixed forms, etc. Measurement of asbestos levels in such materials poses a considerable challenge as there are no agreed sampling and analytical methods available.

The NSW EPA has issued statements that also go beyond the threshold levels used under AS 4964:

*If asbestos is found, but is below the reporting limit it is the EPA's position that the laboratory must still report the **presence of asbestos**, and the waste that is represented by the sample must be classified as Special Waste Asbestos as a minimum.*

This statement appears to define the "presence of asbestos", but is still only based on the use of AS 4964 and then only applies to soil samples, no other substances. If AS 4964 is applied to wastes of varying types, a variable set of outcomes will result.

The next issue is that if asbestos is found how will this affect the surrounding wastes? EPA has issued protocols, assume the asbestos contaminates a cylinder around the sample reporting an asbestos find.

R2 ASBG recommends the NSW EPA use a risk-based set of measurement standards and quantitative sampling protocols for asbestos wastes based on scientific analytical methods developed independently or through Australian Standards and which are accepted by appropriate scientific bodies and or other government agencies. From these standards a risk based approach is developed which reflects Safe Work Australia's TWA criteria.

7 Asbestos Waste Offence Chain

ASBG supports the increase in penalties for illegal asbestos waste dumping and illegal disposal. However, there is some concern over the broadness of liabilities Section 144AAA extends. Parties liable of unlawful disposal of asbestos waste are substantially increased by expanding the definition of *dispose* to include:

...dump, abandon, deposit, discard, reject, discharge or emit anything that constitutes asbestos waste ...

Along with the application of the mere presence of asbestos anyone involved in the chain of waste generation, transport, handling, recycling, recycled product handling and disposal are liable. If not properly implemented with firm protocols this can lead to absurd liabilities to unknowledgeable and unwitting parties. Consider the scenario:

- A resident *discards* asbestos pieces into a recycling bin, making it asbestos waste
- A worker who picks up a waste bin and *discharges* it into the truck for recycled materials
- The driver and transport company who *deposit's* this truck into a recycling facility
- The recycling facility and company which fails to pick up all the asbestos in the deposited waste load and *deposits* the material in a stockpile for recycling
- Some trace amount of asbestos is present in the final product which is sold
- The consumer of the product which accepts the product (now asbestos waste) which was *deposited* on land as fill on land according to a Resource Recovery Exemption
- All directors of any of the companies or organisations involved in the above are liable.

All parties above are liable under s144AAA and or 144AAB. Many in this chain would be unaware that the waste being carried is asbestos waste, but still wear the liability. If asbestos is found anywhere in this chain of waste management that party must treat the waste as asbestos waste. In doing this they wear the costs associated with finding asbestos waste, even though they had no role in asbestos contamination. This party becomes a victim of asbestos contamination where the guilty party generally gets away from its crime. Finding and prosecuting the guilty party is generally not possible and rarely undertaken by the regulator.

There is also a danger from third party prosecutions under s253 of the POEO Act. If a presence based approach is required then absurd cases involving trace amounts posing no significant risk, would still have legal merit. One positive test of any stockpile of material moved from one site to another could trigger the unlawful disposal of asbestos waste. If any material is moved from one site to another and contains any asbestos, it must be deemed to be asbestos waste as it cannot be reused or recycled even if it is a bona fide product.

R3 ASBG recommends:

- ***A special asbestos waste prosecution protocol be developed with primary aim to seek out the capable party which contaminated and made the asbestos waste***
- ***Where a Clean Up notice or a requirement to remove asbestos waste is made, and the party is a bona fide victim of illegal dumping or upstream contamination and not involved in this process be considered, using an assessment protocol for provision of waste levy relief for this waste's disposal.***

8 Impact on Recycling

Use of a presence based asbestos waste trigger dramatically increases the liabilities of the recycling sector. At a time where there is a recycling crisis occurring the addition of a zero tolerance level for asbestos waste will significantly drive up the costs of undertaking recycling and other waste management practices. In addition the introduction of Queensland's \$70/t levy will result in an estimated 500,000 tonnes of C&D and contaminated soils being injected back into the Sydney region. The only way to prevent this amount going to landfill is to ramp up C&D recycling infrastructure. However, the increased liabilities and higher costs brought on by the presence based approach will more likely result in abandonment of C&D recycling activities as has already occurred⁹.

C&D recycling requires support from the NSW Government; otherwise the outcome will be that the remaining landfills in NSW and especially in the Sydney, Newcastle and Wollongong areas will fill quickly. The Government will then need to find a set of new landfill sites urgently, which is always a difficult political planning issue where votes are lost.

The increased liabilities, higher commercial risks due to changes in waste policies, such as the instability of Resource Recovery Orders and Exemptions and the use of an unscientific presence based asbestos threshold will materially impact on the investment in NSW recycling infrastructure. Perhaps the NSW Government needs to provide finance to overcome the impact of its waste laws which damage investor sentiment in the NSW recycling sector?

At a minimum the NSW Government needs to undertake investigations into various scenarios of the remaining capacities of landfills in the Sydney area, including a collapse of the C&D recycling sector which currently manages 4 million tonnes diversion from landfill.

A risk based approach will provide a more practical, efficient and deliver better health outcomes than the absolute presence based approach can achieve. There is no question that better controls are required on the waste sector, but a presence based will deter many from recycling.

R4 ASBG recommends the NSW Government undertake an investigation into the remaining life of existing landfills serving the greater Sydney area considering the impacts of various scenarios of various recycling infrastructure capacity especially in the C&D recycling sector including a collapse of C&D recycling and a set of various reduction levels and increases in recycling capacities.

To ensure that C&D and other recycling facilities are provided some defence against the presence of asbestos, section 144AAA and 144AAB should permit the use of due diligence defence. Such a position is supported as the other Tier 1 offences for negligence permit the use of the due diligence defence under s118 (b):

that the person took reasonable precautions and exercised due diligence to prevent the commission of the offence.

This is also consistent with s115 *disposal of waste – harm to the environment*, which is one of two tier 1 offences. It would be inconsistent to have a strict liability offence as under s144AAA and s144AAB which carries the same penalty as the Tier 1 offences.

This will provide a reasonable level of operability where a bona fide recycling facility can show due diligence. It also will complement the proposed C&D Minimum Standards and other procedures, methods and processes where asbestos risk is minimised in a reasonable practical manner. Without a due diligence defence the use of s241(f) will greatly undermine C&D and other recycling sector investment in NSW, contrary to NSW Government's Policy on the Circular Economy.

R5 ASBG recommends the inclusion of a due diligence defence at least for proposed sections 144AAA and 144AAB.

⁹ Wingecarribee Council's C&D recycling facility was abandoned due to asbestos issues and a heavy handed approach by the EPA

9 Conclusion

Removal of s241(f) from the Asbestos Waste Bill will still enable NSW to police and enforce asbestos waste crimes on the same basis as any other environmental contaminant. This is considered a fair process where a scientific and risk-based approach is applied and penalties are issued based on the harm caused rather than the mere presence of a substance.

If s241(f) is to remain, use of a due diligence defence will permit only those showing effective due diligence in procedures, process and practice will be permitted to have some minor defence. With such provisions the NSW Government can pursue a circular economy, which manages to reduce the increasing flow of wastes into scarce landfill resources.