The Hon. Matthew Kean, MP
Minister for Energy and Environment
GPO Box 5341
SYDNEY NSW 2001

Email: waste.updates@epa.nsw.gov.au

30 April 2021

Dear Minister Kean

Re: NSW Energy from Waste: draft policy statement

The Waste Management and Resource Recovery Association of Australia (WMRR) welcomes the opportunity to provide feedback on NSW's draft Energy from Waste (EfW) policy statement dated March 2021. At the outset, WMRR acknowledges that substantive change has been made to section four (4) of the statement and the questions posed in the EPA's survey indicate that feedback is being sought on these amendments in particular. However, the policy as it stands has significant risks and challenges to project development in NSW, which will be examined in the submission below; the goal is to drive productive engagement with the EPA in order to develop a robust EfW policy that meets the objectives of both industry and the regulator.

WMRR is the national peak body for all stakeholders in the essential waste and resource recovery (WARR) industry. We have more than 2,000 members across the nation, representing a broad range of business organisations, the three (3) tiers of government, universities, and NGOs. Our members are involved in the breadth and depth of WARR, including community engagement and education, infrastructure investment and operations, collection, manufacturing valuable products from resource recovered materials, energy recovery, and responsible management of residual materials. In preparing this response, we worked closely with our NSW EfW Working Group which has more than 60 active participants, including those currently with proposals with the NSW government.

WMRR strongly advocates that there must be a systems-based approach to managing materials in NSW, which must be underpinned by the waste management hierarchy as we move Australia towards a genuine circular economy that emphasises design, extended producer responsibility and sustainable natural material management. A true systems-based approach recognises that a variety of treatment options are required as part of resolving the challenges posed by materials discarded, once generated by the community.

EfW is a safe and proven technology that is used in many parts of the world to treat residual waste and to generate energy. As evidenced in the hierarchy, energy recovery is preferable to landfill disposal. WMRR does also appreciate and support the fact that there must both be a strong social license for EfW facilities (like all waste and resource recovery facilities), and facilities must work well within the communities in which they operate. To that end, WMRR believes that other complementary actions are required, including education and communication on the technology, sharing of, and articulating unequivocally proven scientific facts on both the impacts and benefits of EfW, developing a robust stakeholder engagement plan, and having clear policy and guidance to build community and industry confidence.

WMRR absolutely recognises and supports the need for technology that is utilised to be both proven against international best practice, meets all requirements in relation to pollution and energy efficiency, as well as reduces greenhouse gas emissions. We also recognise the desire of the NSW government to have the most stringent policy (and emissions standards); however, we would submit that there are elements of this draft position statement that are unworkable in practice and require further consideration and articulation, in order

WMRR NATIONAL OFFICE
57 ST JOHNS ROAD
GLEBE NSW 2037

(02) 8746 5000
INFO@WMRR.ASN.AU

ABN 78 071 897 848

WMRR.ASN.AU

to prevent NSW continuing to be considered as closed for investment in waste and resource recovery, causing investors to take projects (and jobs) to other Australian states that are progressing policies that are aligned with international precedents. Moreover, WMRR submits that the regulator must consider if having the most stringent standards will indeed result in better environmental performance or if doing so will only serve to, as noted above, hinder investment, whilst creating concern amongst the community by providing a false impression of non-compliance (with what is an unworkable policy in reality).

As all jurisdictions, NSW included, embark on measures to ensure economic recovery in a post-COVID world, it is vital that policies play a key role in driving, not hampering, investment in our essential industry, which in turn, will drive local economies and boost jobs while continuing to manage environment and community health and wellbeing.

There is a real opportunity for EfW to co-exist, and in fact play a complementary and fundamental role in an integrated waste management and resource recovery model in NSW that is aligned to the waste hierarchy. This can be achieved by considering the proven regulatory frameworks in the European Union (EU), Asia, and US in the development of a balanced and robust NSW policy. The Chief Scientist points to the benefits of leaning on the extensive work of the EU in regulating EfW, which did in fact lead to the reference data within the Chief Scientist's report as well as being used by current project proponents in NSW.

In WMRR's view there is an opportunity to improve the draft EfW policy and we have detailed how in our full submission attached; there are however, three (3) issues that require addressing at first instance:

- The requirement for **hourly reporting** for all parameters – given the values proposed are in many cases close to the detection limits for available equipment, and noting that the EU uses a combination of daily and half-hourly limits, adaptation to the NSW preference for hourly limits creates a variety of challenges. From a development point of view, this includes challenges meeting the threshold test in the NSW EfW policy to provide a fully operational reference site using the same technologies (reported limits from potential reference facilities will not be directly translatable to NSW settings, with the potential to create public confusion in this highly technical area). Having proven reference sites is critical from both a procurement and operational perspective and importantly, it a key part in obtaining approval in NSW, including a social licence to operate. From an operational point of view, the focus on hourly limits rather than daily limits that allow for some level of variability through the course of normal operation, highlights the importance of the limits being implemented and applied in a manner which does not result in public concern about very short term 'exceedances' that taken on balance across the operation do not increase risk to human health or the environment.

- The Chief Scientist's comments in relation to the need to provide a **definition of Other Than Normal Operating Conditions (OTNOC)** or a framework for providing flexibility or handling allowable exceedances, has not eventuated, which significantly impacts workability of this policy. While section 56 of the *POEO Clean Air Regulations* covers start up and shut down periods, WMRR believes that there needs to be a clear definition of OTNOC beyond start up and shut down given the reality of both the feedstock and the operations of these facilities. With all environmental and human health impacts managed, it is imperative that the EPA considers what is realistic, workable, and achievable compliance (in consultation with industry and in considering proven best practice operational EfW facilities globally); otherwise, the policy may result in perverse outcomes such as operators being forced to shut down and start up (with higher emissions during these periods) rather than potentially make relatively small adjustments during operations. Given the government's clear desire to have the most stringent policy globally, this could be drafted with

WMRR NATIONAL OFFICE
57 ST JOHNS ROAD
GLEBE NSW 2037

(02) 8746 5000
INFO@WMRR.ASN.AU

ABN 78 071 897 848

WMRR.ASN.AU

stricter language than the broad EU definition, while still including genuine malfunction not caused by operator action as an OTNOC event.

- The proposed **emissions limits** in the draft policy do not align with international best practice (which have been recognised and adopted in other Australian jurisdictions) and are extremely low compared to historical and current emissions standards in NSW and elsewhere in the world. The proposal by NSW not to follow international best practice, which reflects the reality of operating these facilities, highlights the importance of allowing some flexibility in how the proposed limits are applied in NSW. Please note also that it is near impossible to find a reference facility achieving these proposed limits (because they are not designed/regulated in the same manner as the proposed NSW framework). Industry proposes that emissions should be in fact set at a level that are in line with other comparable sectors.

WMRR also highlights that international best practice for material recovery is for separation at source, which has been recognised not just internationally but in other Australian jurisdictions such as South Australia and Queensland. The NSW government should take the opportunity to lead a systems-based approach to material management in NSW and consider what the valid opportunities are that can provide higher order resource recovery, including requiring source separation, a ban on unprocessed waste to landfill, and implementing mandated product stewardship schemes for batteries, e-waste and other problematic materials, rather than placing additional costs on the WARR industry and local government; only then will NSW begin a genuine transition towards a circular economy. We trust that this approach will in fact be clearly evidenced in the imminent 20-Year Strategy for NSW.

Finally, WMRR has succinctly responded to the EPA's three (3) survey questions:

- **Are the proposed changes to the NSW Energy from Waste Policy Statement sufficiently clear?**
  Regrettably they are neither sufficiently clear (for example the need for workable OTNOC definitions), nor are they workable in some areas.

- **Are the proposed changes to the NSW Energy from Waste Policy Statement capable of being implemented?**
  Advice from industry is that a number of the proposals cannot be implemented, further details of this are included in the full submission.

- **Do you have any other comments on the implementation of the proposed changes to the NSW Energy from Waste Policy Statement?**
  WMRR's full submission can be found attached.

WMRR is keen to engage with you and the EPA on the policy. Please do not hesitate to get in touch with the undersigned to further discuss WMRR's feedback.

Yours sincerely

Gayle Sloan
Chief Executive Officer
Waste Management and Resource Recovery Association of Australia

SUBMISSION

WMRR notes that the Chief Scientist's report is heavily reliant and based on the extensive work undertaken to date in the EU to regulate EfW - work and data that are also referenced by NSW EfW proponents. Additionally, other Australian jurisdictions have adopted a similar approach, e.g., WA expressly references the EU EID as updated from time-to-time as the standard requirement for emissions while Victoria has approval projects with the same emissions standards. As such, WMRR's overarching recommendation is that the NSW government adopts the EU framework for areas such as averaging periods, measurement methods, the definition of Other Than Normal Operating Conditions (OTNOC), while adjusting the numerical emissions limits to meet NSW's environmental aims. Doing so would provide NSW with an established and proven solution that represents world's best practice.

WMRR queries why the EPA has chosen to adapt the existing NSW regulatory framework to EfW, utilising data gathered in a different regulatory environment to determine appropriate emissions in a "pick and choose" approach that is not based on proven best practice and systems. This approach will quite simply result in a costly and perverted outcome for both the EfW industry and the regulator, notably, continued landfilling. Further, the proposed overly stringent changes (in addition to the current barriers posed by the overall EfW policy) may also reduce market competition as smaller operators (50,000-250,000 tonnes per annum) will no longer be able to enter the market as they may not have the capacity (resources, capital, etc.) to meet these standards.

WMRR has compared and commented on areas within the draft policy that require a robust review.

Area	NSW EfW policy draft statement	Chief Scientist's recommendations	European policies and outcomes	Issues	Recommendations
Section 1 – Introduction					
Overarching principles	(i) Higher value resource recovery outcomes are maximised.		Aim for >65% recycling and composting, and <10% landfilling with nothing untreated, e.g., around 25% to 35% to go to EfW. Best-in-class countries achieve	Maximisation of recovery outcomes comes at a cost and should be based on realistic and defined targets, such as proven by best-in-class countries in Europe (including Denmark, Germany, Holland, Switzerland).	NSW requires a robust overarching WARR strategy (i.e. the 20-year strategy) that should be developed and in place prior to the finalisation of the EfW policy; the latter should be emcompassed within the overarching WARR strategy as it is one (but not the only)

			>65% recycling and less than 1% landfilling (as outcomes of an integrated regulatory waste management framework). Several EU countries which only joined the EU in the early 2000s have strongly improved recycling and composting rates while now introducing EfW, and aspiring to zero waste to landfill, though it is worth noting that zero waste to landfill is largely impossible as there will be leakage even in a circular economy.	EfW does not have a negative impact on waste prevention. Its primary task is the safe and proper disposal of wastes not avoided and not recycled. EfW thus delivers the disposal security which remains necessary in a recycling economy based on material and resource efficiency (UBA 2008). The residues resulting from increasing recycling and composting activities require thermal treatment in order to avoid landfilling.	WARR option in an integrated model. As noted above, international best practice for material recovery is for separation at source, which has also been recognised in other Australian jurisdictions. There is an opportunity for NSW, through its 20-Year policy and regulatory framework, as well as community education, to drive greater recovery of recyclables and maximise higher value resource recovery. As a start, WMRR proposes that the EPA considers compulsory source separation of reyclables and organics (food & green waste) from households and industry for MSW and C&I, as well as compulsory separation of C&D, backed by a sustained engagement, education, and communication plan. Additionally, WMRR advocates for a ban on unprocessed waste to landfill along with mandated product stewardship

					schemes for batteries, e-waste and other problematic materials.
	(iii) 'Mass burn' disposal outcomes are avoided.			Emotive language that is not backed by science should be avoided; it is imperative that policies are aligned to the adopted waste hierarchy. In this instance, the implication here is that landfilling is prioritised over 'mass burn' disposal, which is not aligned to the hierarchy. While there are stringent regulations and stipulations proposed on EfW, there are no similar regulations for materials that can go to landfills, signaling a disconnect and departure from the waste hierarchy. There is an absence of drivers for source separation of recyclables and organic materials.	As noted above, there is a need to develop and implement an overarching WARR strategy as a matter of priority and energy recovery facilities must ensure application of current best practice techniques, a high level of thermal efficiency and resource recovery criteria. Greater focus on source separation, including education and communication (as noted above). A review of policies and regulations that provide clarity around the materials that can go and are going to landfill.
	(iv) Scope is provided for industry innovation.			Greater clarity is needed.	That the EPA provides clarity, definitions and pathways in order for industry to understand what this principle entails.
Section 3					
Eligible waste fuels	Eligible waste fuels are those that are considered by the EPA			Recovered waste oil is collected from multiple sources and commonly	As there are operational oil re-refineries in NSW that are recycling waste oil into a

	to pose a low risk of harm to human health and the environment due to their origin, composition and consistency. Amongst the waste categorised by the EPA as an eligible waste fuel is recovered waste oil.			contains contaminants such as polycyclic aromatic hydrocarbons, heavy metals and halogens. From time to time, undisclosed contaminants such as Polychlorinated Biphenyls can be present. These contaminants must be properly managed.	lube oil (higher value resource recovery), WMRR recommends that the EPA considers removing waste oil from this list, reviewing whether its inclusion is consistent with the EPA's overarching principles of waste avoidance and recovery including that higher resource recovery outcomes are maximised.
Section 4 – Energy recovery facilities					
General	Energy recovery facilities must use technologies that are proven, well understood and capable of handling the expected variability and type of waste feedstock. This must be demonstrated through reference to fully operational plants using the same technologies and treating like waste streams in other similar jurisdictions.			There must be an understanding that waste, including its composition, is always changing as it is a function of design, consumer behaviour, collection and aggregation pathways, weather, seasons, climate. As noted above, an overarching WARR strategy must encompass not just downstream WARR options but it must also capture upstream solutions that tackle product redesign and consumption habits. At present, there are approximately 2,000 operational thermal EfW plants worldwide that have had proven success in	The EPA should further investigate the regulatory frameworks and operational performance of EfW plants in Europe and Japan, which WMRR believes to be sufficient and appropriate reference points.

				thermally treating the constantly changing waste streams to safe air emission levels.	
Plant design and operation	If the waste fuel fed to the primary (first) combustion chamber has a content of more than 1% of halogenated organic substances, expressed as chlorine, the temperature should be raised to 1,100°C for at least two seconds after the last injection of air.		EU WID defines this condition for 1% of hazardous halogenated organic substances.	The scientific basis for this requirement remains unclear and this requirement is not adopted for existing facilities operating globally. Further, WMRR notes the following: • An Australian example of a halogenated organic substance is Hexachlorobenzene (HCB) currently stored by Orica in Botany Bay. • In the European EfW experience, it has been found that EfW typically has to manage concentrations of PVC of around 1% (MSW) with around 0.4% as background chlorine (not PVC related). • Straw from diverse crops varies from a minimum of 0.1% chlorine to typically	Firstly, clarity is sought on how the EPA has derived this 1% baseline. The NSW EfW Policy also needs to be amended to reflect the EU regulation and the European experience of safe EfW at chlorine concentrations of typically around 1% (average) with some waste fractions up to 8%. The issue is purely technical, e.g., the capability of the flue gas treatment to cope with short-term chlorine peaks as well as long-term chlorine concentrations – whatever level they are at. WMRR recommends that this criteria is replaced with the EU WID clause.

				0.5% and can exceed 1% (winter barley straw). Straw would be an eligible standard fuel under the NSW EfW Policy; hence, this requirement would be inconsistent with other processes where emissions of chlorine are anticipated to be above this level.	
Emissions standards	Energy recovery facilities must be designed and operated to ensure they achieve air emissions no greater than the standards prescribed in Table 1.	(i) Following expert review, Figure 1 ('the framework') and Figure 2 are finalised and are: • Recognised as a current description of the baseline assessment requirements and regulatory processes for EFW facilities in NSW. • Used as working documents that are updated as required.	• 2019 EU BAT – BREF limits.	The emissions limits in the draft policy are extremely low compared to historical and current emissions standards in NSW and elsewhere in the world. In some cases, these limits are so low that they will be close to the detection limits of the available monitoring equipment. Brief excursions above these limits would therefore pose no threat to the environment or human health. The trade-off of setting the tightest emission limits in the world is that operators will need flexibility in the application of those limits to ensure the resulting	NSW EfW projects in the permitting phase should consider the limits as per the EU BAT.

		• Made publicly available, including through relevant government agency websites. (ii) That the NSW EPA sets out in writing the process for establishing and updating best practice air emission limits for EFW facilities and makes this information publicly available. This process should include reference to guidance on international best practice for plant design and operation, including flue gas technologies, to achieve these limits; and clarity on the frequency with which limits are reviewed. (iii) Technical expert advice is sought on NSW requirements as set out in Figure 1, Table 1 and Table 2, including the draft best practice air		plants are well managed and safely run. Further, WMRR is aware that going above international best practice standards may increase whole-of-environment impacts, including carbon, e.g., increased residues from requiring the addition of further reagents to the system to meet limits as well as increased energy usage – according to one estimate, the energy conversion efficiency due to additional equipment required to meet the NSW's standards will be reduced from 35% to 30%; this is an unintended consequence that goes against the environmental outcomes of EfW.	

		emission limits for EFW facilities; and whether these draft limits are best practice. Their advice should have regard to the Approved methods for the sampling and analysis of air pollutants in NSW (2007), any updates to this as they emerge, and any technical impacts or changes of note arising from the 2019 EU BAT.			
	A one (1) hour or minimum sampling period for all air emissions.		Half (1/2) - and 24-hourly frequency of emissions measurement.	Daily average values and half-hourly average values are defined in European regulation, i.e., in the EU Industrial Emissions Directive (2010/75/EU). The daily and half (1/2)-hourly average values cannot be considered individually but must be understood as an integrated concept. This directive was also the result of the experiences with multiple generations of EfW plants and around 2,000 operating plants at the time of introduction. The proposed switch by NSW EPA to a one (1)-hourly average value will make it difficult to compare the NSW	WMRR strongly recommends that the EPA sticks to the daily average and half (1/2)-hourly average values and measurement regime and ensure alignment to the EU frequencies and values. NSW can still lower its general limits in line with such provisions in the 2019 EU BAT (as noted above).

				plants with the European ones currently used as reference facilities.	
OTNOC *included in the background paper	The expert review recommended that the NSW requirement for 100% compliance with air emissions limits be retained.	The Chief Scientist has indicated that the best/strictest standards are those that combine emissions limits and other regulatory elements such as OTNOC definitions, stating the following: • NSW hourly averaging limits can be as stringent as jurisdictions that use dual averaging limits, provided that (1) the OTNOC (other than normal operating conditions) is accounted for… • In general, there are no direct best practice or standardised method for OTNOC. Instead,	The EU acknowledges malfunction, maintenance, start-up and shutdown, providing flexibility for these circumstances as "discarded data" while allowing total omission during start-up and shutdown where the cumulative duration of such conditions shall be less than 60 hours per year. The EU allows for the 97th percentile for CO daily average.	The Chief Scientist's comments in the report have not translated into a definition of OTNOC or a framework for providing flexibility or handling allowable exceedances. This is important given no natural or technical process is 100% efficient. Allowances must be made for exceedances as shown in EU. One example is a container with flammable goods in waste (CO spike); other examples are listed below. WMRR recommends that overseas examples are reviewed to gain an understanding of the need for flexibility, noting: • In many cases, it is possible to "hot swap" or otherwise make repairs online. For example, EfW plants are typically designed with excess capacity in the bag house for removing	WMRR recommends that the EPA takes one (1) or more of the following actions to provide clear guidance on operational flexibility: • Provides a definition of OTNOC in the EfW policy to define allowable exceedances. This could be drafted with stricter language than the broad EU definition, while still including genuine malfunction not caused by operator action as an OTNOC event. • Includes a provision in the EfW policy that flexibility will be provided via EPL conditions, with the policy defining at a high level the principles on how these conditions will be applied.

			jurisdictions employ a range of measures to allow flexibility within the established standard, including allowing '*reasonable expectation*' during OTNOC. This complexity may cause some confusion as being the 'most stringent' is not simply having the lowest emission number nor 100% compliance. The whole package of measures must be understood when reviewing the feasibility of air emission		particulates/dust from emissions. This allows for a scenario where: ➢ One of the dozens or hundreds of filter bags in the bag house ruptures or tears. ➢ The CEMS detects an increase in emissions and generates an alarm. ➢ After a period of investigation, the operator determines this is due a broken bag, and identifies the section of the bag house which is affected. ➢ The operator isolates that section of bag house and particulate emissions return to normal levels. ➢ Once the isolated section of bag house has cooled down, the operator replaces the broken bag and returns it to service	• Develops a separate document that outlines the flexibility provisions and allowable exceedances, which can be used by both operators and EPA officers in interpreting any potential exceedances. • Includes a 97% emissions limit (or equivalent) in addition to the 100% limit. This would require that the 100% limits are increased to higher levels. To address the risk of these flexibility provisions becoming a "loophole" that rogue operators use to evade regulatory limits, appropriate controls could include: • a requirement to report emissions during OTNOC events (similar to the US framework);

		standards and monitoring outcomes. • The (draft) best practice air emissions limits for EFW in NSW is the most stringent with its 100% requirement during NOC. However, it does not specifically address regulation relating to OTNOC. Currently, Cl 56 of the Clean Air Regulation provides exemptions relating to start-up and shutdown periods. • Overseas jurisdictions provide some flexibility within their requirements for OTNOC through data		• Similarly, operators might need to inspect, clean, or replace sensors in the CEMS system to verify a faulty reading, or make emergency repairs to pumps that dose chemicals into the flue gas treatment process (such as cleaning a filter if the flow rate drops below design levels). In these cases, a quick online investigation and repair will have lower impacts than a full shutdown (potentially with the higher emissions continuing but not assessed as NOC due to the shutdown) before the investigation and repair can be completed. However, an operator with strict one (1)-hourly limits and no flexibility provisions	• limits on the length of a single OTNOC event (US and Chinese frameworks); and/or • limits on the maximum permitted length of OTNOC per year (EU and US frameworks) This change would benefit all parties by: • Providing technology providers with a regulatory framework which is more easily compared to the regime under which the technology was developed and tested. • Providing operators with clear expectations, rather than subjecting them to potential regulatory action at the discretion of EPA officers.

		omissions and different compliance techniques. While it is possible to review other countries' approaches to regulate for OTNOC, it is not ideal for NSW to simply adopt their approach as this flexibility is tailored for others' specific standards."		will be forced to initiate a shutdown if the cause of increasing emissions is not identified within minutes. • Consideration should also be given to permitting brief exceedances during planned maintenance work – for example, where dosing equipment is taken offline briefly for inspections or cleaning, which a competent operator might do to prevent unplanned failures. Real-world examples of these can be seen in the environmental reporting of reference facilities in the EU. If no exceedance is regulated, then the EfW technology will require a mechanism such as automatic shut-down of	• Providing confidence to EPA and communities that there will not be "breaches" of emission limits reported in circumstances where the operators are maintaining and operating EfW facilities in a competent manner. • Resulting in better environmental outcomes than a strict policy where plants will be forced to "crash-stop" and restart to avoid short-term exceedances.

				plant once any value reaches 90% to 95% of the limit. This will cause increased emissions during shut-down and start-up, increase operational cost (fossil fuel and carbon emissions), and lost income during that time.	
Emissions reporting	Emissions monitoring data must be made available publicly through an online portal in real-time. Emission monitoring data must be made available to the EPA in real-time graphical publication and a weekly summary of continuous monitoring data and compliance with emissions limits published on the internet.			Accounting for a measure of uncertainty adopted in international applications considers the accuracy of the monitoring technology. The application of confidence intervals are in place to ensure that emission monitoring is not overstated *or* conversely understated. The removal of the use of adjusted data in the reporting of emissions will be significant for some pollutants.	Further insight sought into this position and expectations surrounding CEMS maintenance standards. It is recommended that an allowance for the validation of data is made in the provision of online reporting of data and therefore, real-time should be defined as the next business day.
Resource recovery criteria	This policy statement's objectives in setting resource recovery criteria are to: • promote the source separation of waste where technically and	Work is undertaken to understand the mix of incentives influencing consumer and industry behaviours to promote adherence to the waste hierarchy.	Mandatory source separation. Bans on untreated waste to landfill or strong landfill levy signals (UK, around 35% higher than current NSW landfill levy).	Resource Recovery Criteria should be defined by overarching waste management strategies with clear definitions and policy outcomes.	Broader consideration of the Resource Recovery criteria (Table 4) as part of the 20-year strategy finalisation is required to provide greater clarity to proponents. Consideration of how these criteria may result in conflicted outcomes, e.g., greater disposal to landfill, is imperative. WMRR

	economically achievable; • drive the use of best practice material recovery processes; and • ensure only the residual from genuine resource recovery operations are eligible for use as a feedstock for an energy recovery facility.		Ban on organic rich material going to landfill.		recommends that targeted and productive consultation with industry to ensure that robust policy and regulatory frameworks are in place.
Notes	Waste streams proposed for energy recovery should not contain contaminants such as batteries, light bulbs or other electrical or hazardous wastes.		Whilst source separation is key and separate collections of materials of concern should be implemented, EfW plants must be able to cope and treat such materials.	It is technically impossible to separate all contaminants such as batteries, light bulbs or other electrical or hazardous wastes.	WMRR recommends that a risk-based approach is adopted as opposed to the current proposed list of objects based approach.
	Bio-char or char materials produced from facilities using mixed waste streams			Pyrolysis of mixed waste (production of Biochar or char) may be the Best Available technology when	WMRR is seeking an amendment to the 'notes' section, specifically the point on bio-char so that it reads:

	will not be considered for land application as a soil amendment or improvement agent.			processing components of mixed waste and yet the notes attached to Table 1 (Table 4 in the revised Policy) don't allow char from mixed waste to be applied to land. The application for the use of Char from mixed waste, may satisfy both BAT and the removal of items such as batteries, light bulbs and other electrical or hazardous waste. If the resulting char product is deemed by a HHERA (Human Health and Environmental Risk Assessment) as suitable for a range of applications that may include land application, and as being low risk, the EPA would not be able to entertain such an RRO as the policy prescribes the prevention of land applying char from any mixed waste.	'Bio-char or char materials produced from facilities using mixed waste streams will not be able to be considered for land application as a soil amendment or improvement agent, without demonstrating that risks are minimised and supported by a HHERA in an RRO&E application as described in the RRO&E framework.'

[BLANK PAGE]

WMRR NATIONAL OFFICE
57 ST JOHNS ROAD
GLEBE NSW 2037

(02) 8746 5000
INFO@WMRR.ASN.AU

WMRR.ASN.AU

ABN 78 071 897 848